Wings Platinum 4

English Version 4.22

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Introduction

The Media Platform

Dear Multimedia user,

Thank you for installing Wings Platinum. It allows you to create shows or projects which may not only include images, sound, videos or text, but even synchronous or interactive control of other peripheral devices, such as light, projectors or mechanically animated objects. All components and media are edited and arranged in one single program. To put your ideas into practice, Wings Platinum features extremely powerful tools and offers full project editability at any stage of the production and will help you on your way towards a perfect presentation.

- Please bear in mind that Wings Platinum is a modern and innovative project which is constantly being extended and advanced. Please make sure that you use the latest version, which can most conveniently be downloaded via the Update Function. For information on the latest
- For a successful start we can offer various **workshops** in the Online Help or in the manual. See *A successful start*.
- Wings Platinum is a software with a modular structure so that your license may not include all functions available.
- Wings Platinum supports all sorts of different hardware for Show Control applications or for classic multi-image.

Show Production - An Overview

In general, the following steps are necessary to produce a show:

Creating a New Project

This is quite easily and flexibly done with the Project Wizard. It assists you in setting up the new project and Wings Platinum for the new task. However, it is also possible to drag and drop images from your image browser and arrange them into a show.

Creating and Importing Media Files

Any media you may want to use in your project must be saved as files on your hard disk. Of course, you can also create new media files in Wings Platinum. Wings Platinum supports also audio import from sound cards and audio CDs, allows capturing of pictures from scanners and video cameras and import of video files in different formats.

Editing and synchronizing objects

From the Media Pool, the media files are placed in the corresponding timeline tracks as objects where they are edited and synchronized. All objects can be edited likewise, be it picture, sound or video. This makes handling of Wings Platinum very easy. Any events, which are not available as actual media files, such as spotlights or remote control commands for any other devices, for example - are placed in the timeline tracks as objects where they can be edited. All steps can be assessed immediately via screen preview windows or in real time via the connected devices. For a show which is exclusively projected digitally, you can take advantage of the new features offered by transparency control or non-destructive realtime effects. For improved sound you can also use sound effects in your sound track.

Show presentation

A digital AV show can immediately be evaluated during production and played back from the timeline. All this is possible through the use of modern 3D graphics cards. Sometimes it may be useful to create a separate presen-

tation medium from the finished show. Wings Platinum allows output of video files in various formats, such as MPEG 2 or WMV or as video DVD for playback on TV. For high-quality presentation on any modern Windows computer you can create an EXE presentation. For a slide show, the show medium produced could be a tape, an audio CD or a CompactFlash Card.

Modifications can be made at any time...

As long as all editable data remain in the project folder on the hard disk, the project is fully editable. For backup, Wings Platinum offers various Backup Functions, in order to save project data on CD/DVD-ROM or to other drives, e.g. external hard disks. This allows the project to be copied back to the hard disk at a later time where it is fully editable again.

The Features

For information on the functions and features of the various versions please refer to topic Licenses and functions in the Online Help topics.

Wings Platinum is an extremely powerful and flexible software the features of which (we refer to the fully equipped module version) we are going to briefly describe below.

General features

- Various wizards will assist you in starting and creating projects. Even a "quick start" via Drag & Drop is possible. ...See *Project Wizards*.
- To create your show, you place media objects in the Timeline. These may be pictures, sounds, videos, texts, light control and remote control commands or other things. Editing of all these objects is based on a uniform concept which means that the editing steps are identical, whenever possible. It should facilitate working with Wings Platinum.
- A number of workshops on a variety of topics will help you to find out about the various functions of Wings Platinum.
- Flexible windows management allows the modern user interface to be tailored to your individual requirements. Windows can be used separately or docked to each other or be assigned to some other window as a tab. Moreover, windows can be hidden automatically, which is rather useful for complex projects or small monitors.
- Media Pool and Project Explorer for administration of all project media and resources, e.g. predefined ramps and visual effects. The Media Pool can be sorted according to various criteria and offers a lightbox view, a search function for missing media files, separation of used and unused files, etc. It can be opened in several windows thereby revealing the contents of various categories or folders simultaneously.
- Wings Platinum offers numerous visual realtime effects for a creative design of your show which can be applied both to picture and video objects and to text and live video / TV objects. Few mouse-clicks will do to create animated background or a wipe transition effect via alpha wipe.

- There is a masking function for transparent masking of track contents, i.e. masking of composite pictures. This also allows animation of masks via a keyframe control track and thus creation of very clever effects as mask and picture can be handled independently.
- Grouping functions for objects and timeline tracks.
- Position markers serve for navigation within the timeline. They can also be set spontaneously during playback. Additional markers, such as Stop, Pause, Reset, Jump, etc. are available for playback control.
- The screen contents can be output as picture file at any size, a feature, which comes in very useful for layouts, approval or documentation purposes.
- Timelines, tracks, objects and ramp shapes can be copied, pasted and duplicated.
- A password protection allows a project to be protected from unauthorized editing. This means that group tracks and Control Panel fullscreen mode are also locked. Password protection is particularly important for permanent installations and presentation mode.
- Projects can be saved as templates to be used again for recurring configurations.
- The Online Help is always available to answer your questions. It is context-sensitive, i.e. when you press key **F1** you will receive the information that matches the active window. .
- For a problem which cannot be answered by the Online Help you can refer to the Support Function. In addition to your error description the system also sends your "problem project" and a log file containing a record of the last editing steps to Stumpfl for problem analysis.
- Data backup is a topic many users dislike and therefore neglect. With the Advanced License producing backup copies of your project data on CD/DVD ROM or (removable) disks is as easy as never before.
- Any data of a project can be managed, e.g. storyboard, texts, records of approval meetings, etc. From the Media Pool, these files can be opened in the corresponding editor without you having to search for them. When producing a backup copy, these external data can optionally be saved along.

Pictures

- It is possible to use and manage pictures of any size. Wings Platinum produces pictures of a suitable work size for display in the program and for fullscreen presentation; this allows for smooth progress. For the output of presentation media (EXE presentation, AVI/MPEG video, video DVD, etc.) the required resolution is based on the large original data to achieve optimum quality.
- Color-true display through evaluation of the ICC color profiles of picture files and output devices. An ICC color profile deviating from sRGB contained in a JPEG or TIFF file is considered for display. Moreover, the large color space of high-quality displays or video projectors can also be used.
- After scaling the pictures for a presentation or for display within a project (....based on the original files) Wings Platinum will sharpen them to ensure optimum picture sharpness. Moreover, other globally effective picture editing steps are also possible.
- The new dissolve test function in the Media Pool lightbox allows pictures to be dissolved at a high-resolution and matching pairs of pictures to be found very easily.
- Every dissolve ramp can be individually designed and shaped with additional nodes. Moreover, you can collect your own group of ramps in the Media Pool. Any ramp from the ramp pool can be transferred to any object and be further edited, if necessary.
- If, during show creation, you find out that a picture needs to be edited, you can easily do so by applying non-destructive picture processing. This method leaves the original data unchanged. This is particularly advantageous for JPEG format, as any individual data saving process would adversely affect the quality.
- In addition to this, you can open and edit the original pictures in your image editing program from within Wings Platinum.
- Dynamic visual effects, such as Zoom, Motion, Rotation and Color control, allow camera movements, "picture-in-picture" effects or spatial rotation and tilting of pictures. All parameters can be changed dynamically via key frame control. This way movable picture objects, camera movements across large static pictures and zoom effects, etc.

can be created or panning movements through the landscape or movement along the facade of a high-rise building be implemented.

- A sequence of pictures within a timeline can be printed as a list, with the picture size being selectable.

Video

- Basically, video objects can be edited just like any other objects. Editing is always done in real time and is either based on lower-resolution display data or on the original video data.
- The new Video Engine with separate codec management decides automatically which of the installed codecs is to be used for video playback. All codecs installed on the system are supported, i.e. also Flash and Quicktime or Quicktime Pro, provided these players are installed. In addition to MPEG-1/2, Wings Platinum now also contains the H.264-Codec by MainConcept. Moreover, the new Video Engine can now play pre-rendered intermediate video data without installed codecs and by bypassing the Windows routines in order to avoid problems.
- Frame-accurate cutting of high-resolution videos beyond HDTV.
- Transparency control via masks for video and live video objects. Videos can be masked and be made partially transparent. For this purpose, an alpha channel from an image file is assigned to the video which allows creation of semi-transparent areas.
- Chroma/Luma keying for turning picture elements in videos transparent (blue box effect). Chroma keying allows certain colors in a video to be displayed transparent. For a picture showing people and objects against a monochrome background this color range can be defined as transparent, thus allowing people and objects to be shown independently and combined with any type of background. This works also for imported live video sources.
- Add creativity to your dissolves by defining individual ramp shapes and save them in the Ramp Pool for further usage.
- Dynamic visual effects, such as Zoom, Motion, Rotation and Color control, allow "picture-in-picture" effects or spatial rotation and tilting of videos. All parameters can be changed dynamically via key frame control.

- Any screen field can be "filled" with video or image information. Screen fields can be controlled dynamically in their position and size.
- Original videos can be cropped for usage in a project. This allows you to choose a certain section of the image or cut off black borders, for example.
- In order to ensure high-quality reproduction of interlaced material, Wings Platinum contains a high-class Deinterlacing feature.
- Videos can be scaled to any size. This permits flexible design and combination of various media as well as output of a project at any resolution.
- The playing speed of videos can be changed to create slow or fast motion effects.
- For videos an option for asynchronous playback has been included. This function enables a video to be run in a loop in the background even after the Locator has stopped at a pause marker. This way, logos can be created which remain permanently animated during a presentation.
- Consistent handling of **MPEG 2** and **H.264** videos, i.e. editing the timeline, video presentation and video output for various applications. Wings Platinum contains codecs by **MainConcept**™, which is one of the best codecs on the market. The quality that can be achieved ranges up to HDTV at a resolution of 1920 x 1080 pixels and a data rate of up to 80 MBits/s.
- Output of Blu-ray-compatible HD-videos for further processing in external writing programs.
- Output of Video-DVDs with Autostart or simple menus.
- Rendering of video files has been distinctly accelerated by using 3D graphics cards (by up to 20 times compared to software rendering).
- Output of WMV format videos is also possible with multi-channel sound in 5.1 or 7.1 channel mode.

Live video/TV

- An imported video source can be integrated in a show, i.e. the signal from a video camera or a TV program, for example. This requires an

ATI TV/graphics card "All in Wonder" with integrated TV tuner or a video input card with WDM or "Video for Windows" driver.

- Via live video / TV objects, video signals can be added to composite images, just like an image or video file.
- Virtually all visual effects are available for live video/TV objects.

Text functions

- Text objects allow integration of texts in a show as titles or labels. The font can be provided with an extensive number of effects, such as 3D-Contour, Outline and Fill with various colors, Shadow or Arc.
- The text can be combined with all sorts of different backgrounds. Text can be animated both in horizontal and vertical direction.
- Virtually all key-frame controlled effects, like Motion, Rotation and Color Control are available for text objects.
- News tickers for presentation of texts in additional screen windows. The text source is an object in the timeline or an external text file. The Show Control Module allows you to control tickers and texts to be displayed.
- Note objects for internal and personal remarks within a timeline and for sending information to Iseo.
- Information from note objects can be displayed in notes windows during playback. See Displaying text in notes windows.
- The text in note objects can be exported to a text file.

Sound editing

- It is possible to use audio files with different formats within one project. Conversion of sampling rate and sound depth or decompression of MP3 files are performed virtually online by Wings Platinum while playing back.
- During recording and editing, Wings Platinum also supports formats with up to 96 kHz sampling rate and 24-bit sound depth.
- Lossless copying of music from audio CD is carried out quickly and easily. In this context it is also possible to select sections and copy them onto hard disk. If required, Wings Platinum also searches for the name

of the singer and the CD title in the Internet, which means that a manual entry of the file name becomes superfluous.

- Add creativity to your crossfades by defining individual ramp shapes and saving them in the Ramp Pool for further usage.
- Wings Platinum features a VST interface which allows you to incorporate professional sound effects in your shows. These VST sound effects (PlugIns) permit extensive manipulations of your sound track. Some effect PlugIns, such as, for example, Equalizer, Dynamic Editing, Delay or Stereo Expander are already included in the Pro License. But it is of course possible to use VST compatible PlugIns by other manufacturers, too. . Moreover, the pitch can also be altered when audio objects are stretched or compressed.
- In addition to a pitchshifting function, i.e. changing the pitch by expanding or compressing audio objects without affecting the speed, there is also a timestretching function to change the playing speed without affecting the pitch. This is particularly interesting for sound tracking videos and picture sequences as it allows the music to be harmonized with scene changes, etc.
- Option for asynchronous playback, e.g. to allow loop playback of music or some other sound during Speaker Support while the presenter is talking.
- The **K-System** is used for effective management of volume and dynamics, as well as for sound track audio level control. Mixing is now so much easier and allows cinema-like dynamics due to the large headroom and the fact that both the peak level and the RMS level in the audio level display can be used for judging loudness. .
- Audio files can be exported in a variety of different formats. What is particularly interesting, is the so-called "32 Bit Float" format. This means that the data are provided with a huge dynamic range, which protects from data loss due to an incorrect audio level and ensures best possible quality.
- The Pro version of Wings Platinum supports multi-channel sound with output on up to 24 audio channels. Unusual sound tracks and sound installations are therefore just as possible as, for example, Surround Sound or multi-language projects.
- Sound cards with WDM and ASIO drivers are supported.

- Multi-channel sound in 5.1 and 7.1 channel mode is supported for output of WMV format videos.
- Playback of AC3-Streams (Surround 5.1) via the S/PDIF output. AC3 wave files can be placed in an audio track and output bit-accurately via the S/PDIF output of the sound card. This signal can be fed into a surround receiver for output of multi-channel sound to the loudspeakers.

Slide projector control

- In addition to all DLC-compatible Stumpfl control units, Wings Platinum can also directly control some Bässgen control units and a variety of projectors with a serial interface.
- Wings Platinum is a program based on media and objects which allows intuitive arrangement of pictures, sounds and videos. For this reason we have done away with projector tracks, and the pictures are automatically assigned to the projectors and tray compartments.
- The Slide Tray Editor allows you to sort the slides manually. It is also possible to move to certain tray positions or to the zero position.
- To help you sort the real slides into the trays, you can have lists of slides printed out.
- Add creativity to your dissolves by defining individual ramp shapes and save them in the Ramp Pool for further usage.
- Even special projector functions, such as Standby, Shutter control or HighLight functions can be programmed.
- To avoid programming two pictures for stereo projection you can define a parallel projector for a particular slide projector. It performs the same operations as the "Master" projector, which means that a stereo show can be programmed just like any other normal slide show.
- Speaker Support shows to be presented using the SD Event Control unit can very simply be made up by setting stop and position markers.
- The presentation medium can be a tape, an audio CD with control signal or a CF Card. But it is also possible to play back directly from the computer.

Show Control

- Wings Platinum offers extensive Show Control functions in combination with the SC Master and the SC Net System. Modules for nearly all input and output requirements are available, e.g. switches, 0 &endash; 10 Volts, DMX 512, DALI and RS 232.
- You can use external input devices to control Wings Platinum, e.g. to adjust the volume with external sliders, control your presentation via external keypads or record control information in data objects, to give just a few examples. External input devices to be used are PC keyboard, MIDI-Controller, Mackie Control and some SC Net Modules.
- Control Panel for direct and timeline-independent operation of devices and for direct start of trigger actions. The Control Panel offers status displays for control channels, switching states and incoming timecode. The Override function makes it highly suitable for live applications. Fullscreen mode and the option of individual, graphic design make the Control Panel a perfect fit for operation via touch panel.
- There are far-reaching possibilities to assign show control functions to a marker. When the show is played back from CF Card (via SC Master) these functions are then carried out at the corresponding point of time. Among other things, it supports volume and sound control, direct and conditional jumps to other shows, as well as setting and evaluating variables.
- Remote-control of Wings Platinum shows or CF Card shows (SC Master) via keypads, IR-remote control units or via RS 232 commands.
- You can use drivers for serial control of devices which make commands directly selectable from a menu. You can downloaded drivers from the Internet or even create them yourself.
- Trigger functions allow various actions and functions to be started by pressing function keys, by serial commands or even live by pressing a button in the Control Panel, or time-controlled by specifying certain conditions. This ranges from show playback control and file downloads from the Internet to dispatch of messages when certain conditions are met.
- The time basis to be selected for a timeline can be **audio**, **PC clock** or **timecode**. For playback, Wings Platinum, being used as a slave, can be

synced up with timecode (MTC or SMPTE). Output of timecode is also possible.

- DMX recording allows recording of DMX data from other control systems. These data can be edited in Wings Platinum and synchronized with sound.

Presentation

- Presentation of videos in fullscreen mode without any visible computer windows, supporting stereo sound or even multi-channel playback with up to 24 channels; consideration of color profiles for optimized color representation for video projectors.
- Shows can be output at full quality as EXE presentations to be started on virtually any modern Windows computer by double-clicking the file without requiring Wings Platinum to be installed. In order to prevent misuse of an EXE presentation, it can optionally be provided with password protection and expiry data.
- Playback stops automatically at pause markers and is continued upon pressing a button, e.g. for Speaker Support. The show can be continued both via the keypad or the mouse and via a remote control unit connected to a serial computer port.
- Via "AV Prompter" software and an **Apple iPod touch** or **iPhone**, speaker support shows can now also be remotely controlled. In addition to playback control preview pictures and prompts on the iPod display can now be displayed in sync with the show. .
- Support of various remote control systems, such as our media control system Iseo, Mackie Control, Tascam US 224 or even simple buttons.
- All the actions programmed in the timeline for slide projectors, lights, switches and other devices are controlled and synchronized via the device ports.
- The mix group function can be used for spontaneous dissolves of certain track contents during playback &endash; these can be pictures, video or sound. You can define certain tracks as mix group A and some other tracks as mix group B. Playback can be started with mix group A, for example, while you change over spontaneously to mix group B after a while. This function is very well suited for live presentation of very complex contents.

- DVD creation including MPEG 2 encoding and menu control for presentation via DVD player and TV set.
- Output of Blu-ray-compatible HD-videos which can be stored on a Blu-ray disc via external writing programs.
- Support of dual head graphics cards allows softedge panorama and stereo shows with one PC and two video projectors without any extra efforts. However, displays cannot be freely configured although some templates for various applications are available.
- For projection onto bent or uneven surfaces the contents of screens can be warped. The essential advantage compared to hardware solutions is improved image quality - at the time of correction the image files are still available at high-resolution quality &endash; and the much lower price.

Multidisplay presentation

- Multidisplay presentations with a number of networked computers allow soft edge projections of huge pictures on a number of data projectors.
- Up to four displays or video projectors can be played by one computer with two dual-head graphics cards.
- Camera-based calibration with regard to geometry, brightness and color, as well as automatic alignment of softedge masks is now available in Wings VIOSO for up to four video projectors on one computer. This feature allows automatic correction of projections onto uneven or bent surfaces or onto brickwork and rocks. See also Camera-based calibration of multidisplay projections.
- In a presentation network with a master and an arbitrary number of slave computers, the show can immediately be presented at full quality even during the production. For this purpose, Wings Platinum uses hardware rendering via 3D graphics cards and automatic media distribution to the slaves.
- The computer used for show production constantly displays the entire multidisplay screen even without the presentation network being available. This means that show production is always possible even when the slaves are not connected..

- As an option, a multidisplay show can also be shown as a video presentation with split video files. This may be very useful for running a number of parallel videos, as the performance of the available computers would otherwise not be sufficient.
- At any time during the production, a few mouse-clicks will do to produce AVI/MPEG videos, video DVDs or even snapshots of the entire multidisplay screen, which may come in very handy for layouts, approval or single screen presentations.
- Soft edge mask are created in a graphic editor. Any modifications immediately become visible, as gray scale is added in real time by the graphics card. So it's easy to make adjustments to the local conditions even shortly before a presentation.
- Warping of screen contents or individual multidisplay areas allows geometric adjustment to warped or uneven projection areas. Moreover, it is also possible to compensate for distortion caused by lenses, which is particularly useful for the overlap areas of softedge projection. The essential advantage compared to hardware solutions is improved image quality - at the time of correction the image files are still available at high-resolution quality &endash; and the much lower price.
- Soft edge masks can now be exported as simple image files (24 bits) or as image files with alpha channel (32 bit). For rendering of split videos, soft edge masks can be rendered into the video as an option.
- The production computer can be used as fully-fledged presentation computer (master) at the same time.
- A project for a multidisplay show may also contain all sorts of complex peripheral installations in addition to audiovisual media. Virtually all show control functions are available.

The Program Window

1. Main menus from "File" to "?" Help
2. Toolbar for object editing.
3. Tool bar with Buttons for frequently used functions.
4. Bar showing locator time, buttons for playback control and zoom in/out buttons for expanding and compressing the time axis.
5. Screen for displaying the visual output, i.e. the mix of videos, images, texts, etc.
6. Locator, vertical line for a graphic display of the time position. Moves along the timeline during playback and can be moved with the mouse in Stop Mode. The exact location of the Locator in time is shown in the time bar on the very left.
7. Accommodates a total of four tabs: "Preview" shows a highlighted file (images videos, etc.) of the Media Pool. See Viewing and listening to

media files. "Tasks"lists all the media files whose display and intermediate video data are being created. See Task list. "Messages" lists error messages and warnings. See Messages. "Log" keeps a record of production steps and system processes. See Displaying log information.

8. Media Pool - contains all media files used in a project, as well as any other project resources
9. Selection of Media Pool categories, also used for structuring media into folders.
10. Audio level control, can be changed over to Control Panel and Comments.
11. Timeline with various tracks for the corresponding objects. Every track has a track head on the left showing the typical symbol for the corresponding track type and a number of buttons. .
12. Properties Table, for editing the parameter of highlighted timeline objects.

Tool bars

Wings Platinum features two tool bars with buttons for selecting functions and tools. They can be found in the program window below the main menu and next to the timeline.

Function bar

The function bar for selecting a number of different functions can be found in the program window below the main menu. For information about the toolbar for editing objects click here.

Please note that the availability of buttons depends on the version.

New... opens the dialog box for creation of a new project.

Open project... opens the corresponding dialog box.

Save... saves the current project.

Save as... opens the corresponding dialog box.

Save undo step... saves the current editing status as undo step..

Undo... reverses the last processing step.

Redo... restores the last processing step.

Create display data... initiates creation of the missing display data for a project and the button will be impressed . When you click the impressed button, display data creation is reduced to the currently displayed media. See also **Creating display data for media files** *in the Help topics*.

Display screens... opens or closes the screen window.

Record Mode... activates or deactivates the corresponding mode. See *Using external input devices in the Help topics*.

Enable device ports... activates or deactivates the port for connected devices. See *Enabling device ports in the Help topics*.

Enable network... activates or deactivates communication via the network. See also *Using Additional Licenses* and *Configuring the presentation network in the Help topics*.

Transfer slave files... enables or disables data transfer to the slave computers for multidisplay operation.

Enable trigger scheduler... activates or deactivates the trigger scheduler. See also *Trigger functions in the Help topics*.

Enable all warnings... enables output of all warnings and error messages. See *Enabling/disabling all warnings in the Help topics*.

Options... opens the Options Dialog.

Help topics... calls up the Wings Platinum Help. See also *Optimum use of the Help topics in the Help topics*.

About Wings Platinum... opens the info dialog.

Toolbar

The Toolbar can be found on the left next to the timeline. This narrow, vertical window, however, can be "torn off" and moved to a different location. Further information on this is available further below.

Enabling the tools

Depending on the situation and your personal working style you can enable tools in different ways. Please note that the first two tool buttons are mutually exclusive, i.e. only either **Edit** or **Pan** can be enabled.

Enabling the tool via mouse-click

- Click a button to enable or disable the corresponding tool. The blue background of a button shows you that it is enabled.
- If a button has a small triangle in the bottom right corner, you can choose from a number of different modes. The list of options is displayed after right-clicking the button or by clicking and holding the left mouse button.

Enabling the tools by pressing keys

- Nearly every tool can be enabled temporarily by pressing a key on the keyboard. This is how it works:
  - Hold the key → Edit → Let go of the key

  While you are holding down the key, the tool remains enabled, when you let go of it the tool resumes the previously selected mode. **Note:** This way, only one tool can be enabled at a time, i.e. holding several keys at the same time is not possible.

- Once a tool is to be enabled permanently press the key twice, i.e. double-press it.
- Information on which keys enable which tools can be found both in this topic and in the tool button context menu. Reference to those keys can be found both in this topic and in the tool button context menu. A compact list of all tools is also available. Click Print list of tools in the same Online Help topic.

Standard toolbar settings

All tools can be reset by clicking **Reset tools**.

Timeline editing and In-Screen editing

Edit objects in timeline and screen ...allows editing of objects in timeline and screen. Shortcut via key **S,** default setting.

Edit objects in timeline ...allows editing of objects only in the timeline. Shortcut via key **T**.

Selecting the panning mode for the displayed section of timeline and screen

Pan ...allows free shifting of the screen contents. Shortcut via key **P**. Press **Shift** to temporarily block vertical shifting in the timeline.

Horizontal panning ...only allows horizontal shifting of the displayed section of timeline and screen.

Vertical panning ...only allows vertical shifting of the displayed section of timeline and screen.

Info

- All three modes also allow zooming via mouse-wheel.

- When the screen content is shifted, **Auto Zoom** is disabled. See also Enlarging/reducing the screen content. .
- Option **Reset pan / zoom** gives you the chance to decide whether the Pan/Zoom settings are to be automatically reset during the Presentation (**F 5**) or not.
- By dragging one screen window edge you can extend or reduce the size of the screen also.
- With tool **Pan** being permanently enabled vertical shifting can be blocked by shifting the timeline portion while pressing the **Shift** key.
- Please bear also in mind that all Panning functions only affect the visible section, i.e. they have no influence on the show itself.

Selecting the area newly created or modified keyframes are to take effect on

Normal keyframes ...the values of a newly created keyframe are only effective at the location of the keyframe. Shortcut via key **N**.

Keyframes constant for object ...the values of a newly created keyframe are also copied to start and end frames, thus applying to the entire object. Shortcut via key **C**.

Keyframes constant from object beginning ...the values of a new keyframe are also copied to the start frame, thus applying to the object from the beginning of the object to the new keyframe. Shortcut via key **B**.

Keyframes constant to object end ...the values of a new keyframe are also copied to the end frame, thus applying to the object from the location of the new keyframe to the end of the object. Shortcut via key **E**.

Info Optionally, these tools can also be used for nodes, which may be an interesting feature for data objects in a show control project. They are enabled under **Options** - **Global Options** - **Objects**.

Selecting keyframe properties for the curve gradient

Linear keyframe ...the parameter curve behaves like a thread and runs in a zigzag line from one keyframe to the other. Shortcut via key **I**.

Spline keyframe ...the parameter curve behaves like a steel wire and runs smoothly from one keyframe to the other. Shortcut via key **O**.

SmartMove keyframes ...the parameter curve, starting from a horizontal curve, runs smoothly to the next keyframe and is ideal for soft movements. It is a Bezier keyframe which is set up to adjust to object modifications. Shortcut via the **Z** key.

Symmetric keyframes ...creates a node with Bezier properties. As opposed to SmartMove nodes, the handles feature identical tangents at both sides whose values are not object-related. Shortcut via the **U** key.

Info

- Symmetric keyframes can only be set in objects with a ramp band. In combined control tracks, selection of tool **Symmetric Keyframes** automatically creates **SmartMove keyframes.**
- SmartMove keyframes in combined control tracks allow entry of a **Smart Factor** in the Properties Dialog. Entry of values between **0** and **100** allows you to influence acceleration: With a value of **0** the movement starts abruptly and the speed remains constant, while with an entry of **100** movement starts very softly while the speed is accelerated markedly.
- Bezier nodes or keyframes are no longer effective as such when their ramp bands are connected to adjacent Spline nodes or keyframes. Details and examples for using different keyframes or nodes can be found in the help topics under Shaping ramps.

Selecting the compress/extend mode for objects

Move fades ...shifts crossfades as well as fade-ins and fade-outs to the beginning or the end of objects. The duration of the fade does not change. Shortcut via key **A**.

Stretch fades ...changes the duration of crossfades as well as of fade-ins and fade-outs at the beginning and end of objects. Shortcut via key **D**.

Stretch objects ...causes object content and the ramp shape to be stretched or compressed when objects are extended or shortened. Shortcut via key **W**.

Info For audio objects the sound is only changed (time stretching) when at least the Pro License has been installed.

Choosing the dragging direction for objects in the screen

Unconfined dragging ...Allows dragging of virtually all editable objects (timeline, screen and warp grid). Shortcut via key **F**.

Horizontal dragging ...Allows only horizontal dragging of editable objects. Shortcut via key **H**.

Vertical dragging ...Allows only vertical dragging of editable objects. Shortcut via key **V**.

Shift following objects ...enables or disables this mode. Shortcut via key **Q.** See *Shifting following objects along in the help topics*.

Snap to objects ...activates or deactivates the "magnetic mode" of the Locator. Shortcut via key **L.** See *Snapping Locator to objects in the help topics*.

Info

- All tools can be reset by clicking .
- Wings Platinum saves the current tool bar settings when terminating the program, i.e. the customized tool bar configuration is kept.
- The toolbar can be "torn off" and moved to some other location or combined with other tabs. See also *Customizing the program window*.

Customizing toolbars

You can add or remove functions to/from the Wings Platinum toolbars. Moreover, it is also possible to create additional toolbars with any type of functions. The following cases are possible and will be explained in this topic:

Adding functions

Changing the order of buttons

Removing functions

Creating a new toolbar

Hiding or displaying toolbars

Resetting toolbars to their default configuration

Adding functions

1. Right-click the toolbar and select **Customize...**
2. In the window on tab **Commands** select a category on the left, and the corresponding functions will be listed on the right under **Commands**.
3. Drag and drop the corresponding command into the toolbar, placing the button in the appropriate location.
4. Once you have added all the required functions, close the **Customize** dialog.

Changing the order of buttons

1. Right-click the toolbar and select **Customize...**
2. Grab the button and drag it to the corresponding location.
3. Once the required order has been established, close the **Customize** dialog.

Removing functions

1. Right-click the toolbar and select **Customize...**
2. Drag the button to be removed from the toolbar.

3. Once the corresponding button has been removed close the **Customize** dialog.

Creating a new toolbar

1. Right-click the toolbar and select **Customize...**
2. In the window appearing click **Toolbars** and **New...**
3. In the field, enter a name for the toolbar and click**OK**, following which the new toolbar is created in the form of an empty new window.
4. Now click on tab **Commands** and add the functions as previously explained.
5. The new toolbar can be used as a separate window at any location or docked to the sides of the program window. It can also be docked to an existing toolbar.

Hiding or display toolbars

1. Right-click the toolbar and select **Customize...**
2. In the window appearing select tab **Toolbars**.
3. By placing or removing the corresponding checkmarks you can define the toolbars to be displayed. **Note:** A toolbar can be closed directly by clicking button .
4. After this close the **Customize** dialog.

Resetting toolbars to their default configuration

1. Right-click the toolbar and select **Customize...**
2. In the window appearing select tab **Toolbars**.
3. The following options are available:

   - **Resetting a toolbar** ...highlight one of the standard toolbars, click **Reset** and confirm the query.
   - **Resetting all toolbars** ...click **Reset all** and confirm the query.

   If you reset all toolbars any possible changes to the menus are reset, too.

See also

.

Customizing the program window

The Wings Platinum program window contains numerous sub-windows which can be arranged and structured most flexibly. We distinguish between two types of window:

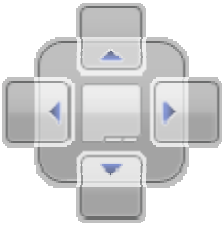
The Timeline window ...is the central window which may contain a number on timelines on tabs. By clicking on a tab the corresponding timeline is moved to the foreground. Moreover, the tabs can be moved into an additional group. In such a case an additional timeline group is created and the contents of several timelines can be displayed simultaneously. This is how it is done:

- Right-click the corresponding tab and click **New horizontal group** or **New vertical group**.
- Optionally, different timeline tabs can be displayed in different colors. See Options - Global Options - User interface.

Info on how to open and close timelines or their tabs can be found in topic Opening/closing timelines.

Any other windows are arranged around the timeline window. However, they can be "torn off" by grabbing the window at the title bar and dragging it. Windows can be placed as follows:

- **Separate window** ...just let go of the window somewhere on the screen.
- **Dock window** ...drag the window to one of the docking symbols. They appear automatically as soon as a window has been torn off and is dragged to some other place.



The future window location is shown as some blue area as soon as the window is dragged onto one of the four symbols. After letting go of the mouse-key the window is docked to the indicated location. Please note that there are also smaller symbols at the sides of the main window in addition to the large symbol with five selectable locations.

- **Add window as tab to an existing window** ...drag the corresponding window or the mouse pointer, respectively to the center of the docking symbol and let go of the mouse key.
- **Hide window automatically** ...click **Auto Hide** in the top right corner. With such a setting the window is minimized as soon as you click somewhere outside the window. Click the window symbol at the bottom left corner of the program window to open it again. Deactivate Auto Hide by clicking again.

Choosing the user interface language

1. In the toolbar below the main menu click **Options** and select **Global Options** - **User interface** on the left.
2. Under **At next program start** select the required language under **Language** by clicking on .
3. Close the dialog by clicking **OK**. Exit Wings Platinum and restart it, following which the selected language will be used.

Audio level display

- In the Project Explorer, click on tab **Audio level,** to find the chosen level display, i.e. Peak Level or K-System with RMS level. See also The K-System - Checking volume and dynamics.
- While playing back, the current level is displayed in the form of bars. Peak levels are marked by peak indicators. The highest possible level is permanently indicated by small markers on the dB scale. Reset the audio level bars by clicking on them with the mouse. The peak level must be no means exceed zero dB.
- When the K-System is activated the wide colored bars indicate the RMS level while the narrow gray ones indicate the peak level.
- You can adjust the master volume control by grabbing one of the little triangles with the mouse.

Comment field

- In the Project Explorer click on tab **Comment**. Here you can enter remarks about your projects. They will be visible before opening a project. E.g. see **Create new project** &endash; **Last projects.**

Slide Tray Editor

Before playing back, the pictures arranged in the timeline are automatically assigned to the tray slots in the editor. Later on, the slides must be sorted into the real slide trays in accordance with their position in the Slide Tray Editor whose contents can be organized in a variety of ways:

Locking slides in tray slots

1. In the Project Explorer, click on tab **Slide trays**.
2. Mark the corresponding pictures by clicking on them, just like in Windows. In order to mark additional tracks, click the track heads of other tracks while holding the **Ctrl key**. Press the **Shift key** while clicking two pictures to mark all other pictures between those two as well.

3. Right-click a marked picture and select **Lock slide in tray slot**.

Info

- Locked slides are marked and their position is not changed when the tray contents are re-sorted. Should re-sorting be necessary after rearranging a sequence, you need to cancel locking. This is done exactly like locking, but you need to select **Unlock slide** from the context menu.
- If you remove locked pictures from the timeline, they are not removed from the tray. In this case you will have to remove them manually from the Slide Tray Editor.

Locking slides in projectors

For special effects to be performed by a particular projector certain slides may have to be locked in a particular projector, e.g. for zoom or mirror effects.

1. In the Project Explorer, click on tab **Slide trays**.
2. Mark the corresponding pictures by clicking on them, just like in Windows. In order to mark additional tracks, click the track heads of other tracks while pressing the **Ctrl key**. Press the **Shift key** while clicking two pictures to mark all other pictures located between those two as well.
3. Right-click a marked picture and select **Lock slide in projector.** Locked slides are marked and are not re-sorted to other projectors when there are any modifications.

Manual sorting of slides

1. In the Project Explorer, click on tab **Slide trays**.
2. Drag the corresponding picture to its new position while holding the mouse key. If this tray compartment is occupied, the pictures just swap their locations. But you can also drag the pictures from the Media Pool into the Slide Tray Editor.

Info

- Re-sorted slides are automatically locked in the corresponding tray slots. Automatic locking can also be deactivated under **Options** &endash; **Project Options** &endash; Slide trays.
- It is also possible to move several pictures at a time into a tray in the editor. This is a practical feature when old shows without any digital pictures were imported into Wings Platinum. Any subsequently and tray-wise scanned pictures can then very quickly and simply be allocated.

Printing a tray list

Once you have finished programming a sequence and want to check it with your slide projectors, you, first of all, need to sort the real slides into the trays. To help you doing this, you can print out a list of slides.

1. In the Project Explorer, click on tab **Slide trays**.
2. Right-click a picture in the corresponding tray and select **Print slide tray**.

Info The number of pictures per page and whether information (file names or comments from the Media Pool) is to be printed out as well, can be specified under **Options** &endash; **Global Options** &endash; Print.

See also

Printing the sequence of pictures in the timeline

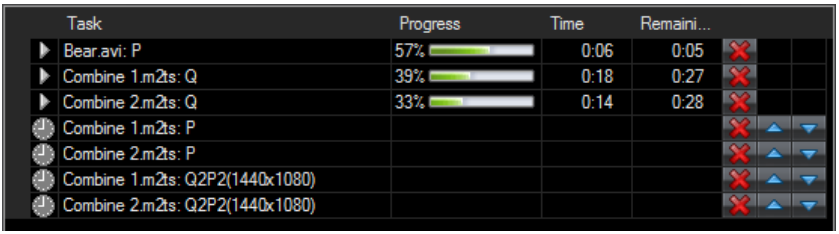
Control Panel

The Control Panel can be used for direct and timeline-independent operation of devices and for direct execution of trigger actions. The Control Panel offers status displays for control channels, switching states, incoming timecode and variables from an SC Master. The override functions makes it highly suitable for live applications which require direct intervention in programmed sequences or for calling up pre-programmed sequences by

means of the corresponding trigger actions. All this is done via control panel fields arranged on the Control Panel.

Task list

Usually, the task list can be found at the bottom right of the program window after clicking on tab **Tasks**. It lists all the tasks processed one after the other in the background and their corresponding statuses.



The first column shows you whether a task is currently being processed, whether processing is paused or whether a task is waiting for processing.

Click to delete the task. Click to move the task to the top of the list where it becomes the next to be processed. Click to move the task to the end of the list.

Right-clicking the task list allows further functions to be selected:

Pause ...pauses processing of all tasks. Restart processing by clicking this function again.

Maximum performance ...this type of processing burdens the processor to a higher extent, i.e. dual core and quad core processors without hyper-threading make use of all available processor cores. Please note that this does no longer allow parallel tasking. However, processor with more than four cores or quad cores with hyper-threading in such a case allow 75 percent of the threads to be used, i.e. parallel tasking is still possible.

> Click this function again to disable mode **Maximum performance** again.

Remove waiting tasks ...removes all tasks in waiting position which are marked by .

Remove all tasks ...removes all tasks from the list.

See also

Creating display data for media files

Optimization through Intermediate Video Data

Messages

Tab **Messages** can usually be found in the area of the Preview window. It provides information about problems within your project. Currently this information refers to videos only, but it is planned to extend it to other areas.

There are four types of messages that can be distinguished by the following symbols:

Information ...these messages require no immediate action.

Warnings ...should definitely be taken into account as otherwise problems might arise.

Error messages ...refer to an acute problem that must be resolved.

Log entry ...indicates that there is an entry in a log file that must be taken into account.

Every message has at least two buttons which can be used for the following:

Repair ...usually eliminates the problem. The exact way of dealing with the problem depends on the problem itself. If, for example, no intermediate video data or preview data are available for a video they will be created. Please note that the error message will only disappear once the data have been generated. With any other messages a file dialog is opened, e.g. if a file is missing, or the log file may be opened for log entries.

Help ...opens the appropriate help topic in line with the problem.

See also

The Program Window

Reset user interface

Displaying log information

The log file contains all working steps performed in Wings Platinum and can be used for error analysis in case of problems.

Showing log entries

- In the bottom right-hand corner of the program window click tab **Log**. In addition to the date and the time, it also contains the type of action and the purpose. Please note that the latest entries can be found at the end of the list. The last entry is shown automatically unless function **Scroll automatically** has been disabled.
- Current log entries referring to errors, warnings and information are displayed in the info line at the bottom right corner of the program window. This information remains visible even if tab **Log** is not in the foreground.

Copying log information

- Right-click some free space on tab **Log** and select **Copy support information**. Following this, all the log information but also any other information such as the properties of imported videos are copied to the clipboard. This information can be copied and pasted to a text document or directly to an e-mail, e.g. via the key combination **Ctrl** and **V**.

Exporting log information as CSV file

- Right-click some free space on tab **Log** and select **Export as CSV file**. In the dialog box, enter name and target directory for the CSV file and click on **Save**. Following this, all the log information but also any other information such as the properties of imported videos are exported to A CSV file (comma-separated values) which may be opened in MS Excel, for example.

Deleting log entries

Right-click some space on tab **Log** and select

- **Delete previous entries** ...following which all entries older than the one you clicked on will be deleted.
- **Delete all entries** ...deletes all log entries.

Info Only the visible entries will be deleted. When deleting the entries Wings Platinum stores all log entries in separate files in folder **Log**. See also Extras - Open folder.

Opening windows

Wings Platinum uses several windows that may be grouped into a number of tabs. If a window is not displayed you can open it as follows:

- In the main menu click **View - Toolbars** and select the corresponding window. Make sure the toolbar is not checked which is a sign that it is already open. By checking and unselecting it it would be closed again.

See also

Opening/closing timelines

Opening/closing the timeline

If the required timeline including the arranged tracks is not visible, you can open it as follows:

1. In the Media Pool click on category **Timelines** and open the corresponding folder, if necessary.
2. In the line of the corresponding timeline click **Display** and the timeline in the active timeline group is opened while the previously opened one is closed. If the new timeline is to be added to the active group as a separate tab you need to press **Ctrl** additionally when clicking **Display**. Please bear in mind that a number of opened timelines requires more performance.

Info

- When a high number of timeline tabs is open, some tabs will not be visible, which can be recognized by the symbol in the top right-hand corner. If you click you will see a list of all timeline tabs of this group and you can open the required timeline by clicking on the tab.
- Close a timeline tab by activating it and clicking the symbol in the top right corner of the tab. Any possible playback is stopped.
- You can close all opened timeline tabs at once by clicking **Timeline** in the main menu, followed by clicking - **Close all timelines**.
- Moreover, tabs can also be moved into an additional group. In such a case an additional timeline group is created and the contents of several timelines can be displayed simultaneously. Right-click the corresponding tab and click **New horizontal group** or **New vertical group**.
- Optionally, timeline tabs can be displayed in different colors. See Options - Global Options - User interface.
- For projects with a number of timelines, only one timeline must contain projectors which are linked up with screen fields. Active projectors in any other timelines may cause malfunctions.

Reset user interface

If you should muddle up your user interface configuration and not be able to resolve this problem you can have the user interface reset to its original condition.

In the main menu, click **View - Reset user interface...**

In the next dialog click **OK**, exit Wings Platinum and restart it again.

See also

Customizing the program window

Licenses and Functions

Licenses and functions

Wings Platinum is a software based on a modular structure and is available in a number of different versions offering different features. Information on the various features of the individual versions can be found in the table of functions. Of course, an upgrade is possible at any time.

Licenses

Wings Platinum is available in different versions, a short description of which can be found below:

Free licenses

- The **Wings Platinum Demo License** is free of charge and offers all the functions for testing with certain restrictions. On the screen, a bar showing **Demo** will appear and no media except WMV and AVI videos with a length of up to one minute can be exported. A multidisplay presentation can only be viewed in Preview Mode and cannot be presented via slave computers. Devices cannot be controlled. Any other restrictions can be found in the table in the Help topics under **Licenses and functions**. The **Info** dialog of a Demo license allows you to choose the range of functions (Starter, Advanced, Pro or Multidisplay) you want to test.
- **Wings Platinum Basic** is also available for free and offers interesting options for newcomers to find out about how to create a full-scale AV show. Audio, pictures and videos at standard resolution (PAL/NTSC) can be arranged on one cross fade track each. For any additional features of this license please refer to the table in the Help topics.

Full licenses with dongle

- **Wings Platinum Starter** is a low-cost full version for newcomers containing virtually all the most important basic functions for designing extensive shows. Audio, pictures and videos at standard resolution (PAL/NTSC) can be arranged on two cross fade tracks each, allowing for a number of effects and parallel montage of similar objects. A text track can also be used for titles. For exact details of this license please refer to the table in the Help topics **under Licenses and functions**.
- **Wings Platinum Advanced** is a powerful full version for ambitious and advanced users. In addition to all the basic functions for designing extensive shows it also offers functions for controlling external devices. Audio, pictures and videos at HD resolution can be arranged on any number of cross fade tracks to achieve spectacular effects and complex montages. For exact details of this license please refer to the table in the Help topics under **Licenses and functions**.
- **Wings Platinum Pro** is a highly extensive full version for particularly ambitious or professional users. In addition to the functions of the Advanced License it also offers sound effects and extended functions for professional presentations, as well as export of blu ray-compatible HD videos. For exact details of this license please refer to the table in the Help topics under Licenses and functions.
- **Wings Platinum Multidisplay** offers all functions of the Pro License and multidisplay support via networked computers for the professional user. It also allows Display Warp and can be used as master or slave license for a computer. For exact details of this license please refer to the table in the Help topics under Licenses and functions.

Wings VIOSO offers professional users all the functions of the Multidisplay License and, in addition to this, camera-based VIOSO calibration of the projected image. This calibration feature allows automatic adjustment of the image for projection via a number of video projectors onto uneven, bent or even completely irregular surfaces. The corrected parameters are geometry, brightness and softedge masks. Optionally, it is also possible to compensate for patterns and colors of the projection surface in the image. Dongles are available for one or two displays. The exact features of the license can be found in the table in the help topic under Licenses and functions.

Upgrades to a higher license are registered with the existing dongle. See also Copy protection dongle in the Help topics.

Optional Modules

- The **Wings Platinum** AV Prompter Modul allows full-scale operatoin of AV Prompter, which is free software for Apple iPod and iPhone for remotely controlling presentations and for displaying information on iPod display in sync with the show. Refer also to the Help topic Remotely controlling via iPod and AV Prompter.
- **Wings Platinum Show Control Module** has been designed for professional users with extremely high demands in the field of Show Control. It can used as an extension to an existing full version of Wings Platinum. For exact details of this module please refer to the table in the Help topics under Licenses and functions.
- **Multi-Timeline EXE Presentation Module** allows output of interactive projects with several timelines as an EXE presentation, with the interactive links of timelines and mix groups being supported by triggers. This way it is possible to output even complex projects as EXE presentations and make them accessible to customers without Wings Platinum. This type of output can already be tested with the Pro License and up. In this case, however, the screen shows a large logo to start with and the text "Created with Wings Platinum" later on.
- **Wings Platinum Additional Licence** is a low-cost alternative if you want to run Wings Platinum simultaneously on several computers. It is supplied with a separate copy protection dongle. When an additional licence is used within a network, all functions of the main licence recognized within the LAN are enabled. An exception are the functions of the Multidisplay Licence and the Show Control Module, as well as all Start Options under Global Options - Start that are required for automatic operation. When an additional licence is used independently without LAN connection, saving of projects or media is not possible (except for CF card data). For a presentation, however, this does not matter. See Using additional licences in the Help topics.

What are the features of the free Basic License?

Welcome to the World of Wings Platinum. The free Basic version allows digital presentation of pictures at high quality. Moreover, this version allows control of three slide projectors, which means that you will also be able to create and present simple slide shows. The following operations are possible:

- You can **arrange your sequence of pictures in a picture track**. Dissolves of your digital pictures are immediately visible on the screen, the virtual projection screen, **at full screen resolution**. Wings Platinum uses hardware rendering via 3D graphics card for this purpose.
- On an audio track **music**, **noise** and **language** can be arranged and crossovers be produced. Even precise cutting is possible. Fading in language or noise into music or advanced sound montages require the optional Audio Track Module. See Licenses and functions.
- It is possible to integrate **standard-resolution videos** (PAL/NTSC) in to your show. "Video-in-picture effects", i.e. a large background image with a smaller video in front, are also possible. See Video editing and Visual effects.
- Images and videos can be animated via so-called **keyframe effects** in order to create camera movements, etc.. You can either create the keyframes yourself or use previously prepared ones from the Media Pool. See Using Predefined keyframe effects.
- There are some visual realtime effects available, such as Monochrome, OldPhoto, DefaultYUV correction or Posterize. See also Visual effects.
- If you have used digital pictures and videos in designing your show, you can output **EXE presentations** via the integrated player. An EXE presentation can be started by double-clicking it and runs on virtually every up-to-date Windows computer, provided it has enough capacity. For presentation of high-resolution images Wings Platinum uses 3D graphics cards hardware acceleration. The images contained in the file can be copy protected to prevent unauthorized usage of images by third parties to the largest extent possible when passing them on. Password protection can also be enabled additionally. See Creating an EXE presentation.
- You can also use Wings Platinum to render **MPEG 2 videos** and output **video DVDs**. For the Basic License, however, the picture size is re-

stricted to 720 x 576 pixels. To produce videos with arbitrarily large pictures you need the Advanced License or higher. See Versions and Licenses.

- The **Help** topics contain information about all functions of the Basic version as well as a few tips on interesting functions of the full versions. The Basic version is available free of charge; therefore, we cannot offer any support. Support is available though after installing a full version. By the way, there are numerous committed Wings Platinum users who exchange information in the user forum. Why don't you pass by for a few mouse clicks, at www.stumpfl-anwenderteam.de (...in German).
- Contact Stumpfl for the **free enable code** by email (or in any other way), so that you can use the Basic Version as often as you please. To be able to send it to you we only need your name and address. Of course, you can also turn to your dealer. Any available enable codes for version 2.40 can also be used for Wings Platinum 4. Of course, you can also take advantage of the Wings Platinum updates. Use the update function to bring your program up-to-date. See Software Update.

So far, so good. Have fun trying out the Wings Platinum Basic Version! Or would you rather find out about the concept of Wings Platinum first and get some information on the workshops? In this case you should choose A successful start.

Enabling licenses

When you acquire a new module or upgrade for your Wings Platinum version you normally only need to enter the enable codes before you can use the new functions.

1. Click button in the function bar below the main menu or **?** in the main menu and select **About Wings Platinum...**
2. Click **Wings Platinum License...**
3. If you have plugged more than one dongle into your computer, you select the dongle under **Enable code for dongle no.** which you want to enter enable codes for.

4. Enter the enable codes in the corresponding fields and click **Accept.**
5. Click on **OK**. Now terminate Wing Platinum and restart it.
6. Now check entry of the enable codes by clicking on button . The correct license must be displayed at the top of the dialog box. If this is not the case repeat entering the enable codes.

How to avoid entering enable codes in the future...

If you need to frequently install Wings Platinum on different computers, you can avoid entering the enable codes every time by proceeding as follows:

1. Copy file ***PlatinumXXXX.reg*** (with XXXX standing for the serial number of your dongle) to your new computer and double-click this file. Following this, all enable codes are registered. This file is available under

Windows XP

...Documents and Settings ***Username**\Application data\AV Stumpfl\Wings Platinum 4

Windows 7 and Vista

...Users***User name**\AppData\Roaming\AV Stumpfl\Wings Platinum 4

Note: In Vista, the original paths are in English. In the Explorer, however, they are usually displayed in the corresponding language, e.g. German, etc. Therefore, they may vary depending on the file browser used. The original English pathname is stated above.

2. Now install Wings Platinum. The correct enable code will be displayed in the corresponding dialog box.

Info If file **PlatinumXXXX.reg** is not available on your old computer, you can create it by clicking on **Info** - **Wings Platinum License**... followed by **Accept**.

Info If you are using several dongles on one computer for multidisplay with VIOSO calibration you need to have a Wings VIOSO license for each of

them. Otherwise the dongle with the lowest license applies and VIOSO calibration will not be available for any display.

Copy protection dongle

A full version can only be run with a copy protection dongle. It is supplied along with all licenses (Starter, Advanced, Pro or Multidisplay or Wings VIOSO). For Multidisplay or Wings VIOSO dongles with licenses for two displays are available. There are two types of dongles:

The **USB dongle** is supplied by default and is compatible with Windows XP, Windows Vista and Windows 7. If your computer has a USB port at the front, the dongle can easily be plugged in and removed again, which may be very useful when several computers are used.

The **dongle for the parallel port** is connected to the printer connection (e.g. LPT 1). The printer cable can be reconnected to the back of the dongle. This dongle version has become outdated and is only fully supported by Windows XP.

Using Wings Platinum without administrator rights

If you want to use Wings Platinum as **user**, i.e. via a user account with restricted rights, you should bear the following in mind:

1. For the duration of the installation, the user account of the future Wings Platinum user must be granted administrator rights.
2. Then register as a user and install Wings Platinum.
3. After the installation take away the administrator rights again.

Using an additional license

An additional license is a low-cost alternative, if you want to run Wings Platinum simultaneously on several computers. When an additional license is used within a network, all functions of the main license recognized in the LAN are enabled, except for the Multidisplay License and the Show Control Module. When an additional license is used independently without LAN connection, saving of projects or media is not possible. An exception are CF card data, which can still be generated and saved.

The following three steps will be covered in this topic:

Installation

Network configuration

Enabling the network for full-scale operation

Installation

For an additional license install Wings Platinum as usual. Entry of the enable codes can be simplified by proceeding as follows:

1. Install Wings Platinum on the second computer just like on the main computer. Serial number and enable codes should already be entered.
2. Plug in the USB dongle for the additional license and start Wings Platinum. If applicable, check whether licenses are enabled by clicking on **About Wings Platinum...** in the function bar below the main menu.

The additional license permits limited operation, although only saving of projects, the undo function and media export are excluded. CF card data

can still be generated and saved. Any other functions, like editing and presenting are also possible.

Network configuration

Using the additional license for full operation including all functions requires a network connection with the master (main computer with Wings Platinum Module License) and Wings Platinum needs to be started on the master. For both computers to be able to communicate, configure a network connection in Wings Platinum on both computers (master and slave).

1. A functioning network is a necessary precondition, so make sure that there is a network connection between both computers. For this purpose, the **Internet protocol (TCI/IP)** and the **Client for Microsoft networks** must be installed. Information about how to proceed can be found in the Windows Online Help. In addition to this it is also important that the computers have a static IP address and the address is not obtained automatically. For information on how to verify or alter this, refer to Static IP addresses in the network.

2. In the function bar below the main menu click on **Options** and select **Global Options** – **Network** on the left.

3. Make the following settings for the corresponding computer:

   For the master computer (main license)

   - Under **Mode** click **Master** and add a checkmark next to **Enable** under **Network connections**.

   For the slave computer (additional license)

   - Under **Mode** click **Slave** and add a checkmark next to **Enable** under **Network connections**.
   - Click on **Select computer** and choose the master. The context menu will only show active computers, i.e. the master computer must be on and be part of the network.

4. Close the Options Dialog by clicking **OK**.

Enabling network for full-scale operation

A correct configuration in combination with an additional license allows master and slave to establish a connection and permits full-scale operation on both computers.

1. Enable the network connection, by clicking **Enable network** on the master computer tool bar so that the button looks as follows: .
2. On the computer with the additional license click on **Enable network**. Here, too, the button must be depressed.

Following this, the additional license will allow full operation. The network connection must remain live during this period. Otherwise, only limited operation will be possible.

Info If you start Wings Platinum on a computer with an additional license and no network connection is available, you may have to wait a little while due to the fact that it is not possible to establish a connection with the master. Information on how to sidestep this problem can be found under Wings Platinum does not start correctly.

Current Version

Under certain circumstances it may be important to know which Wings Platinum version you have installed.

- In the function bar click on **About Wings Platinum...** or in Main Menu on **?** on select **About Wings Platinum....** Here you will find the type of license, program version, revision date and the serial number of your copy protection dongle.
- Function **System info...** provides information about the computer. See System info...
- If you click **Wings Platinum License** you can enter enable codes, e.g. for upgrades or the Show Control Module. See Enabling licenses.
- Information about copyright, persons and companies scrolls automatically at certain intervals.

New and modified functions

New and modified functions

Below you will find a description of new and modified functions of Wings Platinum 4. Please note that this information refers to the highest full version and may not entirely apply to your individual license (Starter, Advanced, Pro, etc.) currently installed on your computer. Please make use of the links to the corresponding topics to find out about the modifications. This list is directly available at any time via the Help menu **?** - **New features**.

A complete list of features offered by the corresponding licenses can be found in the help topic under Licenses and functions.

Version 4.22

- **Attention:** As of version 4.21 Wings Platinum works only with USB dongles, i.e. usage of the former parallel-port dongles will no longer be possible. Please get in touch if you should be affected by this modification. See also Copy protection dongle.
- The interface for the **AV Prompter** has been redesigned in order to simplify configuration and connection and to improve connection reliability. See Remotely controlling via iPod and AV Prompter. **Attention:** Please note that the new AV Prompter version must be installed on the iPod or iPhone, which you can download from the App Store as usual.
- The design of the help topics has been changed and been provided with a font that is more pleasant to read. **Users of Windows XP** will have to install font **Segoe UI**. Otherwise the text is still displayed in **Arial**. Font **Segoe UI** can be found on the Internet and on Vista and Windows 7 computers. See also Optimal use of the Online Help.
- In addition to this, the Help System now contains a new topic on **Windows 7 optimization**. See Optimizing Windows 7.
- A project containing several timelines can now be output as EXE presentation, which supports also interactive linkage of timelines via triggers. This way it is possible to output even complex projects as EXE presentations and make them accessible to customers without Wings

Platinum. This function, however, requires the **Multi-Timeline EXE Presentation** Module. This type of output can already be tested with the Pro License and up. In this case, however, the screen shows a large logo to start with and the text "Created with Wings Platinum" later on. See also Interactive multi-timeline EXE presentation.

- Output of EXE presentations was simplified and does no longer require selection of an MP3 encoder. See also Creating EXE presentations.
- The new mode **Prioritized synchronization on all outputs** has been introduced for graphics output. This mode is a good alternative for multidisplay applications in case of problems. See **Project Options** - **Output.**
- The default setting for the navigation bar has been changed to gray scale (...instead of yellow). See also Screen Properties.
- Function **Restore output size** allows size and screen display to be restored to the output size preset in the Screen Properties. This is a handy feature if monitor and video projector have got different resolutions and you want to judge the image quality at the video projector size though. See Adjusting the screen window size.
- When pasting images to a gap between two objects, the image does no longer fill the entire gap but only the section that corresponds to the default duration specified in the options. See also **Global Options** - **Objects** - **Pictures**.
- The tab showing the effects of an object can now be opened directly via a context menu. This works even if no effects had been applied so far (...right-click the object and select **Enable/display effects**). This makes usage of effects so much faster and simpler.
- The new effect **FrameScaled** allows images and videos to be provided with a frame whose width can be adjusted proportionally when there are changes in size, i.e. the optional effect remains the same. This function is also very convenient for an output of media with different resolutions. See Frame around images or videos.
- **Control tracks** and **keyframes** in the objects can now optionally be displayed at a size which is 50% larger and facilitates editing. See **Global Options** - **User interface**.
- The Keyframe context menu now contains a **Cut** function, which copies values to the clip board and deletes the keyframe.

- Collections of template ramps can now easily be imported to the Media Pool via a right-click. See also Predefined ramp shapes.
- Highlighting a time portion in the timeline by left-clicking or editing it now requires the **Ctrl** key to be pressed additionally. This prevents a time portion to be drawn up or changed accidentally. See Marking a portion.
- The MainConcept MEPG/H.264 codecs have been updated.
- The text function Font Engine has been updated.
- Function **Add files** has been removed from the **Media Pool** main menu. It is now available in the context menus of the various Media Pools and is no longer needed in the main menu. See also Adding media files.
- Menu item **Remove all objects** has been removed as it resulted in malfunction. If you want to remove all objects you need to highlight them first and then remove them.
- Function **Media Pool** - **Remove unused files** now allows optional deletion of the display data for these files. See Removing unused files.
- If you are having problems with the video sound you can have it extracted again by right-clicking the video object and selecting **Special Functions** - **Extract audio file again**.
- For the export of sound objects a **16-bit file format** has now been preset instead of **32-bit Float** as it is required much more frequently. See also Exporting sound objects.
- Function **Project backup...** now also records copying in the log file. See also Displaying log information.
- Menu item **Output - HDAV Player Export...** has been removed. The HDAV player will not be available as planned.
- There is now a function in place which checks during presentation whether all media can be loaded into the graphics memory. Any errors are recorded in the log file after stopping. This allows the critical points in a show to be detected and eliminated and results in higher playback reliability. See Displaying log information and Saving resources.
- **Extended logging** can now be enabled for problem analysis, which logs an extended range of activities. See **Global Options** - **Save**.

Info Modifications of earlier versions can be found in the Online Help. In the Online help topic **New and modified functions** you can also look up information on bugs eliminated, known problems and functions that have not yet been documented extensively.

Bugs and problems eliminated

- For multidisplay shows played on a PC, effects were only applied after opening and closing the screens on all displays. This problem has been solved.
- Trigger "Shut down PC" works now on all slave PCs even during playback.
- "Display Pool Object" for triggers now works also if the trigger is located in a subfolder.
- Filled folders in the Trigger Pool can no longer be deleted, but a corresponding is displayed instead.
- Pool Object Properties can no longer be edited while the show is running as it could lead to problems.
- Display of a new timeline during playback is no longer possible since it is a disallowed operation and might cause Wings Platinum to crash.
- Live video masks for multidisplay playback on one PC only worked for the first display. This bug has been eliminated.
- Changes of the video properties in the Media Pool are now also included in the undo routine.
- During multidisplay mode on one PC the dialogs and messages are now always displayed above the main window.
- During the start of a presentation, the input focus is now always put on the timeline so as to ensure playback control.
- An error messages appears when a font cannot be saved during the output of an EXE presentation.

- Recording of Show Control data is now also possible in Presentation Mode.
- Changing the contents of text objects while pressing the Alt key is not allows and has been blocked in order to avoid problems.
- When shifting and snapping to object edges the current timeline resolution might be used for snapping. This bug has been resolved.
- VIOSO calibration now also works with only one display.
- The keyframe tools now work for color keyframes, too.
- Effect changes are now also part of the Undo routine and can be made undone.
- Errors in combination with uneven resolution have been resolved.

Version 4.11

14.04.2010

- Activities of and messages from Wings Platinum are now logged in a different format, which offers a number of options, such as filtering of information. The items of information relevant to the user are listed on tab **Log** at the bottom right corner of the program window. The Preview window does no longer show any temporary messages. See also Displaying log information..
- After right-clicking the task list, functions **Pause**, **Delete waiting tasks** and **Delete all tasks** are available. See Task list.
- Management of display data and intermediate video data creation has been improved and become more reliable. As a consequence the display data settings in the Options have been somewhat changed. See **Project Options** - **Display data**.
- The font size for displaying text on the screen is no longer limited to 10 percent of the screen height. Since larger fonts require a higher amount of graphics memory, the graphics card needs to have a correspondingly large memory. See Ticker field properties.

Info Modifications of earlier versions can be found in the Online Help. In the Online help topic **New and modified functions** you can also look up information on bugs eliminated, known problems and functions that have not yet been documented extensively.

Bugs and problems eliminated

- Creation of display data for images occasionally resulted in artifacts. This problem has been eliminated.
- In some cases preview display data of videos was not created automatically. This problem has been resolved.
- When releasing button "Create display data" the existing tasks are no longer deleted (as of version 4.10a).
- Softedge settings for multi-PC multidisplay now work even when several projectors (multihead) are run on one PC.
- VST Plug-Ins are loaded even when the project is copied to a different computer and opened there.
- Mode "Maximum performance" can now be disabled correctly even when the task list is empty without Wings Platinum crashing.
- Import of timelines from other projects no longer corrupts projects.
- BlankScreen works even when the primary monitor is not monitor no. 1.
- BlankScreen-Freeze Trigger also works for multihead output.
- Changing over from preview to presentation resolution for multihead output now works properly for all outputs.
- Auto-Mute videos work again. However, intermediate video data are compulsory for this purpose.

Version 4.10

17.03.2010

- Multidisplay shows with up to four displays or data projectors now be played by one computer with two graphics cards. The render engine has been reprogrammed for images to ensure proper synchronization.
- The new camera-based calibration of multi-projector image with regard to geometry, brightness and color, as well as automatic alignment of softedge masks is now available in Wings VIOSO. This feature allows automatic correction of projections onto uneven or bent surfaces or onto brickwork and rocks. See also Camera-based calibration of multidisplay projections.
- For permanent installations automatic camera-based calibration can be performed via the trigger **VIOSO calibration** without any further queries, e.g. when starting up the system in the morning. See Automatic calibration of a permanent installation.
- The option for limiting the output of a track has been changed from slaves to displays since a computer can now output on up to four displays and restricting the output to slaves only does no longer make sense. **Important note with regard to older projects:** If you load older multidisplay shows which used output restriction to slaves you need to change the setting manually to displays. See also Restricting the output of visual contents to certain displays.
- A new Trigger **Freeze displays permanently** is now available for freezing display contents. If this trigger was used for freezing display contents this state can only be made undone via Trigger **Unlock displays**. See also Trigger actions.
- In order to minimize graphics card problems two new functions have been introduced. The Output options allow activation of the function **Restart presentation as a result of graphics card errors** in order to inform the master about graphics card problems during multidisplay presentations. In such a case the master automatically stops the show, freezes the display contents, closes the screen and restarts the presentation from its current position. Due to the fact that the display contents are frozen the audience will hardly notice this measure. Trigger **Restart timeline** may come in handy if the image is not yet visible on all displays. It also stops the show, freezes the display contents, closes the screen and restarts the presentation from the current position. See **Project Options** - Output and Trigger actions.

- Data transfer to slaves via the trigger **Transfer slave files** can now also be initiated by remote control. See Trigger actions.
- A device port **Mouse** is now available which can be used for controlling various parameters, such as portion and/or screen field size. See Configuration Mouse.
- The new function **Delete display data** allows deletion of display data for individual images. In case of problems this may be very useful in order to create new display data. This function can be found in the context menu of picture objects in the timeline or of picture files in the Media Pool.
- Active realtime effects for an object are indicated by an **Fx** in the info line. E.g. **Fx2** indicates that the object contains two effects. See also Visual effects.
- The masking function can be disabled via a button in the track head of the corresponding tracks. This may be useful for analyzing the effect of masks. See also Dynamic transparency masks.
- When an old Wings Platinum 3 project containing video objects with chroma keying is opened, the settings are written to the object comments. These values allow quick copying of the effects in the Properties Table.
- The playback speed for video objects can now be set by entering the frame rate or the speed factor (pitch). The Pitch function for videos is now available with the Starter License and up. See Video Properties.
- The Preview window now features the additional tab **Messages**. This tab shows current messages providing information about the status of videos or serve as a warning if there is a problem. In such a case the Repair button can be clicked which usually attempts to resolve the problem. See Messages.
- The Task List now offers buttons which allow sorting of tasks from top to bottom or from bottom to top in order to organize timely processing. Deletion of tasks is now also possible. A "Turbo Mode" has been introduced for better utilization of multi-core processors. After choosing function **Maximum performance** both processor cores of a Dual Core processor will be used, i.e. the processing time can be halved. However, computers with Dual Core or Quad Core processors without hyper-threading should be left to work in peace in quiet as parallel task-

ing in mode **Maximum performance** only makes sense in combination with modern i7 processors. See Creating display data for media files.

- The program behavior when opening the timeline was changed as a number of opened timelines require higher performance . Clicking **Display** opens the timeline and closes all the other timelines in the group. If the timeline is to be added as a separate tab to the active group you need to press **Ctrl** additionally when clicking **Display**. See also Closing/opening the timeline.

Behobene Fehler und Probleme

- Masked images were displaced by one pixel to the bottom right.
- Masked media were greatly displaced if the height of the screen was below 128 pixels.
- Videos on masked tracks were greatly displaced if output was smaller than 129 pixels.
- The Play buttons in the Audio Pool now also work reliably in the Basic Version.
- Under certain conditions the tool bar happened to disappear.
- With manual Pan/Zoom In-Screen-Editing no longer worked correctly.
- Changes in the Properties Table are now registered and considered in the memory query when the project is closed.
- When saving a project, intermediate video data will only be saved when the corresponding option has been checked.
- The sync value in mode "XP/Vista" in the Output Options is now saved.
- Trigger "Shut down computer" for slave computers sometimes did not work, when the master computer was shut down, too.
- Unnecessary data transfer to the slaves is now prevented.
- Disabled slave displays or slaves that are not required for the show no longer receive presentation cues.

- A deactivated SC LAN-DMX port can now be correctly activated/deactivated using the triggers "Enable device ports" or "Disable device port" and will maintain the corresponding status.
- The mouse wheel works again properly with slider controls as in Version 3.
- When a file was added that was already available in Media Pool it was not selected in the Pool.
- New triggers are now added to the highlighted folder.
- The scroll bar in the Control Panel could not be moved down far enough.
- Changes in the Properties Table of color keyframes are now executed correctly.
- When exiting Wings Platinum the screen status "Full screen" or "Window" are now saved and restored after the program start.
- For videos with variable frame rate cropping the video image could prevent the video from being played to the very end.
- Realtime effects for videos were partly ignored during video file output.
- When dragging a mask onto a video object while the screen is open the masked view is immediately displayed on the screen.
- When importing entire folders into the Media Pool, .wp4 subfolders are now ignored.
- Burning of CD/DVDs or Blu-ray disk works now under Windows 7, too.

Version 4.00 to 4.01c

21.09.2009 to 23.12.2009

General

The last modifications of versions 4.00a to 4.00d as well as 4.01, 4.01a and 4.01b are marked and can very easily be found in this topic using the search function.

- **Important note on problem videos:** Videos with timing problems, i.e. with incorrect speed, length or cuts require display and intermediate video data to be recreated (even if you have already done so using version 4.01). The same applies to sequences of pictures or videos that show no transparency or only incorrect transparency. To recreate display or intermediate video data right-click video or picture sequence and select **Recreate Display data** or **Recreate intermediate video data**.
- **Important notes with regard to older versions:** Due to technological improvements, Version 4 no longer supports all the functions of earlier versions. That's why display data in old projects need to be recreated. Manual editing is necessary for certain functions. We advise you to take a look at topic Opening version 3.x-projects in order to avoid problems with old projects.
- **Important note:** Multidisplay Mode with several display running from one computer and camera-based VIOSO calibration are still in beta. Therefore, we cannot guarantee any functions. Moreover, the functions have not been fully documented yet. See Multidispla mode using one computer and Camera-based calibration of multidisplay projection.
- Wings Platinum 4 features completely new **Windows Management**, making it much more flexible and easier to handle. Docking is facilitated by the docking symbols and the preview. Windows can be used separately or docked to each other or be assigned to some other window as a tab. Moreover, windows can be hidden automatically which is rather useful for complex projects or small monitors. See Customizing the program window.
- Toolbars can be designed individually, i.e. functions added/removed or their order changed. Moreover, it is also possible to create **Customized toolbars** to meet your individual requirements. See Customized toolbars.
- The new **Media Pool** can be opened in **additional windows**. In this way, the contents of several categories or folders can be displayed si-

multaneously or several light boxes can be opened for sorting pictures. See Opening a category or a folder in a new window.

- **Important note:** Users of Wings Platinum 3 need to get used to the new way of handling the Media Pool in order to be successful. See Notes on the Media Pool for Upgraders.
- The user interface has a completely new window which shows the properties of a highlighted timeline object in a table. This **Properties Table** allows numeric editing and selection of the required parameters. The properties are structured into tabs, e.g. a picture object may have tabs **Object**, **Picture** and **Effects**. The Properties Table allows a quick changeover between numeric and graphic editing. See also Editing effects in the Properties Table.
- The **tool bar default settings** can be resumed with one click only. The tool bar at the top has the corresponding button. See Toolbar.
- In order to avoid operating errors, **tools can now activated** permanently by briefly pressing the key twice. Temporary activation works as before: hold the key down to activate the tool and let go of the key to deactivate it again. See also Toolbar.
- Wings Platinum now offers numerous **visual realtime effects** for creative design of your show which can be applied both to picture and video objects and to text and live video / TV objects. Few mouse-clicks will do to create animated background or a fade via alpha wipe. Virtually all effects are created via the Properties Table. For an overview refer to Visual effects.
- The **performance test** allows you to check playback of your show and detect critical positions in time. See Performance test for complete timeline.
- **Sorting in the Media Pool** according to column criteria now has three modes: ascending, descending and unsorted. This way sorting can be according to several criteria, e.g. format and file size. Moreover, sorting now works also for other categories, such as trigger, timelines, etc. See Sorting contents.
- Categories Timeline and Trigger now allow creation of folders, which facilitates management of complex projects. See also Using folders.

- Main menu item **Programs** allows opening of other programs or documents, which you can define yourself. See Using and editing the Program menu.
- Function "Close all timeline windows" is now available in the main menu under **Timelines**. See also Opening/closing timelines.
- The track marker for marking a timeline portion can now be fixed and secured against unintentional changes. See Marking a portion.
- The Pan/Zoom function for adjusting the visible screen section has been supplemented by **Auto Zoom**. This function automatically ensures that the handles of the edited picture always remain visible on the screen, making In-Screen Editing faster and more comfortable. See Enlarging/reducing the screen content.
- There is a **new masking function** for transparent masking of track contents, i.e. masking of composite pictures. This also allows animation of masks via a keyframe control track and thus creation of very clever effects as mask and picture can be handled independently. See Dynamic transparency masks. There is also a workshop on this topic. See Controlling the transparency of composite pictures via dynamic masks.
- Display data are no longer created in the same folder as the original data but in subfolders, which are located in the folders for the original data. This makes it much easier to find and structure media in the Windows Explorer or image browser.
- The Properties Table supplements the classic properties dialogs and shows all the important parameters of a highlighted object. This way you can alternate between fast numeric and graphic editing. See also Editing in the Properties Table.
- In addition to Media Pool components it is now also possible to import complete projects with **timelines and screen fields**. See Importing from other projects.
- The color selection dialog now offers a pipette for highly comfortable selection of colors from the screen or somewhere in the program window. See Color selection.
- A media file can now be opened in an external editing program by right-clicking the object. See also External editing of media files.

- The free **Basic License** is now also available for Wings Platinum 4. The old enable codes continue to be valid (as of version **4.00a**). See also What are the features of the free Basic Version?
- A central folder can now be defined for storing display and intermediate data. Compared to standard storage in media folder subfolders certain rules must be complied with especially when external hard disks are concerned (as of version **4.00b**). See Display data.
- The effect **AlphaWipe** now has the additional parameter **Inverse** which allows inversion of the internal mask and thus also fading out of images or videos via AlphaWipe (as of version **4.00b**). See Wipe transition effects via Alpha Wipe.
- EXE Presentations can now make use of all the advantage of intermediate video data. If file **d3dx9_40.dll** is located in the same folder as the presentation, installation of the current DirectX 9.0 version is often unnecessary (as of version **4.00c**).See Creating EXE presentations.
- All picture effects configured in a Properties Table can now be copied to the clipboard and pasted to a number of highlighted objects (as of version **4.00c**). See Copying and pasting picture effects.
- The progress display for display data creation is now located in the bottom right corner of the program window. Additionally, it is also provided with a progress bar which is continuously updated (as of version **4.00d**). See also Creating display data for media files.
- Data backup now offers the option of using the the Media Pool folder structure for saving the data. This method allows display data for videos and intermediate video data to be saved along as well. (as of version **4.01**). See Backup of project files.
- Playback of images has been optimized by introducing various sync modes. The appropriate mode will be set during the first Wings Platinum 4.01 program start. Of course, modes can also be adjusted manually under **Project Options** - **Output** (as of version **4.01**.
- Lightbox view can be changed over to list view and vice versa by pressing the **F9** key (as of version **4.01**).
- The Media Pool now allows the properties of several media files to be changed simultaneously. Currently, however, this works with video files only (as of version 4.01). See Changing the properties of several files in the Media Pool.

- The window position and internal layout is saved automatically and loaded upon program start and works now also with multi-monitor systems (as of version **4.01b**).

Audio

- The newly implemented **K-System** is used for effective management of volume and dynamics, as well as for sound track audio level control. Mixing is now so much easier and allows cinema-like dynamics due to the large headroom and the fact that both the peak level and the RMS level in the audio level display can be used for judging loudness. This function is available with the Pro license and up. See The K-System - Checking volume and dynamic range.
- The new **VST interface** now allows VST PlugIns for professional sound editing to be used. Such PlugIns are available in great numbers for every requirement from other suppliers - also as freeware. See What PlugIns are useful?.Optionally, you can also use the old DirectX-PlugIns from Wings Platinum but you can only use either DirectX or VST PlugIns in one project. See Sound editing**.**
- **Output via ASIO drivers** now allows usage of professional multi-channel sound cards at optimal performance. The tool "ASIO4ALL" enables you to address also standard WDM sound cards or onboard sound chips via ASIO and produce multi-channel output under the precondition that several outputs are available. Currently no asynchronous audio playback is possible in ASIO mode. See **Global Options** - Sound cards ASIO.
- The names of the audio files and the corresponding time they are used for can be exported to a text file and printed. This may be useful for settling the royalties payable for the use of music rights. See Export usage duration to text file.
- Category **Audio** in the Media Pool now has a Play Button which allows playing of the audio file.
- Audio inputs and audio output levels can now be added as device ports in the Media Pool. These levels allow control of effect parameters, can be recorded in data object and be used for controlling light, etc. In addition to this, it is also possible to read SMPTE timecode at the audio

input. See External control of effect parameters and Audio input configuration.

Images

- The color management system now also considers the ICC color profiles of output devices, such as monitors or data projectors. This is particularly important for high-quality devices with a large color space, otherwise color rendering may turn out unnatural and oversaturated. Color conversion is performed while display data are created. This saves computer performance and works for videos, too. Color conversion for images can optionally also be done during playback by the graphics card, which, however, requires higher computer performance. See also **Options** - **Global Options** - **Color management**.
- Picture tracks are now always set to alpha mode, i.e. the ramp band of picture objects always controls transparency. For older projects there is a conversion option which ensures compatibility with the old composite pictures. See Opening old projects containing tracks with "Addition".
- In the picture properties in the Media Pool you can now define whether the alpha channel or one of the color channels is to be used for transparency control. See Picture Properties.
- There is an alternative synchronization mode that prevents jerky images that are produced with certain PC configurations. It can be activated under **Options** - **Project Options** - Output (as of version **4.00c**).

Video

- The new Video Engine with codec management decides automatically which of the installed codecs is to be used for video playback. All codecs installed on the system are supported, i.e. also Quicktime or Quicktime Pro, provided these players are installed. In addition to MPEG-1/2, Wings Platinum now also contains the H.264-Codec by MainConcept. In addition to this, the new Video Engine can now play pre-rendered intermediate video data without installed codecs and by bypassing the Windows routines in order to avoid problems. Output optimization through pre-rendered intermediate video data has the following advantages:

- Direct playback at high performance without Windows routines
- Fast locating and opening of files
- Optimization with regard to size, portion, frame rate and deinterlacing
- Very high content security; intermediate video data can only be played with Wings Platinum
- An EXE presentation now only contains intermediate video data. The video data folder and the codecs of the videos originally used in the show are no longer required for playback.

  Intermediate video data are now created together with the display data by default provided creation of intermediate video date is enabled. See **Options** - **Project Options** - Display data. Intermediate files with the suffix ***.wpiv*** (**W**ings **P**latinum **I**ntermediate **V**ideo) are pre-rendered video data at original size, i.e. at full resolution and frame rate, which are saved in subfolder **.wp4** in addition to the display data. During creation of intermediate video data any deinterlacing that may be necessary is immediately done, i.e. they always use progressive pictures. For multidisplay applications, intermediate video data are split for the slaves. See also Optimization through Intermediate Video Data.

  Note: Please bear in mind that Intermediate Video Data and video display data have no alpha channel yet. Therefore, videos with an alpha channel cannot be correctly displayed. This function will be added in one of the next versions.

- The new display data format is based on intermediate video data which can only be processed by Wings Platinum. Files with the suffix ***.wpci*** (**W**ings **P**latinum **C**ontainer **I**nfo) contain the display data and any other information, such as frame rate, color profile, etc. Video display data are now always based on the original frame rate and the correct aspect ratio with the picture size being chosen automatically. This has led to a marked improvement of the preview quality. Optionally, display data for HD videos can be based on a higher resolution that almost corresponds to full quality. See **Options** - **Project Options** - Display data.
- Picture sequences, i.e. high-resolution fast motion recordings can now be played back at full presentation resolution on the basis of interme-

diate video data. This function is already available with the Starter License and up. See also Adding a sequence of pictures to a video track.

- The video **performance test** allows you to check whether your (HD) videos can be run on your computer. If the framerates are too low you can transcode the video into intermediate video data that Wings Platinum can play while bypassing Windows routines. See Performance test for videos.
- The video aspect ratio is determined when the video is added to the Media Pool, i.e.the videos are distortion-corrected and displayed correctly on the screen. In the Media Pool and the Preview window, too, the videos are displayed correctly. As an option, the aspect ratio can also be defined manually in the video properties. See Video Properties.
- When being added to the Media Pool, videos are checked for interlaced or progressive recording and Deinterlacing is activated automatically if necessary. Only in exceptional situations does the user need to change the extended Deinterlacing settings. See Video Properties.
- Wings Platinum now comprises the **MainConcept H.264-Codec** which can be also be used for playing high-quality HD videos at a low frame rate. There are also presets for Adobe Flash and iPod videos available. See Output of H.264 videos.
- In order to allow some problem videos, e.g. certain H.264 videos to be output as video file or picture sequence, rendering can optionally be based on intermediate video data. See Methods for video output.
- In the Media Pool column **Intermediate video data Q1** - **Q4** and **P1** - **P3** are used for quality and positioning. 1 = best/fastest (as of version **4.00a**). See also Video Properties.
- Display data for videos and picture sequences were limited in size to a maximum of 640 pixels (standard) or 1280 pixels width (if higher quality for HD videos was activated). This was done in order to prevent the computer from being overtaxed by very high-resolution media, such as 4k-videos or images from DSLRs (as of version **4.00a**). See also **Project-Options** - Display data.
- The properties of intermediate video data can now be set in the Project Options. So far configuration was automatic (as of version **4.00c**). See **Options** - **Project Options** - Display data.

- Creation of display and intermediate video data now makes use of multi-core processors. Quad-core processors have therefore led to a distinct acceleration of the process. Moreover, the new tab **Tasks** has been introduced for the preview window which displays a list of videos to be processed incl. progress bar (as of version **4.01**). See Optimization through Intermediate Video Data.
- When cutting the beginning of video footage, the object now always displays the first frame, i.e. the display data in the object change dynamically. In this case you may have to recreate the display data (as of version **4.01**).
- The status information of video display data and intermediate video data creation is now shown in a clear and detailed list. Taking advantage of several processor cores, data creation based on quad core processors is now so much faster than before. The task list can be found on tab **Tasks** in the preview window (as of version **4.01**). See Optimization through Intermediate Video Data.
- For videos there are now "Quick Preview Display Data" available which are always created first for a quick preview. They contain only few frames and are primarily used for previewing in the Pool (as of version **4.01**). See also Creating display data for media files.
- Intermediate video data now support also alpha channel for transparency control (as of version **4.01**).
- Some new video types have been added to the Video Engine (as of version **4.01**).
- The Deinterlacer was extended and allows usage of additional video formats. Packed color formats, e.g. RGB, UYVY, YUY2 etc. are now also supported (as of version **4.01b**).
- **Decklink video input cards** for live video can now be integrated. Using the new driver V 7.4 they ensure perfect function. The frame delay remains constant even over a longer runtime, the HDMI input can be selected and deinterlacing is also possible (as of version **4.01b**).
- Moreover, general optimizations for live video have been introduced and deinterlacing has been changed, which is now always software-based (as of version **4.01b**). See also **Global Options** - Video input.

Presentation

- Via "AV Prompter" software and an **Apple iPod touch** or **iPhone**, speaker support shows can now also be remotely controlled. In addition to playback control is it is now possible to display preview pictures and prompts on the iPod display in sync with the show. See Remotely controlling via iPod and AV Prompter.
- The new **Stumpfl HDAV Player** features a separate export system for video and control files. Such control files allow the HDAV player to stop at pause markers and continue playback upon pressing a button, which is ideal for speaker support shows. See Export for HDAV player.
- The **AV Prompter** has now been released and is available for free in AppStores. You can start testing remote control via iPod touch or iPhone right away, using the sample project **Demo** - **AV Prompter**. It can be found by clicking **Extras** - **Open folders Sample projects** (as of version **4.01**).
- The cable-based Start/Stop button can now also be used with a Starter License. See Remote control of presentations.

Multidisplay

- **Attention: Multidisplay via one PC is still in beta:** Playback of multidisplay shows is now much more efficient due to a new program structure with optimal support of multi-core processors. A computer with two graphics cards can now supply image signals to up to four displays. The displays are assigned automatically when the multidisplay project is created after selecting the PC as sole PC. See Multidisplay Mode using one computer.
- The Warp function has been completely redesigned and improved options for editing the warp grid been added. See Using Display Warp.

Show Control

- Reading of SMPTE timecode is possible via the sound card input. Wings Platinum, in such a case, can sync up as slave with other systems. See Configuration of audio input.

Bugs and problems eliminated

- Graphics data output settings of WP3 projects are no longer applied by mistake (as of version 4.00a).
- WPIV data are now always created separately (no longer together with WPIC data) which reduces waiting times (as of version 4.00a).
- Function "Media Pool - Create display data" now creates also WPIV files as an option (seit Version 4.00a).
- Problems in creating display data and WPIV files of picture sequences have been eliminated (as of version 4.00a).
- "Options - User interface" no longer shows "UI color" (as of version 4.00a).
- Internal optimization for projects containing a high number of large pictures (as of version 4.00a).
- Value "Max. used graphics memory for pictures" in "Project Options - Output" is now applied correctly (as of version 4.00a).
- Internal optimization in the status management of intermediate video data (as of version 4.00a).
- Alpha masks for videos are now also visible when no effect has been activated (as of version 4.00a).
- Changes in the new visual effects are now also considered in the query about saving the project (as of version 4.00a).
- Problems in the Media Pool, such as double screen or device port entries have been resolved (as of version 4.00a).
- Undo is now temporarily always performed completely, otherwise it would be too fragmentary. However, it will presently take longer than usual (as of version 4.00a).
- The link between *.pt4-files and WP4 Icon is now registered during the installation, but works only with the full version (as of version 4.00a).
- When the Pool columns were moved too close together (usually by accident), saving no longer worked properly. This problem has been eliminated.
- When videos and picture sequences were searched for, the settings changed by the user in the Media Pool were reset. This is no longer the case (as of version 4.00a).

- Option "Allow auto codec selection by Window" under "Options - General" is now enabled by default. This allows videos to be played even if the WP codec management can't assign any particular codec (as of version 4.00a).
- Option "Enable masks for visual tracks" in the Output options is now enabled for the Advanced License (as of version 4.00a).
- During Audio CD grabbing the slider selection range is now displayed correctly (as of version 4.00a).
- When screens in the Pool are renamed the name is now also updated in the folder view on the left (as of version 4.00b).
- The Render Engine was adapted for (Mobile)Chipsets without Hardware Vertex Processing, i.e. screen output works now also with the "Mobile Intel 945GM Express Chipset" (as of version 4.00b).
- Screen field clipping with a fixed clipping area was occasionally incorrect in combination with out-of-center screen fields. This problem has been solved (as of version 4.00b).
- Internal adaptations have been made to eliminate jerky images with some PCs (as of version 4.00b).
- The Preview window no longer causes creation of intermediate or display date. This allows the settings for intermediate video data in the Video Properties to be changed beforehand. Videos are only displayed in the Preview window if all display data are already available (as of version 4.00b).
- When media files are imported to the Media Pool by right-clicking "Add..." "Media files" they are no longer placed in the top category but at the insertion position in the correct folder (as of version 4.00b).
- When dragging & dropping videos into an audio track highlighting in the Pool no longer jumps (as of version 4.00b).
- When a project is loaded, that Pool that was selected last is displayed and Lightbox view resumed (if applicable) (as of version 4.00b).
- With an Advanced License option "Enable masks for visual tracks" may occasionally have been disabled. This problem has been solved (as of version 4.00b).

- Shows without sound no longer cause Wings Platinum to crash during MPEG output(as of version 4.00c).
- Images with an edge length of 256 pixels can now be used using option "Don't subdivide picture for effects" (as of version 4.00c).
- Dragging & dropping of several objects from the Pool into the timeline now works also from the lightbox (as of version 4.00c).
- Video preview and rendering are now only carried out using untiled textures (as of version 4.00c).
- The mask function is now enabled by default in the output options (as of version 4.00c).
- Error reports are now sent off correctly (as of version 4.00c)
- The update function now indicates whether the full version is to be downloaded (as of version 4.00c).

Main menu and tool bar are now complete even without a timeline (as of version 4.00c).

- Video objects with an alpha mask assigned to them are now displayed correctly even during presentations and with the corresponding transparency (as of version 4.00c).
- The values for cropping videos are now rounded to up/down to even values as cropping works with even values only (as of version 4.00d).
- Effect textures in EXE presentations were defective. This problems has been solved (as of version 4.00d).
- Picture compression during EXE presentation creation did not always work. This bug has been eliminated (as of version 4.00d).
- Soft fading out of text objects to zero is again possible (as of version 4.00d).
- The wizards will only create new folders if a new project folder was set up (as of version 4.00d).
- The screen is now updated when the alpha channel properties of an image are changed. After creating the new display data, however, the locator must to be moved for the changes to be displayed (as of version 4.00d).

- Function "Close gaps" tended to muddle up objects. This problem has been solved (as of version 4.00d).
- When opening or closing dockable windows via the main menu item "View - Toolbars", the active category or folder is also specified for the Media Pool (as of version 4.00d).
- A few more types of codecs have been added to the codec management system (as of version 4.00d).
- Effect Pixelate is now displayed with its correct parameters (as of version 4.00d).
- Certain key and click combinations could cause Wings Platinum to crash. This bug has been eliminated (as of version 4.00d).
- External files can again be added to the "External Pool" (as of version 4.00d).
- Lightbox view is now updated after dragging and dropping images to the Pool (as of version 4.00d).
- Playback of audio files can only be stopped by clicking the Preview window in order to avoid problems in selecting other audio files (as of version 4.01).
- For objects without keyframe control track and output on small screen fields effects were not applied correctly. This bug has been fixed (as of version 4.01).
- After changing the size of the lightbox trays in the options the new size is now immediately applied to the lightbox (as of version 4.01).
- When choosing lightbox function "Remove + close gap" gaps are now closed (as of version 4.01).
- The Properties Table windows now remain visible even if there is no content to be displayed. This way, the window layout is kept (as of version 4.01).
- The performance test for individual videos now works also correctly with original videos (as of version 4.01).
- Intermediate Video Data for Picture Sequences with alpha channel are not displayed correctly, i.e. the transparent areas are displayed correctly (as of version 4.01a). **Important:** Display and intermediate video

data must definitely be recreated for the picture sequences in question!

- Intermediate video data for videos with variable frame rate are now displayed correctly, i.e. there are no more timing problems during playback (as of version 4.01a). **Important:** Display and intermediate video data must definitely be recreated for the videos in question!
- Rendering of videos based on intermediate video data now works with looped videos, too (as of version 4.01a).
- The mouse pointer no longer appears on the screen when buttons for starting or continuing the presentation are pressed (as of version 4.01a).
- The Control Panel again allows scrolling over the entire range using the scroll bar (as of version 4.01b).

FAQ

Frequently asked questions

Below you will find a list of frequently asked questions. Whenever errors or problems come up you can search for the corresponding solution in accordance with the various functional areas in topic If you have any problems...

What is the easiest way of finding out about Wings Platinum?

Which version do I need?

Why do I need a dongle to start Wings Platinum?

Is Wings Platinum compatible with a Mac?

Can I play a show on a Mac?

What resolution should my pictures be?

Why do my videos look compressed on the screen?

Which slider controls have a real time effect on sound?

What do I need to know if I want to pass on an EXE presentation?

Can an EXE presentation be remote controlled?

What DirectX version is installed on my PC?

What firmware version is my Stumpfl hardware?

What can I do when errors or problems come up?

What is the easiest way of finding out about Wings Platinum?

We have prepared a few introductory topics and workshops which will help you to find out about the basic functions and achieve presentable results. On the Wings Platinum CD you will find media files which can be used for the tutorials, although it is also possible to use your own files.

See

A successful start

What's the quickest way of finding the necessary information?

Wings Platinum has an extensive Online Help with the following functions:

- Use function key **F1** to call up the topic matching the current dialog.
- Searching for certain topics is possible via **Index** and **Full-text search**. Searching via Index is usually the fastest way.
- Messages are often provided with a **Help button** to call up further information.
- Detailed explanations with regard to the help functions are available in topic Optimum utilization of the Online Help.

Which version do I need?

It all depends on what your aims are or how complex your AV shows are, i.e. on the type of media you want to edit and output. Under Versions and Licenses you will find a table providing information on the functions of the

various versions. If you are not sure which to choose or if you have questions, turn to one of our dealers who would gladly give you advice. A list of all dealers can be found in our website. If you can't find a dealer near you feel free to contact us directly. See AV Stumpfl contacts.

Why do I need a dongle to start Wings Platinum?

The dongle is necessary to ensure authorized usage of the program. If usage did not require a dongle, it would be possible to use illegal program copies. For you as a registered user this would mean that the continuous and customary advancement of Wings Platinum could no longer be guaranteed for a lack of financial means gained by selling the program. This is a decisive factor for a high-quality niche product such as Wings Platinum. We ask for your understanding and are sure that the advantage will ultimately outweigh the disadvantage, e.g. by receiving high-quality support and regular updates.

Installing Wings Platinum on a number of computers is no problem. In this case you can use the USB dongle as an "ignition key" with the corresponding computer you currently want to use. If you want to run Wings Platinum simultaneously on a number of computers you can buy inexpensive additional licenses. More about this in Versions and Licenses.

Which license is enabled on my computer?

During the Wings Platinum installation all program parts are installed and the various licenses (Starter, Advanced, Pro, etc.) are enabled via enable codes. To find out about the license enabled for your computer do the following:

- In the function bar click **About Wings Platinum**. At the very top you will find the information about the active license.
- Alternatively, you can click **?** in the main menu, followed by selecting **About Wings Platinum**.

Is Wings Platinum compatible with a Mac?

Yes, Wings Platinum 4 runs on the latest Intel Macs with XP emulation and bootcamp. Wings Platinum 4, however, has been designed for Windows on PC hardware so that we cannot guarantee any function or provide support. The same applies to EXE presentations created by means of Wings Platinum.

Can I play a show on a Mac?

Yes, that's possible. In principle, the new Apple models with Intel processor and Windows XP emulation are capable of playing back Wings Platinum shows from the timeline or as EXE presentations. For performance, however, you need to check yourself. In such a case we cannot provide any support for any problems that may come up, since Wings Platinum has been designed for Windows XP.

In order to run a show on older Mac computers you can have the show output as video, which can then be played by the Mac.

- The best video format for a Mac is H.264. See Output of H.264-video.
- It should also be possible to play the new WMV format via QuickTime and a WMV player plugin.
- When there is a DVD player software installed on the Mac, also MPEG2 videos should be playable.

What resolution should my pictures be?

With a digital camera you should always choose the highest resolution when taking your pictures. Usually, they can't be repeated when they don't work out with a lower resolution. Wings Platinum has no problem with large image files; it creates smaller display data for presentation. Larger pictures have much more in store for a high presentation quality.

Slides and negatives should also be scanned at a high resolution. Scanning and editing means a lot of work, so you should do it the best possible way which allows universal usage of the pictures at a later time, e.g. for prints or camera movements with only one section of the picture being visible.

Further information on this topic:

Minimum picture sizes depending on the application

Why do my videos look compressed on the screen?

Videos, as opposed to pictures, usually have "rectangular pixels" and the distortion of the videos needs to be corrected. This is normally done automatically by entering the aspect ratio in the video properties. See Video Properties. More information on this can be found in topic Video image formats - correctly used.

Which slider controls have a real time effect on sound?

Volume settings are immediately audible when the function is calculated in real time. This is true for the following controls:

- **Sum level control** ...for adjusting the output level. Tab Audio level display has controls for every outut channel as well as a control affecting all output channels. See Sum level.
- **Controls for sound effects** ...virtually all PlugIn controls for sound editing work in real time. PlugIn Level allows adjustment of the track volume. A Level PlugIn can be opened and the volume be controlled for every track. Both controls of a track (stereo) are linked up when the **Shift** key is pressed. See also Sound effects.
- **Control for track routing** ...are used for adjusting the track level and routing the audio track to various output channels. See Linking up the audio track with several outputs.

See also

Using slider controls

What do I need to know if I want to pass on an EXE presentation?

If you want to pass on EXE presentations to other people, you should provide the recipient with the following information:

- Before starting it, the EXE presentation and a possible video folder belonging to it should be copied from the CD/DVD to the hard disk to allow faultless playback at high resolution. The same path must be used for video folder and EXE presentation; the video folder must not be renamed.
- For playback of an EXE presentation, the multi-media interface **DirectX 9c of November 2007** or higher and **VC Runtime** must be installed in Windows. If necessary, write a folder containing the DirectX installation files on the CD/DVD as well. Folders **DirectX** and **VC Runtime** (32 bit and 64 bit version) can be found on any recent Wings Platinum DVD under **Software**.
- On the presentation computer all those codecs must be installed that are required for decoding the corresponding video. Therefore, you should copy the codec installation files onto the data carrier as well so that the receiver of the presentation can install the codecs.
- Certain video functions, such as transparency masks or Chroma/Luma keying require a high-performance graphics card. Make sure that the presentation computer is equipped correspondingly or do not use these functions.
- We have prepared start pictures showing the most important operating instructions which you can use at the beginning of an EXE presentation. Moreover, there is also a readme file containing all the important bits of information for playback of EXE presentations. You can write this **Readme file** onto the CD/DVD together with your EXE presentation, if you want to pass it on. Start pictures and **Readme file** can be found in the Wings Platinum program folder at ...**My Documents\Media Samples\Exe Presentation\English**, unless you deselected "Example pictures" when installing the program from DVD. Open the folder by clicking **Extras** in the main menu followed by **Open folder ▶Media Samples** and double-clicking folder **Exe Presentation/English**.

  This picture is available in Photoshop format with editable levels and different aspect ratios.

See also

Playing EXE presentations

Can an EXE presentation be remotely controlled?

An EXE presentation can only be controlled via the computer controls, i.e. keyboard or mouse. See also Playing EXE presentations. Those who have a good radio mouse available can use it for wireless control, although the range is rather limited.

Using a start button for Speaker Support, an SD Event Control or an SC Master for remote control purposes is only possible for playback from Wings Platinum. It requires ports in the device control system to be configured.

See also

Wings Platinum remote control

What DirectX version is installed on my PC?

If you have no idea about what DirectX version is installed on your computer you can easily find out about this under Windows XP:

In Windows click **Start** and select **Execute...**

In field **Open** enter the command **dxdiag** and click **OK**.

In the dialog box displayed you can find the available DirectX version at the bottom under **System information**.

Info Windows Vista or Windows 7 is based on DirectX 10 anyway. However, since Wings Platinum is a DirectX 9.0 program you need to have **DirectX 9.0c of November 2008** installed additionally.

See also

Minimum system requirements

What firmware version is my Stumpfl hardware?

Nearly all devices display the firmware version briefly after switching it on, e.g. **Ver: 3.75**.

There are two exceptions:

- The firmware version of the **SC VIDEO PLAYER** can only be checked and updated at the factory.
- The **SC Net Module** firmware version can be determined as follows:

  ➔Connect one or several SC Net Modules to an SC Master and switch on the devices.

  ➔At an SC Net Module, press the setup key for about three seconds for the device name, the SC Net address and finally, the firmware version to be displayed on the SC Master display.

What can I do when errors or problems come up?

Tips and information on problem solutions can be found in the Online Help topics under **Problems and Solutions**.

AV Stumpfl contacts

Should there be any questions which cannot be answered in the help section, please tell us about them. Please use the Support Function if there are any problems or errors. Wings Platinum can be updated via function Software Update. If you have any questions or suggestions, you can reach also us on the phone on weekdays from 8.00 am to 10.00 am. Please have the serial number of your copy protection dongle ready.

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Documentation Status

Last reviewed: **19.01.2011**

Wings Platinum Version: **4.22**

The functions mentioned in this newcomer manual require the following **firmware** versions of Stumpfl units:

- SC Master 6/16 **1.83**
- SC Master 2M/4M/Lite **3.93**
- SC Net Module **1.26**
- SD Event Control **3.91**
- SD Event 2X4 **3.93**
- SD 404/402/302/302 Digital **1.83**
- SD 302 CD IR/PC **1.11**

Current firmware can be **downloaded** from our website at http://www.AVstumpfl.com at **Service** - **Download**.

Installation

Minimum system requirements

All you need is a PC running at least Windows XP, Windows Vista or Windows 7 and the current version of the multimedia interface DirectX 9.0c.

The configuration essentially depends on the projects you want to edit or design in Wings Platinum. For simple projects the following minimum system requirements must be fulfilled:

- Control of devices without output of images:

  1.0 GHz processor, 512 MB RAM, graphics card, sound card, DVD drive, monitor with a resolution of 1280 x 1024 x pixels.

- AV shows with pictures and output of pictures with a width of up to 1024 pixels:

  1.4 GHz processor, 1024 MB RAM, 3D graphics card with 128 MB graphics memory and compatible with DirectX9, sound card, DVD drive, monitor with a resolution of 1280 x 1024 pixels.

- HDAV shows with pictures and SD videos and output of pictures with a width of up to 1400 pixels:

  2.5 GHz processor, 2048 MB RAM, 3D graphics card with 256 MB graphics memory and compatible with DirectX9, sound card, DVD drive, monitor with a resolution of 1280 x 1024 pixels.

- Complex HDAV shows with pictures and HD videos:

  3.2 GHz processor or 2.0 GHz processor with dual-core processor, 3072 MB RAM, 3D graphics card with 512 MB graphics memory and compatible with DirectX9, sound card, DVD drive, monitor with a resolution of 1280 x 1024 pixels.

- Complex multidisplays shows with image and HD videos running on one computer:

  2.4 GHz processor clock with four-core processor (i5 or i7 recommended), 6144 MB RAM and 64-bit Windows, 3D-graphics card with 512

MB graphics memory and compatible with DirectX 9, sound card, DVD drive, monitor with a resolution of 1280 x 1024 pixels and up.

Info The above information refers to simple projects and is no guarantee for correct functioning of Wings Platinum. For optimum working conditions computer performance should be distinctly higher. For programming of complex shows we recommend using two monitors (...extended desktop). Tips with regard to PC features and the most appropriate configuration can also be found in the Help topic Optimizing the computer.

Compatibility with Windows Vista

Wings Platinum 4 is also already been optimized for use with Windows Vista. Performance is better than under Windows XP and Vista has already been tried and tested combination with professional applications requiring high system reliability. Additionally, please note the following:

Vista 32 ...parallel port and USB dongles with up-to-date drivers can be used and Wings Platinum as of version 2.0.

Vista 64 ...requires a parallel port and a USB dongle and Wings Platinum as of Version 3.50.

First-time installation with copy protection dongle

This information refers only to the first-time installation of a full version. For installing the basic version or any updates, please continue at **Starting the installation**

Before installing a full version any other USB dongles that may possibly exist must be unplugged from your computer first. After completing the installation, plug the USB dongles back into the USB port.

Please note the following:

- If you want to install both Wings Platinum 2.40 and Wings Platinum 4 on one computer you need to install version 2.40 first, enable the don-

gle and then test and terminating Wings Platinum 2.40. Only then can you start installing Wings Platinum 4.

- Wings Platinum 4 is always installed to folder **C:\Programs\AV Stumpfl\Wings Platinum 4**. This path is predetermined and cannot be changed.
- After starting Wings Platinum you will be asked to enter the enable code, which you can find on the back of the Wings Platinum package.
- Installation of an **additional license** is identical to that of a full version. Only the USB dongle differs in its labelling. Information on the usage of an additional license can be found in the Help topics.
- Demo, Basic and dongle-protected licenses of Wings Platinum 4 versions can be installed and run in parallel. All version types are installed in the same program folder **Wings Platinum 4**. Uninstalling individual versions is possible. See also Uninstalling Wings Platinum.

Attention! Wings Platinum requires **Windows XP**, **Windows Vista** or **Windows 7** and **DirectX 9.0c November 2008** or a higher version! The current DirectX 9 can be found on the Wings Platinum DVD or on the Microsoft website.
If you have downloaded DirectX from the website please bear in mind that the installation file needs to be unpacked to a new folder. Following this you will find ***DXSETUP.exe*** in the new folder. Double-click this file to start the actual installation process.
Wings Platinum can only be started after correctly installing the required DirectX 9 version!

Starting the installation

For installation you need to have administrator rights. Otherwise refer to the information in topic **Using Wings Platinum without administrator rights**. Before starting the installation, terminate any other programs that may be open.

1. Insert the Wings Platinum DVD into the DVD ROM drive. If the selection dialog does not appear automatically, click on **Start** &endash; **Run** in

Windows, enter **D:\setup** and click **OK**. If your CD/DVD-ROM drive designator is not **D:**, change the entry accordingly.

2. In the DVD Welcome Dialog under **Software** click **Install Wings Platinum 4**. When Windows 7 or Vista issues a message saying that an unknown program requires access, answer **Allow**.
3. In the first dialog, click **Next**. Read through the license agreement. If you agree, click on **I accept this license agreement** and **Next**. When you click **Cancel**, installation is aborted.

   Info If a message appears saying that the correct DirectX version is missing, confirm it and continue by installing the required DirectX version from the Wings Platinum DVD. If you have no DVD, download the current DirectX 9 version from the Microsoft website and note the DirectX installation instructions.
4. Under **Custom setup** you can choose the version you want to install. If there is a version you do not want to install, click and select **Entire feature will be available** so that the symbol signifies deselection.
5. Click **Install** to start installation. Progress can be monitored in the dialog box. After completion of the process is announced click **Finish**.

Installation of dongles and enable codes

These steps for driver installation are required for installation of the full version and need not be repeated any more during future updates.

1. Start Wings Platinum **without** the dongle being plugged in by double-clicking desktop icon .
2. Following this a message appears saying No appropriate dongle could be detected and asking you whether the driver is to be installed. Confirm with **OK**, following which the driver will be installed. Under Windows 7 or Vista you may have to click **Continue**. Wait for the message "No appropriate dongle could be detected" and click **OK**.
3. Now plug in the dongle. Wait until Windows has detected the dongle and loaded the driver.

Now start Wings Platinum by double-clicking icon on the desktop.

4. In the dialog box appearing enter the **Enable Code** for your Wings Platinum version. If you have the Show Control Module you can enter the appropriate enable code here, too. The enable codes can be found on the back of the Wings Platinum package. Following this click **Accept**.

   Info With a Multidisplay License no dialog box for entering the enable code will pop up as the dongle has already been programmed accordingly.

5. Wait a little while until Wings Platinum and the **Tips & Tricks** window appears:

   - Every time the program is started, short tips for effective work with Wings Platinum will appear.
   - Click on **Next Tip** to browse through the collection of tips.
   - If, after a few weeks, you seem to be familiar with all tips, you can deactivate the display of this window by removing the checkmark at **Display at Start-Up**.

6. Then click **Close**.

Now you can start with your first project. The Project Wizards will help you along.

Wings Platinum does not start up...

If Wings Platinum does not start up following the installation, the following error messages may appear:

Uninstalling Wings Platinum

Wings Platinum 4 can be uninstalled via the Windows **Control Panel** - **Software**.

If several version types, i.e. full version, Basic version and Demo version are installed in parallel, you can uninstall them individually by selecting **Change**. For the version you want uninstalled, click symbol and select option X **...**

- If you have older Wings Platinum versions installed in parallel and want to uninstall one version only you start be uninstalling all versions followed by reinstalling that version that you want to continue to use. Otherwise some jointly used modules, such as MainConcept codecs may no longer work properly.

A successful start

A variety of workshops will help you find your way in the multifarious world of Wings Platinum. By way of examples, you will find out about the most important steps to produce a slide show, a digital AV show or Show Control projects.

Before you actually start working through a workshop, it may be a good idea to get familiar with the concept of Wings Platinum. The second topic on Optimal utilization of the Online Help mentioned below - it's very important!

Have fun and enjoy discovering about Wings Platinum!

If you are in a bit of a hurry, try Quickstart via Drag & Drop.

The extensive workshops start with the following topics:

What steps are necessary to produce a digital AV show?

The Stumpfl Show Control System

Introduction

The Wings Platinum Concept

Wings Platinum is a cross-media software tool for production of multi-media AV presentations that can contain virtually any type of show control elements. Wings Platinum was released in December 2001 and has been consistently advanced. In developing, we have essentially pursued two goals:

- Media integration based on a modern software architecture which allows integration of all present and future applications.
- Simple and intuitive operation via a modern graphic user interface featuring media-oriented editing and new and handy functions.

The current Wings Platinum 4 features an enormous range of functions and is extremely powerful. There won't be many users that will be able to take full advantage of all the available functions ranging from simple holiday presentations and highly ambitious AV shows with multi-channel sound track to huge, seamless multidisplay presentations beyond HDTV standards. This is

even more remarkable when you bear in mind that Wings Platinum is successful both in production and presentation. But you can just as well use it to produce radio plays, videos or high-quality video DVDs.

In order to combine high performance and flexible media integration with simple operation, we have developed a completely new user surface with a whole lot of user-friendly functions you will find out about at a later time. At the centre of the operational concepts are the objects representing a medium, e.g. a sound element, a picture or a video. Some object may also be certain functions, e.g. light progressions for spot lights, switching pulses or navigation markers.

All these objects are arranged on a timeline. The timeline is the central window containing the tracks, which displays the timeline from left to right. On the tracks, the different media are arranged as objects in the required chronological order. Editing of these objects is based on a uniform concept which means that the editing steps are identical, whenever possible. This should facilitate working with Wings Platinum. Any editing is non-destructive, i.e. all media files on the hard disk remain unchanged and editing steps can be made undone or changed.

There are certain track types in accordance with the media used in them, i.e. picture, sound and video tracks, with their contents being output to certain devices. An audio track sends audio data to a sound card output. Or a picture track transfers data for a screen field on a screen. For a multidisplay presentation the screen contents are distributed to different video projectors or displays. The entire media management, calculation of overlap and gray scale is performed by Wings Platinum. A true novelty is the camera-based VIOSO calibration, which corrects multidisplay setup for projection onto warped projection surfaces with regard to geometry and color and additionally allows automatic generation of softedge masks. Integration of Show Control is via objects that output their control information via SC NET or SC LAN hardware in sync with all the media. Synchronization is guaranteed at any time and the device follow every mouse-click, if the user says so. Of course a combination with our media control system ISEO or any other media control systems is also possible. Wings Platinum with its vast range of useful features takes a lot of work off your shoulders and allows you to fully concentrate on the designing of the show.

Optimum utilization of the Help files

While unpacking Wings Platinum you may have noticed something: There is no manual. And there's a good reason for this. By buying Wings Platinum you have chose ultra modern software which is constantly being improved and advanced. Even after the first updates you might leaf through outdated documentation, you might try in vain to find some information on a particular topic or even worse, you might find false information about functions that have already been modified or improved. Chaos and frustration would be the ensuing consequences ... something we want to avoid. This is why we have developed this user-specific help system which can easily be updated and which will help you to find the correct information with ease and in time.

Selecting the right help version

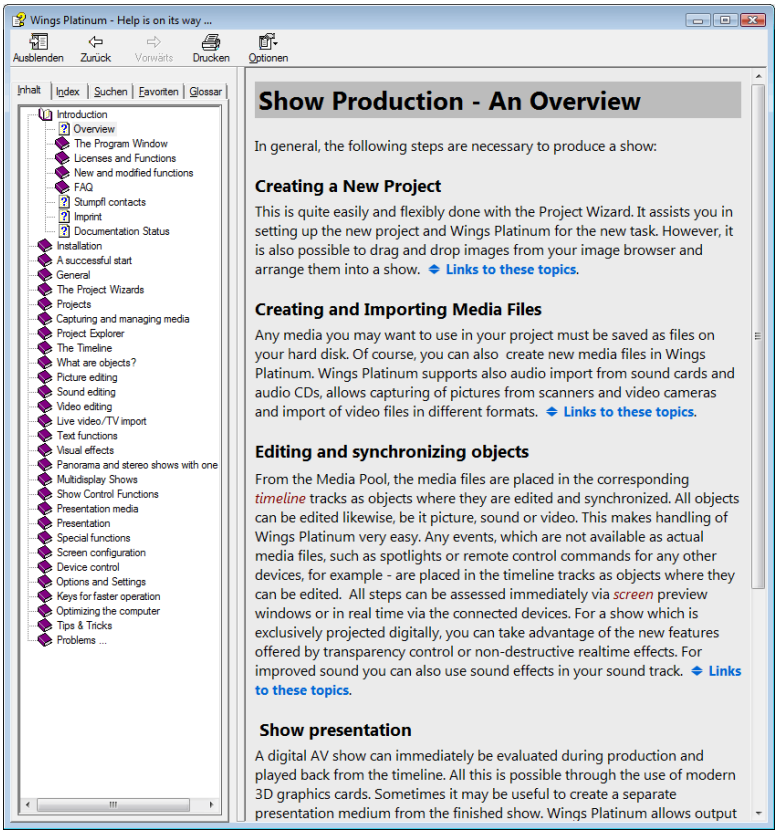
Wings Platinum is an extremely versatile and powerful software. This is why we have created a number of different helps which meet the individual needs of the different user groups. You should therefore start by selecting the help in accordance with your range of applications.

1. In the main menu click **?** and choose **Select help...** The following options dialog listing the available help options will appear:
2. Select the help that comes closest to your range of applications.
3. Click on **OK**. When you call up help topics, the corresponding help is automatically preselected.

Info When you update Wings Platinum via the Internet, help **All information** is updated and used. This help contains a lot of information for advanced and professional users. It would therefore be a good idea to download your preferred help version separately and copy it to the program folder **...\Wings Platinum 4\Help\English**.

Discovering the Help System

1. Click Button **Help Topics** in the function bar below the main menu. The Help window will appear.



2. In the left window you will find the available topics and in the right one the contents of the selected topic. The Book Symbol is an indication that there are further subtopics. Double-click the book symbol to list the subtopics.

3. Now click topic **Show Production - Overview**. This topic provides information about the essential steps for producing a show.

4. Whenever a word appears in blue or pink, there is a help topic which can be displayed by clicking on it. In the second paragraph please click **Links to these topics**, following which some links will be displayed. By the way, this symbol signalizes that additional information is available.

5. Please click the link **Copying sound from audio CD**. In addition to further information you will also be offered some suggestions as to how to proceed.
6. Do not proceed as specified for copying audio files at the moment, but scroll down to the end of the instructions, e.g. by using the scroll bar at the right-hand window edge or by using the mouse wheel. At the very bottom, click **Edit objects**.
7. Within these instructions for editing objects, you will again be able to retrieve further information. In the second paragraph, click on **Display info line** and you will be told where in the objects the info line is located. Click next to the small window to close it again. The small symbol tells you that the link refers to a popup window. This way you can find out about all the information contained in the whole window. If, by doing this, you have moved to a different topic altogether, just click **Back** on the button bar to return.
8. If you are trying to find out about the help functions via the manual, you can access this topic via the book symbols **A successful start** – **Introduction** – **Optimum utilization of the Help files**.

Searching for specific information

Surely, you may sometimes need to find specific information to be able to continue. A Context Help function is available in many dialogs. Press key **F1** and the corresponding topic is automatically displayed. If, however, the topic **The Program Window** appears, you can use the links, the index and the search function to find the information you need:

Index

Searching via the Index is the fastest way. It is well structured and allows selective searching of particular topics.

1. Above the left-hand, narrow window, click tab **Index**. Enter the keyword "Printer". While entering the search term you will notice that the index list is updated with every letter entered so that you don't even need to enter the complete term.

2. Under **Print** you will find a number of topics. Double-click one of these topics to display it.

Search Function

When the Index does not provide you with the required information, you can start a full-text search.

1. Click tab **Search**. Enter the keyword "Playback", click on **List of Topics** or press the Enter key.
2. All topics containing the keyword will be displayed. Double-click topic **Start/stop playback** .... and the required information will appear.
3. Even bookmarks can be set most easily. Click on tab **Favorites** and **Add to**. This way you can create a customized list of topics giving you easy and fast access to the information you require.

You can see that this way it is very easy to find the required information. Be honest – don't you thinks this is faster and more convenient than leafing through 1200 pages? Here, you have only got the thin, introductory handbook...

Obtaining context-specific information

Information can also be obtained for certain situations, i.e. matching the corresponding dialogs. Wings Platinum Help offers you the following ways of doing so:

- Pressing the **F1** key will automatically display the corresponding help topic for the current dialog box. Should this not be the case, accessing the multi-tier **index** will be the fastest way to find the necessary information.
- When an error message is displayed, the dialog box very often has a help button **?** which allows you to obtain further information or find out about a specific solution.

Producing a digital AV Show

What steps are necessary to produce a digital AV show?

Wings Platinum is an extremely flexible tool that allows a highly creative approach to producing digital AV shows. You can combine high-resolution still pictures with videos or animations, change the transparency of and dynamically control pictures on the presentation surface in terms of size and position. There is virtually no limit as to the picture size. Based on the original files, Wings Platinum creates low-resolution display data to display images or videos on the user interface or in the screen window. This is done at high quality via 3D graphics card hardware rendering. For very complex projects or if no powerful computer is available, display can be based on low-resolution display data allowing swift editing in real time even in such cases.

The size and quality for the presentation can be chosen arbitrarily in accordance with the application. A suitable computer allows immediate presentation at full monitor or video projector quality without requiring additional files to be generated. Wings Platinum, however, also supports export of EXE presentations for high-resolution pictures and videos as well as output of video files in AVI, WMV, MPEG or H.264 format or even creation of video DVDs. Combined with a networked computer system, Wings Platinum can even be turned into a scaleable presentation system, which, via multidisplay presentation, allows a quality which actually exceeds HDTV standards. Every computer can supply image signals to up to four video projectors, which means that several, overlapping image fields can be turned into seamless presentation areas of unprecedented size and quality.

In principle, the necessary steps to produce a show are always identical. Complex shows require the Wings Platinum Advanced License or up.

Using Wings Platinum to produce a show

In Wings Platinum, an AV show is produced via media objects. This means that you arrange pictures, videos, animations and music as desired and the

result of your work can immediately be viewed. It may help to start thinking about the show concept and the central theme of your show beforehand. But even while working at the show will Wings Platinum give you maximum freedom to make changes and improvement.

The following steps, which will be dealt with in detail in this workshop, are required to produce an AV show:

Creating a project: The fastest and simplest way to create a project is via the Project Wizard. They assist you in providing and setting the most important information for device and software configuration.

Capturing media: Scan your slides or photos and save music and sounds on your hard disk. Wings Platinum helps you to do so in a variety of ways. Or, you can copy existing picture, video and audio files onto your hard disk and import them into the Media Pool. It should do to start out with a few files. Further files can be added any time. Larger quantities of media can be nicely structured in Media Pool folders.

Arranging pictures, video and sound: Drag the corresponding pictures, videos and pieces of music from the Media Pool into the corresponding track in the Timeline. All the resulting objects can be edited likewise, i.e. shifted, dissolved or cut, which means that learning to edit is quite easy. Any editing steps are immediately visible in the screen window when playing back the object.

Presenting: A direct presentation from the timeline at full screen resolution is possible at any time. A presentation medium, such as an EXE presentation or a video file, only needs to be produced under certain circumstances, e.g. when the presentation is to be passed on to somebody else or in the case of extremely complex shows. No matter whether you require High End quality for final presentations or a low-resolution Internet version: both are produced at a mouse-click, although the computing time is of course distinctly longer for the High End quality.

The resulting presentation media can be directly presented or, in the case of videos, also played from the timeline in Wings Platinum. But even other players, such as the Windows Media Player, for example, can also be used. Output devices can be monitors, LC or plasma displays and, of course, also video projectors.

Why digital projection?

Digital technology has drastically changed and simplified many a production process and working method in a variety of fields. Just think of how computer programming and soundtracking via hard disk recording has revolutionized multi-image. And now it's projection that is being revolutionized .... or better evolutionized. For digital projections have been used on a daily basis for a number of years: for trainings, meetings, business or video presentations. Digital projection technology has achieved a quality which is also suitable for high-quality presentation of images.

In addition to quality, there are a number of other criteria in favor of digital projection, such as completely new ways of designing shows, the fact that only a limited number of devices are required, brighter and larger pictures or that a whole show can be saved on one single CD or DVD.

Advantages of digital AV shows

- Data projectors feature very bright pictures. They may be many times as bright as those of a slide projector. This means that larger image projections are possible which are less likely to be affected by interfering light sources. A brighter picture is, subjectively, perceived by the viewer as being much sharper.
- All the restrictions of slide projectors, such as slide change time and lamp inertia no longer apply. One data projector replaces any number of slide projectors projecting onto one image field. Elaborate racks for slide projector alignment are no longer necessary. Images are positioning is at the accuracy of one pixel and do not change.
- For dissolves, Wings Platinum offers transparent superimposition of pictures in addition to the normal image addition. This way you can fade in dark writing into a bright area.
- You can integrate videos and combine them with still images. Video scenes can be placed on a background picture in a small image field and can even be moved.
- This way it is possible to create camera movements across large still pictures, e.g. panning through the landscape or moving along the facade of a high-rise building.
- Digital image editing means that you can pursue your creative ideas without limitations &endash; the slides need neither be exposed nor mounted before you can start.

- But it also means that the slide frames no longer need to be cleaned from dust. Once spotting of digital picture has been completed, it will remain like this forever. No Newton rings will develop or condensation collect beneath the glass mount during projection.
- There are no flatness problems like for slides. Not even slides in a glass frame are absolutely flat so that even top-class projection lenses cannot achieve the desired projection quality. The image chips, on the other hand, are completely flat and allow highly precise projection of an image on the projection screen even at the corners.
- Individual images or whole shows can be duplicated or copied digitally and thus loss-free, which means that you are virtually only dealing with originals.

However, you should also know some of the disadvantages

- The picture quality is currently limited by the computer performance and the data projector. Resolution, contrast and color rendering, strictly speaking, do not come up to slides, but the higher brightness of digitally projected pictures is often perceived as better by the viewers. The results, in any case, exceed DVD standard by far. And the new multidisplay technology allows you to implement even exceptional formats at virtually any quality level.
- All pictures must be available in a digital form. This means that the slides must be scanned at very high quality, must be cleaned from dust and scratches and be corrected in color and contrast. Scanning is of course superfluous when you take your pictures with a digital camera. Digital photographs usually have a better projection quality than scanned slides.
- In exceptional cases output of a show as video file may be necessary, which, at high quality, takes several times the original playing time. This needn't be a big disadvantage, as you can leave your computer on during the night. Moreover, immediate presentation at full quality is possible for a project with still pictures and few simultaneously running videos.

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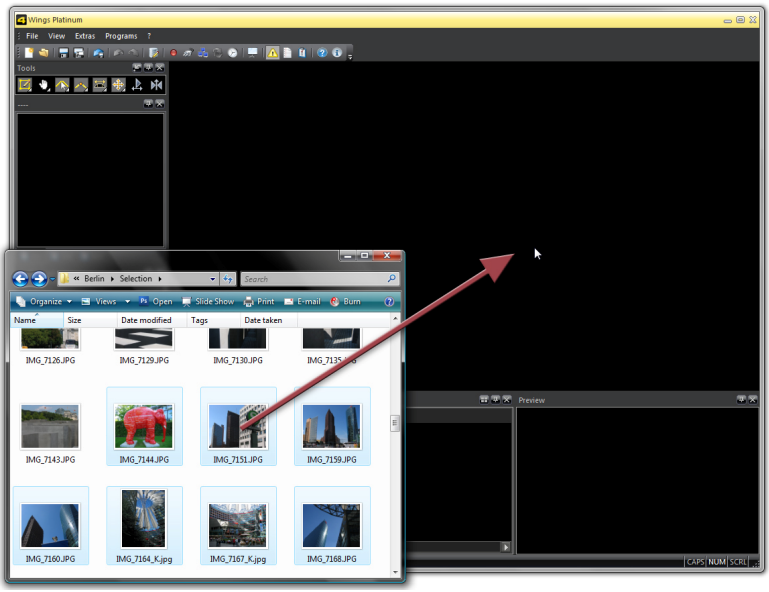
Quick start via Drag & Drop

Those who expect to see quick results should try the "quick start". Media, such as Images, music and videos can just be dragged from the Windows Explorer or image browser to be "dropped" into Wings Platinum and immediately be presented there.

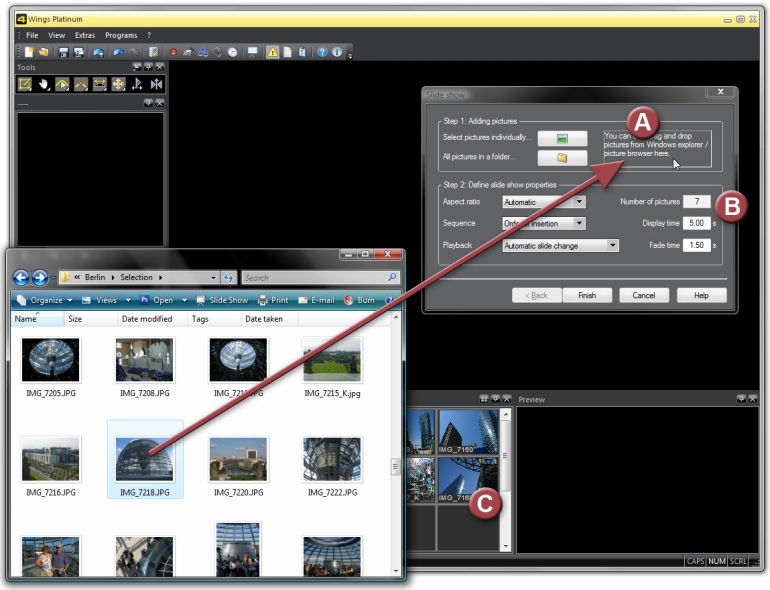
We will show you at the example of a simple slide show:

1. Open Wings Platinum (you may have to close any dialog boxes that may possibly appear).

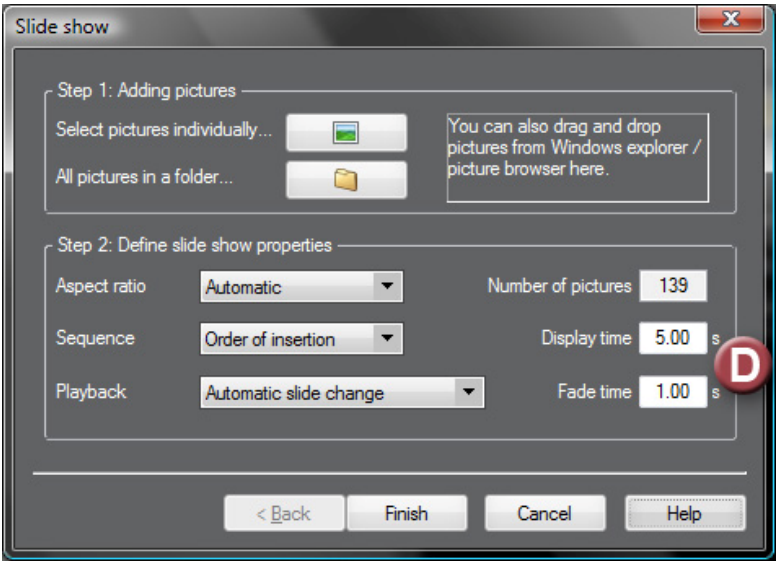
2. Now open the Window Explorer or your image browser and drag the first image into the large empty space showing **Wings Platinum 4**. If your pictures are not displayed in the Explorer, click on button **Views** and select **Thumbnails** (XP) or **Large Icons** .



3. Following this, a dialog box for creation of a slide show will appear. It offers various options for adding pictures. Use the drag & drop method and drag your pictures into the dialog field (A) in the order you want them to appear in the slide show. The Wings Platinum Media Pool will then show the added pictures (C). The **Number of pictures** added can be seen in the dialog box next to **Number of pictures** (B).



4. After adding all the required pictures you can define some other properties for your show. The default settings are suitable for a show that is to run automatically. The preset value for the display time of a picture is 5 seconds, that for the fade time is one second (D). These values can be adjusted in accordance with your requirements.



A tip for later on: For **Playback** you can also choose **Enter key advances to next picture**. This allows you to determine the point of time the slide is to change individually for every slide during the presentation. In this case the Wizard places pause markers at the beginning of every new picture. The **Display time** should be kept rather short, e.g. 2 seconds; this is considered the minimum display time.

5. Now click **Finish**, for all the pictures to be displayed in the timeline as a show (E). If the pictures or picture icons are not yet visible, the display data are just being completed automatically in the background. Click **Lightbox View** (F) to change the Media Pool into a lightbox. This is helpful if you need to sort and search images later on.

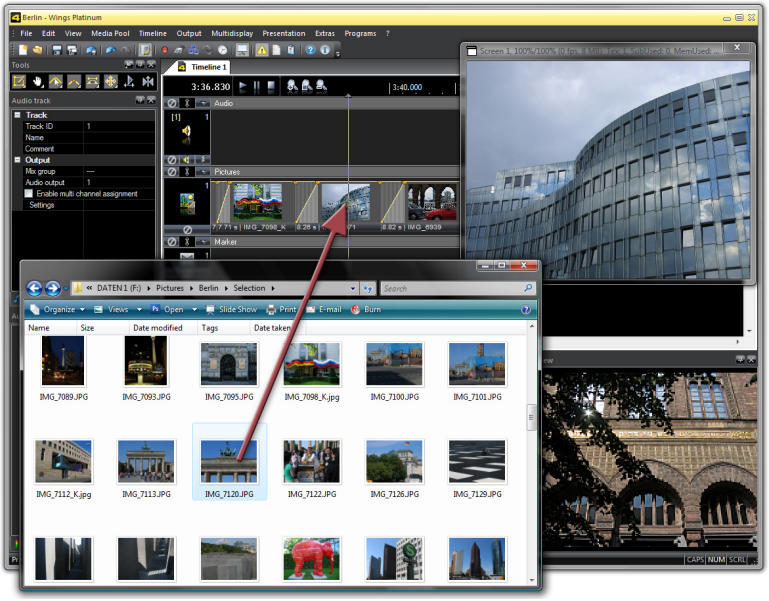
6. When you start playback by pressing the space bar, the Locator (H) starts moving across the picture objects and the fades appear in the screen window (G). Stop playback by pressing the **Esc** key. The Locator stands for the current point of time within a show. In Stop Mode you can grab the Locator and move it. Try grabbing it in the empty track area (H), where there is no object below the mouse pointer.

   Tip: Press key **Home** to make the Locator jump to the first object. If this does not work, click some empty space in the timeline to activate the window.

7. Full screen mode at maximal quality is started by pressing the **F5** key. The picture is displayed in full screen size and Wings Platinum changes to Pause Mode. When you press the **Enter** key, playback is started. Press the **Esc** key once to stop; Fullscreen Mode is maintained. Press **Esc** a second time for the user interface to reappear.

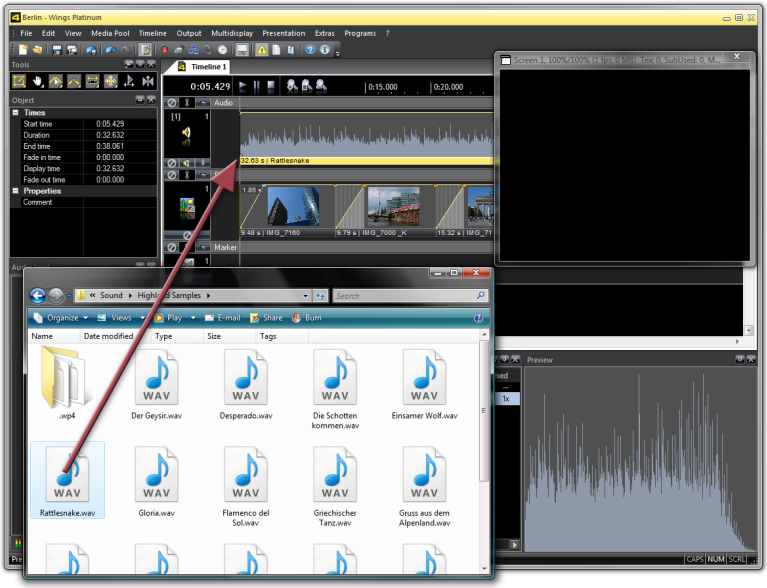
8. Any image you don't like can be replaced by another one. Just drag the new image from the Explorer or Media Pool onto the object in the timeline whose image you want to replace. In the illustration below the cars were replaced by the Brandenburger Tor. **Note:** If the Media Pool

is in List View you need the grab the images at the symbol. Grabbing is easier if you change over to **Lightbox View**.



9. Sound tracking is just as easy. Click some empty space in the timeline for the window to be topmost and press the **Home** key. The Locator will jump back to the beginning.

10. In the Explorer find an audio file in wave or MP3 format and drag and drop it into the timeline below the picture track. Drop it as closely as possible to the Locator so that the music starts when the first image fades in. This way an audio track is created containing some music that can immediately be played.



11. If you place the Locator to a location before the music and start playback picture and music should start at the same time.

12. Don't forget to save your slide show. You will be prompted to do so when exiting Wings Platinum. A Wings Platinum project file requires only little storage space. It does not contain any media files but only the references to them.

Information on how to create new media files, e.g. copy music from an audio CD, edit objects, i.e. change dissolve times or create motion effects can be found in a number of workshops. There you will also be provided with information about the concept of Wings Platinum.

Creating a project for a digital AV Show

In this lesson you will find out about how to create a new project for a digital AV show via a Wizard. Let's start by giving you a general overview:

- A **Project Folder** and the subfolders **Audio**, **Pictures** and **Video** are created on hard disk to accommodate all your project files produced during production.
- Wings Platinum is configured for your show, i.e. the wizard asks you about the format of your show or the number of tracks you want to work with.

Step by step, the Project Wizard will help you start your project. It is important to establish a sound basis for your project. Changes in the settings can be made at any time later on. We'll start with a simple project.

Info This workshop refers to the full versions. With the Basic or Demo License, however, most of the command are reproducible. Information about the restrictions can be found in the Help topics under **General** – **Licenses and functions**.

This is how you create a project:

1. Start up Wings Platinum. If this has already been done, click on **File** – **New** in the main menu.
2. In the dialog box popping up, select **Project Wizards** in the left dialog window .
3. From the list displayed, select **Creation of a new mixed media project** and click **OK**.

Project Name

1. Select **Create new project in selected folder** to determine where the files are to be stored .
2. Enter the required name under **Project Name**, for example **Exercise 1.**

3. Click on and access the drive or open the directory you want to create the new project folder in. Now click on **Create new folder** and enter the name, e.g. **Exercise**. Finally, click on **OK**.
4. Under **Comment** you can add some remarks, e.g. **First lesson of the Wings Platinum tutorial**.
5. Click **Next**. The Wizard will now create a project file in the specified project folder.

Info If you want to save all projects to the same location, you can specify a **standard folder** under Options. However, this is only for later.

Screen

Here you can make some settings for the screen used for displaying your show.

1. Specify the **Aspect ratio** of the screen you want to use for your show. It is useful to choose the same aspect ratio as that of your pictures. The aspect ratio can still be changed at a later time via the Screen Properties.
2. The settings under **Screen Settings** can normally be left as they are. The picture display data size is automatically adjusted to match your monitor. Of course, modifications are also possible at a later time, e.g. for presentations on a video projector.
3. Click **Next** twice. Presumably you won't use slide projectors.

Video

The following options refer to video playback:

1. For HD videos and with a high storage capacity on your hard disk you can check the box next to **Additional higher resolution for HD videos**. In this case preview is nearly at presentation quality.
2. The second checkmark next to **Create intermediate video data** should definitely be left, especially when AVCHD videos are used.
3. Click **Next**.

Pool Template

This dialog allows you to select a project template which is used as a basis for taking over Media Pool components into the new project. This way you can use ramps and effects as templates for a new show.

1. Place a checkmark next to **Add Media Pool components from following project template**.
2. The preselected template **Default Pools** contains a few ramps and control tracks for effects. If you want to import ramps from a different project template, highlight the corresponding template by clicking it.
3. Click **Next**.

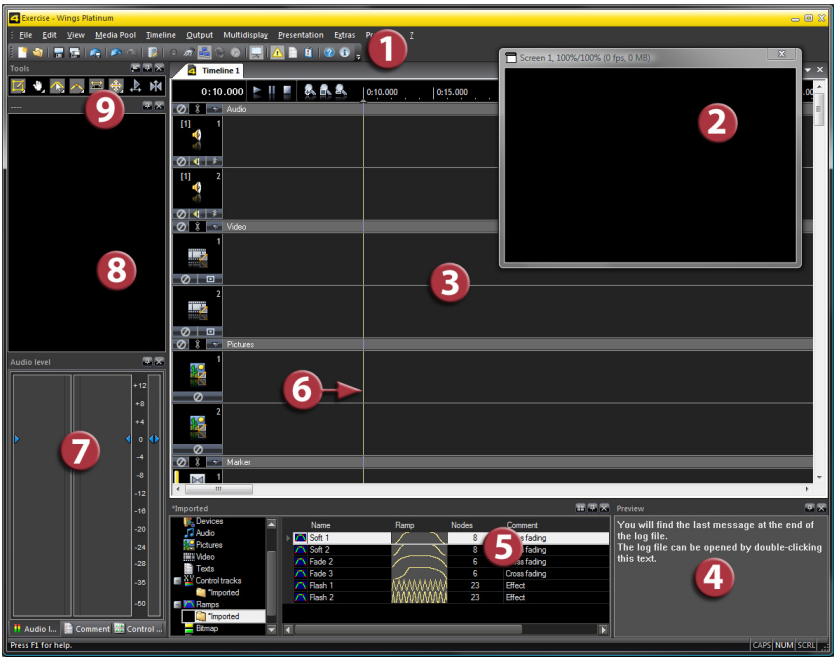
Media Pool

1. Select the components you want to import. Without previous selection of a separate template you should leave the settings for **control tracks** and **ramps**.
2. Click **Next**.

Tracks in the timeline

1. Here you can enter the number of tracks you want to use for programming. Choose 2 sound, picture and video tracks each. Leave one marker track and set the universal track to zero.
2. Click **Finish** to create the project and make the Timeline window appear.

The empty program window has the following components:



1. **Main menu** and the **Function bar below the main menu** with buttons
2. **Screen** for preview display
3. **Timeline** with tracks. In the picture, the green group tracks, among other things, are not displayed.
4. **Preview Window** to display media and messages
5. **Media Pool** with a number of different tabs for various categories
6. **Locator** which marks the corresponding position in time
7. **Audio level control**, additional tabs for comments and Control Panel
8. **Properties Table**, shows the parameters for highlighted objects in the timeline
9. **Toolbar** for editing various objects and components.

Capturing pictures and sound

As a necessary precondition for this tutorial you should already have created a project. You can use pictures and audio files from the Wings Platinum DVD. They are normally saved to hard disk when installing Wings Platinum. We will show you how to add these media files to the Media Pool. Please note that all media files contained on the Wings Platinum DVD are protected by copyright.

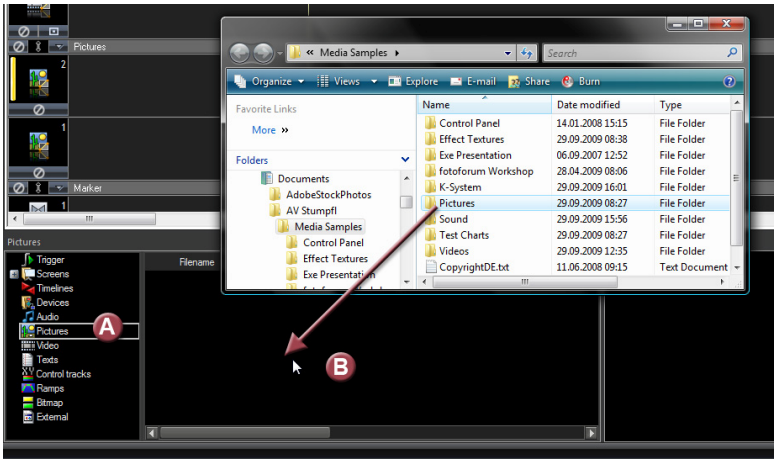
As you may well suspect, the Media Pool accommodates all media files of a project, e.g. picture, audio, video and text files. In addition to this, other items which are also important for your project, such as screen and device configurations and a collection of user-defined dissolve ramps are also managed in the Media Pool.

Clicking the wrong buttons while trying to reproduce the workshop is really no problem. Virtually anything can be undone. The Undo Function will help you undo or restore editing steps most easily. The **Undo** and **Redo** keys can be found in the function bar below the main menu.

This is how you can import existing media files

1. Folder **Media Samples** contains various picture and audio files which you can use for this workshop. In the main menu click **Extras** followed by **Open folder ▶Media Samples** and Windows Explorer will appear. If this is not the case the sample files may be missing on your computer. Insert the Wings Platinum DVD and click **Install sample media** in the selection dialog.

2. In the Media Pool on the left highlight category **Pictures** (A). Bring the Windows Explorer window to the foreground and drag and drop folder **Pictures** into the Media Pool (B), following which the files are listed in the Media Pool.



3. Since Wings Platinum renders the media display data in the background it may take a while before the pictures are displayed. The number of files remaining to be processed is indicated in the bottom right corner on tab **Tasks**.

4. In the Media Pool click category **Audio** and drag and drop folder **Sound** from the Windows Explorer to the Media Pool.

5. When you highlight an audio file in the Media Pool, the corresponding graphic representation of the audio is displayed.

6. When you click on category **Pictures** and highlight a picture file, the picture is enlarged and displayed in the Preview window.

Info If you have added large amounts of data into the Media Pool, you may be confronted with blue crosses in the Media Pool as an indication that display data have not been created. In such a case you can have the display data created all at once. Just click on **Create display data** in the tool bar below the main menu. This may take a while, depending on the number of files. You can, however, continue editing, since this process is running in the background.

Import of video files

The same way the video files can also be imported. Virtually all formats, such as **AVI**, **WMV, MOV** and **MPEG-1** and **MPEG-2,** as well as **MPEG4** and **H.264** are supported. However, you need to make sure that the corresponding codecs are installed on your computer. More information is available in the help topic *Supported file formats*.

Creating new media files

Wings Platinum offers various ways of creating new media files, e.g. recording sound via a sound card, copying sound from audio CDs, scanning pictures or capturing them via a camera (WebCam, video camera or digital camera) from the screen. The type of process depends on your audio source or the image capturing device available. All these procedures are explained in more detail in the Wings Platinum Help, in the following chapters:

Copying audio samples from audio CD

Recording sound via a sound card

Scanning pictures

Capturing pictures via video camera

Transferring your own videos to the computer

Currently, it is not possible to use Wings Platinum to transfer video material to your computer. To do so, you need to use other software. A most recommendable tool for **DV videos** is **Scenalyzer Live**, which automatically detects scenes and copies them onto the hard disk as individual files. Further information can be found in the Internet at

http://www.scenalyzer.com/d/main.html.

For **HDV** videos tool **HDVSplit** can be used which splits scenes automatically but is not as comfortable as **Scenalyzer Live**. It can be found at

http://strony.aster.pl/paviko/

If you are planning to produce an HDAV show it may be a good idea to start thinking about media integration. This is particularly important for usage of videos and for optimum presentation via a video projector. See Media integration in the help topics.

As an example, we will show you how to copy a piece of music from an audio CD.

Insert CD and make preparations

1. Insert an audio CD into your CD ROM drive. If the Windows Media Player should start up a little later, abort it.

   Info You can prevent the Media Player from starting up by holding the **Shift** key for a few seconds while inserting the CD into the CD ROM drive.

2. In the main menu click **Media Pool** and **Create new files**.
3. In the left window section, click on the plus sign next to **Audio** and **Pictures** to display the subordinated items. These are the options for creating new media files. Now click **Audio CD**.
4. In the centre of the pop-up dialog you will find a list of audio tracks of this CD starting with 01. Should this list be empty, choose the correct CD drive at the top.
5. As **target directory**, Wings Platinum has chosen the corresponding folder. You don't need to make any changes.
6. If you have access to the Internet, you can download the names of the music titles and other information from a data base on the Internet. To do so, click on **Track names from Internet database**. When there is no Internet connection, you are requested to dial up.
7. If you do not have access to the Internet or if the name of your audio CD is not contained in the database, you can enter the **base file name**, e.g. an abbreviation of the CD title. In combination with the number, the tracks are then clearly defined. However, you can also enter individual names for your tracks. Just mark a name on the list and click the name again. Enter the corresponding name and press the **Enter** key.

Listening to and copying track samples

1. Highlight a title and click to listen to the sample.

Info Some, usually professional sound cards, do not support this function. For these cases, you can directly connect a headset to the CD ROM drive.

2. If you click any other titles while playing back, playback changes over to the selected titles.
3. Click on to terminate playback.
4. Highlight the titles you want to copy (... one or more).
5. Click on . The dialog appearing allows you to keep track of the progress. The copied titles can then be found in the Media Pool.

   Info If you only require a small portion of a piece of music, you can also copy portions. You should, however, choose a larger section which leaves you enough scope for editing the sound object at a later time. Further information can be found upon pressing the **F1** key.
6. Terminate the Record Dialog by clicking **OK**.

Viewing, listing to and organizing media files

You have now added a number of files to the Media Pool and may continue adding further files at any time. As you can image, a comprehensive show may comprise hundreds or thousands of media files in the Media Pool. In the following we will show you how to view or listen to media files and how these files can be structured and organized in a system.

Viewing and listening to media files

1. In the Media Pool click on category **Audio** and highlight an audio file to make the graphic of the audio appear in the Preview window.
2. Move the mouse to the Preview Window and the mouse pointer will be provided with a Play symbol. After a mouse-click playback is started at exactly this location in the audio file. Click the preview window once again to stop playback.

3. If you click any other files in the Media Pool while playing back, the corresponding files are immediately played back. This way, pieces of music can easily and comfortably be compared and selected.

4. You can also sort the listed audio files according to different criteria. In the line containing the column headers click on **Duration**. Following this, all audio files are sorted in a descending order in accordance with this criterion. Click on **Duration** again to reverse sorting, i.e. the longest piece of music is now at the top of the list. After clicking on **Name** the files are again in alphabetical order.

5. Now click on **Pictures** and highlight a picture file to display the picture in the Preview window.

6. Of course, it is also possible to sort the pictures in accordance with the available criteria. Moving the scroll bar at the bottom to the right will cause further criteria to appear. Under **Comment** you can enter your personal remarks with regard to a file. Using the mouse, you can grab a column at its header and move it to any location, e.g. column **Comment** to the very left. This means that the columns can be arranged and organized in any desirable way.

7. For category **Pictures** you can choose a different form of display which allows several pictures to be viewed at a glance, just like on a lightbox. Just click on button **Activate lightbox view** in the function bar below the main menu.

8. Just like on a normal lightbox you can sort and move the pictures by grabbing them with the mouse and dragging them to the desired location. In order to have free spaces for sorting, right-click the first picture in the top left-hand corner and **Insert empty row**.

9. You can also test dissolves of pictures. With the right mouse button, drag a picture onto another picture and a test dissolve will be displayed in the timeline window as long as the right mouse button is kept pressed. You can also test dissolves with various other pictures by just dragging the picture onto other pictures. If you don't like the dissolve time, you can change it by hitting a number key on the main keyboard between 0 (zero seconds) and 9 (4.5 s).

10. This test functions is an excellent means for evaluating individual pictures. Right-click a picture with the mouse-pointer and move the mou-

se-pointer slightly on it to make the picture appear in the timeline window.

Structuring content

The left side of the Media Pool consists of categories. They help you organize everything contained in the Media Pool. You can create as many folders and subfolders for every category as you like and name them in accordance with the contents. These folders are created, shifted and renamed, just like in the Windows Explorer. By highlighting a folder its contents are displayed in the right section of the Media Pool.

1. Right-click category **Pictures** and select **New Folder**. Name the new folder to specify a group of motives or a topic, e.g. **Landscape** and press the **Enter** key.
2. Now right-click folder **Landscape** to select **New Folder**; Name it for example, **Coast**. Repeat this procedure and create a new subfolder in folder **Landscape** called **Forest**, for instance.
3. These folders can now be used to accommodate the corresponding pictures. Click on category **Pictures**. Keep the **Ctrl** key pressed and highlight a few pictures with coastal motives on them. Grab them and move the pictures into folder **Coast**. Do likewise with any other groups of motives.
4. When clicking one of these folders in the Project Explorer, the pictures contained therein will be displayed.
5. This way, contents can also be organized in accordance with other criteria, e.g. according to Pop, Classic, Noises, Language, etc. for **Audio**.
6. For sorting a vast number of pictures into various folders you can open the corresponding folder in a separate window. Right-click a category or a folder and select **Open in new window**.
7. In list view, the folder contents can also be sorted in accordance with certain criteria. To do so, click at the header of a particular column, e.g. **Name**, for all the lines to be sorted in accordance with this criterion. Click again to reverse sorting. Sorting works likewise for all columns.

8. Presumably you may not be able to see all columns. Move the scroll bar to the right to see even the very right columns. If one of the last columns appears to be more important to you, drag the corresponding header to another location, e.g. further to the left. This way the order of columns can be arranged in accordance with your individual requirements.

Attention! Please bear in mind that the folders in the Project Explorer do not exist on your hard disk, but they are only used for structuring Wing Platinum! Wings Platinum only stores the references to the media files on the hard disk.

If you would like to take a break, save your practice project by clicking on **Save project** in the function bar below the main menu. You should now go on to the tutorial **Editing sequences of pictures and objects**. You will be supplied with some basic information about how to deal with objects, which you may use for sound and video editing as well.

Editing sequences of pictures and objects

As a necessary precondition for this workshop you should already have added media files to the Media Pool. See Workshop Capturing pictures and sound. Now we can start arranging a show in the timeline. This workshop will show you how to edit objects and how to use the pre-defined ramps and effects. As mentioned before, any faulty editing steps or clicking the wrong buttons can be undone or situations be restored by using the Undo Function. The Undo/Redo keys and can be found in the function bar below the main menu.

Editing objects

As was mentioned before, the way (media) objects are edited is identical for all types of media. This is why the explanations below apply to all types of media. Let's start with a few basic "finger exercises".

1. Unless you have already done so, load your project **Exercise 1**. After starting up Wings Platinum, dialog **Create new project** pops up. After

clicking **Last Projects** you will be presented with a list containing your exercise as well.

2. Click on category **Pictures**. Using the mouse, grab a picture and, while keeping the mouse button pressed, drag it into a picture track, which can be recognized by a cactus, the symbol for pictures. Let go of the mouse button and an object is created. Note: Grabbing pictures is easier when **Lightbox View** is selected in the Media Pool.

3. For editing, the toolbar at the left side of the timeline is of central importance. Usually the tools should have their default setting. If you are not sure, click on **Reset tools** in the toolbar to reset the tools. Now you can grab the object at the info line (A) and shift it in time (to the right or left) or to other picture tracks. If this is not possible, check whether the dragging tool is set to **Unconfined dragging**. If necessary, press key **F** to enable it.

Info You can have a list of tools printed and place this sheet next to the keyboard to remember the tools and the shortcut more easily. Click Print Toolbar list in the same Online Help topic.

4. Now grab the beginning of the object (B) to extend or shorten it. The end can be modified the same way; fade-in and out times will not change. The yellow ramp band represents the progression in brightness. When it runs at the top of the object, it represents full brightness, while, at the bottom near the info line, it means that the object is completely dark.

5. To change fade-in and fade-out time enable tool **Stretch/Compress fades**. Alternative shortcut via key **D**, as in "Dissolve". Dragging the object beginning or the end (C) changes the fade-in or out time. The time is displayed at the top node, when you highlight it. The overall duration of the picture object is displayed in the info line to the left of the name. Set tool back to **Move fades**.
6. Test the effect in the preview window. If the screen window is not open, click **Show screens** in the function bar below the main menu (Shortcut via **F10**). Using the mouse, move the Locator to a location in front of the object and press the space bar to play back the object. Press the **Esc** key to stop playback.
7. But playback can also be started in a different way: When you click the empty space of a track and position the Locator you only need to briefly click the right mouse button additionally while keeping the **left mouse button** pressed. To stop, simply click the timeline. Just try it a couple of times and will get extremely fast.
8. Drag a second picture from the Media Pool into the picture track and move the picture object created thus (D) on top of the first one to produce a dissolve in the overlapping area.

9. Grab the dissolve at the hatched area (E) and the mouse pointer is provided with an X-symbol. Now move the dissolve in time by moving it to the right or the left. This way dissolves can also be synchronized with music. More about this later on.
10. Now change the length of the dissolve. For this purpose you need to enable tool **Stretch/compress fades**. To avoid having to use the mouse you should get used to enabling the tools via the keyboard keys.

Start by clicking to reset the tools. While holding down the **D** key **Stretch/compress fades** is enabled. So hold down the **D** key and drag the beginning (F) or the end of the fade with the mouse. If you want the dissolve time to be displayed numerically, you need to highlight one of the upper dissolve nodes beforehand by clicking on it.

11. Play back the dissolve at full screen size. Click a location before the first object to position the Locator. Press the **F5** key to change over to Presentation Mode and the fullscreen picture will be displayed. Start playback by pressing the space bar. Stop playback by pressing the **Esc** key, pressing it once again will cause the screen to return to window size.

12. In the Media Pool highlight several pictures. This works just like in the Windows Explorer:

- Hold the **Ctrl key** down to highlight a number of pictures by clicking them.
- Press the **Shift** key while clicking two pictures to highlight all other pictures located between those two as well.
- An additional alternative: Right-click the Media Pool and a **context menu** will pop up offering six different file selection functions. Just try it out.

Info On the lightbox in the Media Pool, check the images for their suitability for dissolves. Define a suitable sequence of images accordance with the previous chapter. If you don't know anything about this yet, find the corresponding information under *Sorting on the lightbox*.

13. Now drag the highlighted pictures into the picture track to a location behind the existing picture objects and a dissolve sequence will be created. Fade-in, display and fade-out times are identical and chosen in accordance with the standard settings. Choose your own standard settings for future applications: Create a picture object with the required time settings. Right-click this object and select **Ramp** &endash; **Set durations as default**. Any further sequence of pictures dragged into the picture track will be created in accordance with these default settings.

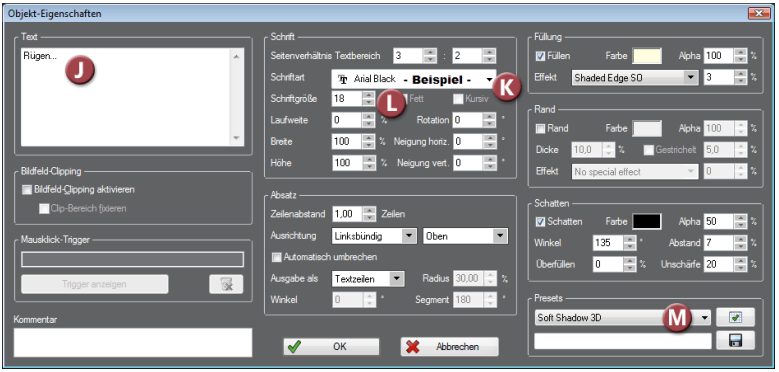
14. Now we want to add a piece of music to the timeline. To do so, click category **Audio** in the Media Pool and drag the desired audio file into an audio track. Try to place the dissolves in a way which fits in harmoniously with the music. Of course these dissolves can also be varied in length. Keep testing the effect by playing back the sequences and continue practicing what you have learnt so far.

15. With a high number of objects in the timeline tool **Shift following objects** can be very useful. Enable it by clicking the icon with the mouse or press **Q**. Now shift the dissolve (G) and any objects following will be shifted along (H). You can also grab the dissolve directly at the beginning if tool **Move fade** is enabled. Shortcut via key **A**.

Tool **Shift following objects** can also be used for shifting objects (I) and for adjusting the right object edge (fade-out). Just try out how the various functions work and what effect they have. This may be a good idea if you need a gap to add a new image.

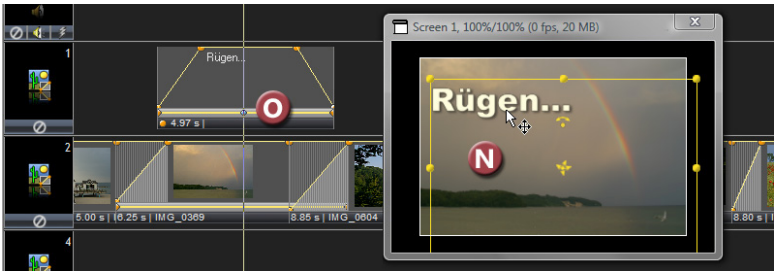
16. The next step is fading in a title. Image **IMG_0369** is very suitable for a title fade-in as it has large quiet areas. We need a second picture track for the fade-in. If you've got only one picture track in your project you need to right-click the picture track head (cactus symbol) and select **Insert track** ▶ **Picture**.

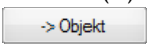
17. Right-click the picture track and select **Insert Text Object.** Right-click the text object and select **Properties**. Under Text enter the title (J), for Font select a bold font, e.g. **Arial Black** (K) and for Font size about 18 % (L). An Advanced License would allow you to add an effect, e.g. **Soft Shadow 3D** (M), which you can activate by clicking .



18. If the track containing the text object is located below the track containing all the other pictures, grab its track head and drag it to a location above the other track for the text to be shown on the screen. Place the text object parallel, i.e. at the same location in time, with picture object IMG_0369 to produce a fade-in. Grab the Locator and move it and you can see the dissolve in the screen window.

19. In-Screen-Editing allows you to improve positioning of the title on the screen. Right-click the text object and select In-Screen Editing following which the yellow frame with its handles appears on the screen. Keep the **C**-key pressed, grab the title with the mouse and drag it to the desired location (N). To return the screen to normal right-click the screen and select **Reset Pan/Zoom**.



20. If the title keeps moving during playback the C-key had been pressed at the wrong moment. To remedy this problem, right-click the key-frame highlighted in blue (O) and select **Properties**. At the bottom right corner click 

, and the location is applied to the entire object and the dialog closed. Workshops **Camera movement across still pictures** and **Editing and integrating videos** provide more information about In-Screen-Editing.

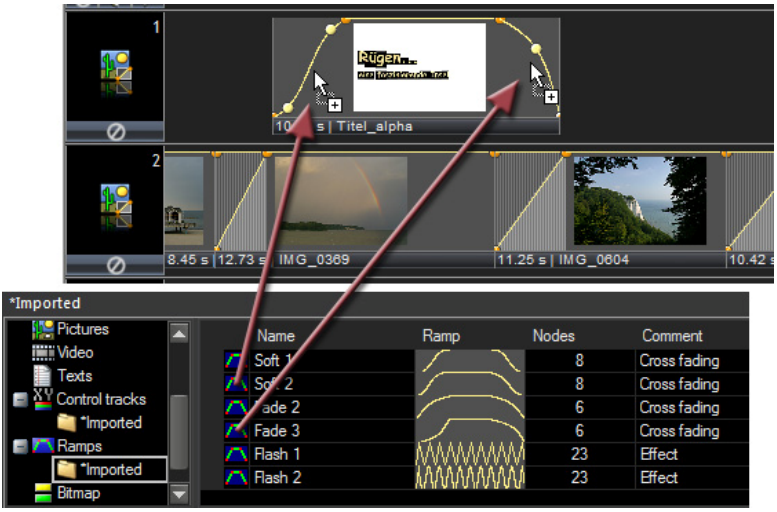
The next step will be to show you how a title can be faded in softly via a modified ramp and how you can add a motion effect to your title.

Using pre-defined ramps

By using ramps, dissolves can be given an individual touch. As you know, every object has four orange standard nodes. They are linked up by a ramp band which has different functions depending on the type of media. For images and videos, it changes the transparency. For audio objects the ramp band changes the volume. Via pre-defined ramps the dissolve characteristics can very simply be changed.

1. In the Media Pool click category **Ramps** and folder ***imported** below it. Here you will find a few dissolve ramps imported from a template while creating the project. If you project does not contain any ramps you can also some at a later time. See help topic Importing from other projects.

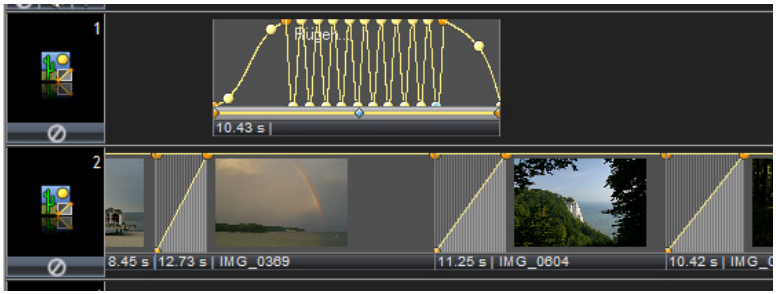
2. If you click on one of the ramps, it is displayed in a large size including all its nodes in the Preview Window. Now drag ramp **Soft 2** from the Media Pool onto the title dissolve and use **Fade 3** for the fade-out.



3. Start playback to test the new ramps. The same way try some other ramps as well and change the fade-in and out times until you find that the effect is harmonious.

4. You may have noticed that only that portion in the object is replaced that was selected with the mouse when dragging the ramp onto it. All in all, a ramp consists of three parts: **fade in**, **middle portion** and **fade out**. After clicking ramp **Flash 1** or **Flash 2** in the Media Pool, you can see in the Preview Window, that these ramps only have nodes in the middle portion. The other ramps, on the other hand, have nodes in the fade-in and fade-out part only.

5. Now drag ramp **Flash 2** onto the middle portion of the title. Fade-in and fade-out are maintained and only the middle portion is provided with this blinking effect. Have a look at the effect by playing it.



6. This effect is not particularly suitable in this location, so you should remove it again. In its place you could drag ramp **Soft 1** onto the middle portion. As **Soft 1** does not have any nodes in the middle portion, the blinking effect has disappeared.

7. You could go on to improve the crossfades of other objects by adding ramps. The nodes in a ramp, too can be changed. More information on this can be found in the Online Help topic Editing the ramp band. A ramp that you consider particularly suitable for the dissolve can also be turned into a standard ramp by double-clicking it in the Media Pool. It can be recognized by the yellow symbol and the red frame around it.

8. Now let's try out some other transitions. Dissolves are a nice stylistic device but it may be useful to have alternatives at the ready if the motif does not allow good dissolves. Save the project status, but leave the project open.

Alternatives to classic fades

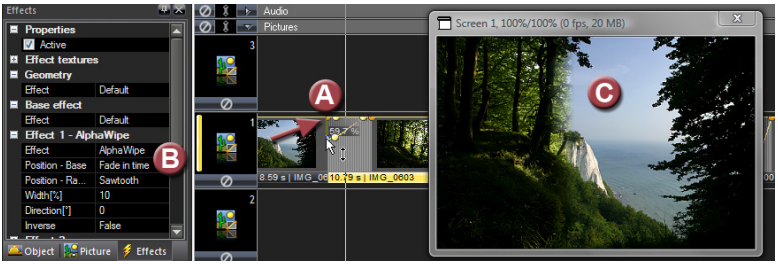
In addition to fades, Wings Platinum offers other ways of designing the transition between picture objects, i.e. by means of visual effects.

Wipe transition effect

This effect can be universally used and is suitable for all sorts of motifs.

1. Now move the first picture object node up for it to start at full opacity (A). Otherwise fade and effect will be superimposed. Highlight the corresponding picture object so that the parameters are displayed in the Properties Table.

2. In the Properties Table select tab **Picture** and place a checkmark next to **Realtime effects** below **Output** for tab **Effects** to be displayed.
3. Click the plus sign in front of **Effect 1** and field **--No Effect--** for the select button to appear. Click on and select **AlphaWipe** following which five more entries will appear. You can leave the settings as they are (B).

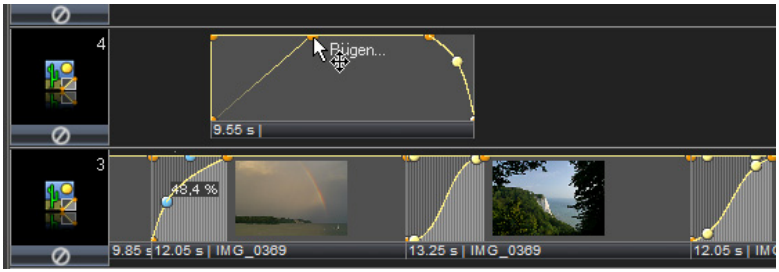


4. Start playback to judge the effect. The second picture is revealed via an internal mask with a soft edge (C).
5. Similar to the duration of fades, the effect duration can be altered by extending or shortening the "crossfade" section. Information on the effect parameters can be found in the help topic *Wipe transition effect via AlphaWipe*.

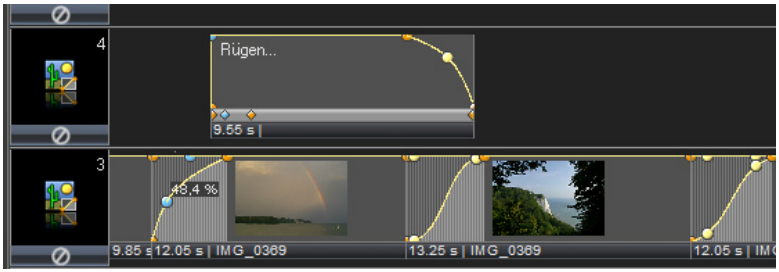
Motion effects

Some other transition option is movement of pictures.

1. As a preparatory measure you should delete the additional bright-yellow node in the title fade-in. Click the node while pressing the **Ctrl** key to highlight it. Right-click one of the highlighted nodes and select **Remove**.
2. Move the upper, orange standard node of the fade-in to the left until the fade-in time is virtually zero.



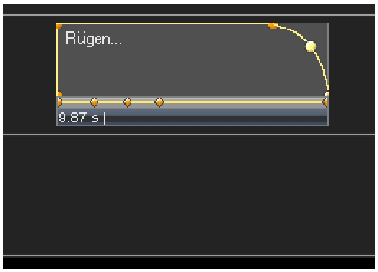
3. In the Media Pool, click category **Control tracks** and folder ***imported** below it for the imported control tracks with the effects to appear. Drag the first effect **Move in from the left (Einschieben von links)** onto the title object.

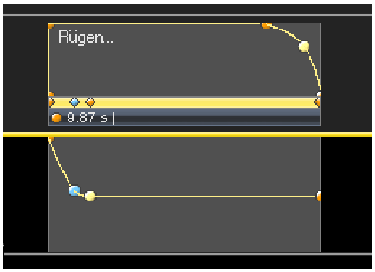


4. The object has now been provided with a control track and keyframes. These keyframes contain the data for position and size of the image. Just start playback and have a look at the effect.

5. Try out other effects, too by dragging them onto the object. The former effect is replaced by the new one, just like for ramps. If you particularly like an effect you can make a corresponding note in column **Comments**.

6. You can also edit or modify effects or create new ones. This is done by editing the keyframes in the control track.





7. Depending on how the effects were created, there is either a combined control track (left) or individual control tracks containing parameter objects and the ramp shape (right). Click the empty space in the picture track to close the Keyframe Editor. Information on how to use them and create your own effects can be found in the tutorial about camera movement or in the Online Help topic Visual effects.

The next step is to create your soundtrack. This you can do in the tutorial **Creating and editing soundtrack**.

Creating and editing the sound track

As a necessary precondition for this tutorial you should already have completed tutorial Editing sequences of pictures and objects where we have used pictures to show you how to edit objects and ramps. You may even have dragged a few sound objects into the timeline and found out that they can be edited and dissolve just like picture objects. However, there are a few audio-specific functions, such as setting the volume, audio cuts or correct audio level control. This and more is what you will find out about in this lesson. As mentioned before, any faulty editing steps or clicking the wrong buttons can be undone or situations be restored by using the Undo buttons and . But let's get started now...

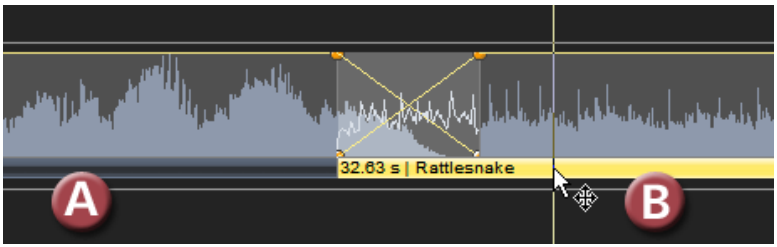
Why do I need a sound track?

In a show, the sound track, essentially, has two functions: First of all, it carries the emotion and secondly, it forms the time schedule for a show. When using still pictures, slide changes can be harmonized with the rhythm of the music, which you are going to do at the end of this tutorial.

Dissolving music and adjusting the volume

Load your tutorial project and start with a simple audio dissolve.

1. In the Media Pool click category **Audio**. Drag audio file **Einsamer Wolf** (A) followed by **Rattlesnake** onto an audio track. Move them on top of each to produce a dissolve. By the way, audio dissolve are frequently called crossfades in musical jargon. Play the crossfade and, if necessary, extend the overlapping area by shifting the objects (B).



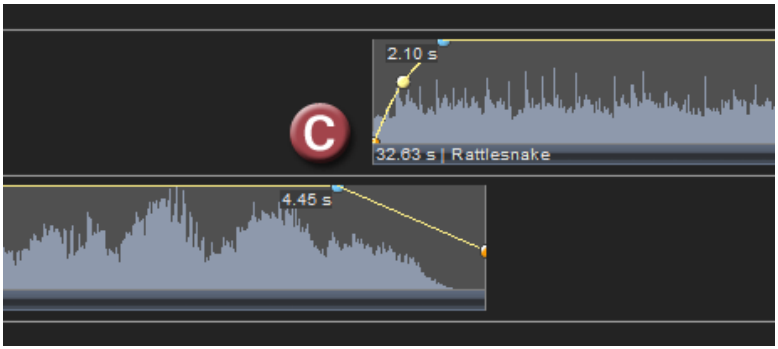
2. Audio file **Einsamer Wolf** is to be used as a sort of low-key overture, so **Rattlesnake** should be slightly louder and more dominant. Therefore you must change the volume. Highlight object **Rattlesnake** and the pa-

rameters will be displayed in the Properties Table. Right-click object **Rattlesnake** and select **Properties**. Under **Peak Level / Sample** you can see that this piece of music has a peak level of 0 dB which means that the volume cannot be increased without losing information during output. Click **OK** without making any changes.

3. We therefore have to reduce the volume of **Einsamer Wolf**. Right-click this object and select **Properties**. Reduce the volume with the slider by five to six dB. **Tip:** The volume controls allow very selective adjustment. They can be grabbed and moved with the mouse, that's clear. But you can even change the volume by exactly one dB by clicking either below or above the slider. Move the mouse wheel, and the volume is changed in tenths of dBs. Finish by clicking **OK**. The set volume is displayed again in the info line in front of the file name.

4. Now play this part and make adjustments, if necessary. You may have the feeling that this dissolve is not really harmonious enough Well, let's try an asymmetrical dissolve. Move one of the objects onto a second audio track. If it should remain fixed in time you hold the **V** key to temporarily enable tool **Vertical dragging**.

5. This way, you can edit both the superimposition of audio information and both ramps independently (C) and have maximum freedom to do whatever you feel like. Let's try to create a dissolve as illustrated below.



Place further pieces of music one after each other. Usually, moving them on top of each other will achieve good results, in particular when you shape the dissolve ramps by means of nodes. Adjust the volume of every object to

match the existing objects in the audio track. To provide ample scope for adjustments, start by reducing the existing pieces of music in volume.

Hold the **Ctrl** key and click the info line of both objects to mark them. Right-click one of the sound objects and select **Special Functions** – **Change volume**. Reduce the volume with the slider by six dB and click **OK**. This will reduce the volume of both objects, while the relation of the volume values will remain constant.

Prior to the sound montage you can cut a sound object by moving beginning or end of the object with the mouse. If you want to cut off a large chunk, it is easier to use the functions in the context menu. Right-click about the location in the sound object where you want to make the cut and select **Cut left part**, **Cut right part** or **Divide**. Practice using these functions for a number of sound objects and add further pieces of music to your sound track.

Recording and speech editing

High-quality recording of language is a very delicate task. The text must be formulated, you need a good microphone and a quiet room with good acoustics. In addition to the speaker you need at least one extra person for the technicalities and for speech control during recording.

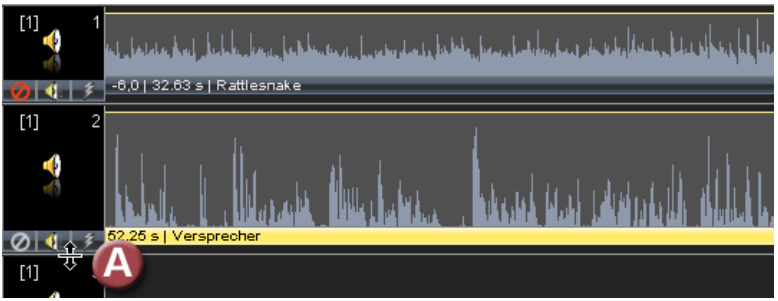
If possible, do not connect the microphone directly to the computer – sound card microphone inputs do not allow for high quality. It's better to apply the microphone signal to an external preamplifier first – this could be a recorder in Record Pause Mode or an audio mixer – to amplify it before it is recorded via the sound card's Line Input. Any details as to how record with a sound card can be found in the Help under Recording sound via sound card.

Just continue recording and stop only for longer breaks. The less the speaker is aware of the technical details around him, the better will be the quality of his speech and you can fully concentrate on speech control. You will end up with a recording consisting of several large files which can be edited unhurriedly at a later time. Once the rough version is located in the timeline, you can cut it up into pieces and compare different versions. The best versions can be exported as new files, so you can delete the large file containing the rough version from the hard disk after editing is completed. Exporting, however, is not absolutely necessary. Taking into consideration that you will only need about 10 percent of the rough version it would clear-

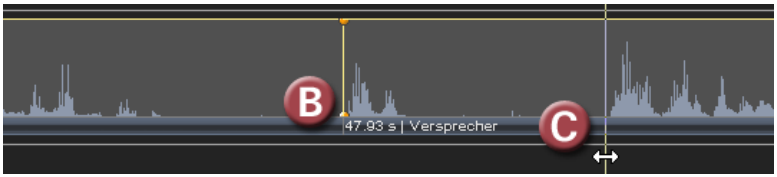
ly be a waste of space to continue using the large file and the rough version for your project.

This tutorial will help you to find out about the principles of speech cutting illustrated at an example file.

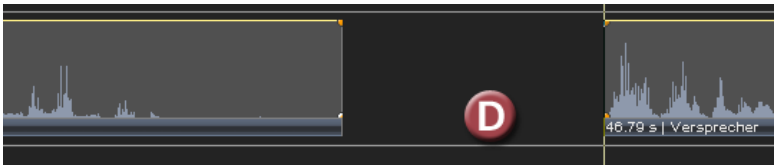
1. Drag file **Versprecher** from the Media Pool into an audio track in parallel with the arranged pieces of music. If there is no vacant audio track, you can simply drag the sound file into the empty dark gray area of the timeline. A new audio track is then created automatically for the object.
2. To be able to listen to the speech object without music, you should deactivate all other audio tracks by clicking button in the track head, which then turns into a red symbol .
3. First of all you should listen to the whole speech file in one go. You may have noticed that the file contains a few slips of the tongue which you may want to cut out. Start out by enlarging the display. Click the zoom-in button at the top left side of the timeline three times. As an alternative, you can also use the **plus** key on the numeric keypad for zooming.
4. Now grab the lower separation line in the track head with the mouse and pull it down (A) to increase the track height. You can even choose a larger track height than in the illustrations to allow accurate editing.



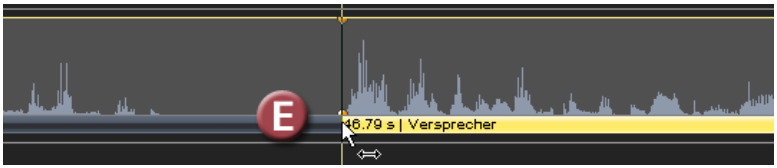
5. Now play the sound object until you hear the first slip of the tongue and stop. Move the Locator to a position before the slip of the tongue, right-click the Locator in the sound object and select **Divide** (B).



6. Now move the Locator to a position after the slip of the tongue but before the part that is correct again. (C). Right-click the Locator in the sound object and select **Cut left part** and the mistake will disappear (D).



7. Now you only need to remove the gap. Press the **F3 key** or click **Snap to Objects** in the function bar and the Locator will turn magnetic. Click the track head of the track containing the sound objects to be edited and it will be highlighted in yellow. This restricts the magnetic effect to this track only. Now grab the right sound object at the very beginning of the info line and move it towards the other object until it snaps accurately in place (E).



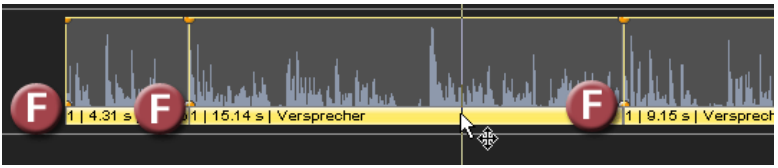
8. Play the section to check whether cutting was ok. You may have to press the **X**-key on the numerical keypad (multiplication) to return to the normal display. As an alternative, you can also use the zoom button for this purpose.

9. All the other mistakes can be cut out likewise. Don't forget to deactivate Mode **Snap to objects** by clicking on (...or, alternatively, by briefly pressing the **L** key). After the sentence finishing with "... von British Columbia bewahrt." there should be no further mistakes. This is

where you should divide the object. Example file "Versprecher" in the audio track should now be split up into four objects. The first three objects should be used as comments. There are two ways to continue. We would like to show you both.

10. The first would be Grouping, which means that the "audio chunks" are sort of stuck together and can be shifted just like one object. Hold the **Ctrl** key and click the info line of the first three objects to mark them.

11. Right-click one of these objects and select **Grouping** ▶**Create new group**. Following this, these three objects are defined as Group **1**, which can also be seen at the beginning of the info lines (F). Whenever you grab one of these objects, all other objects of this group are highlighted as well and can be moved along.



12. An alternative is to export these three objects into a new file. This is a good way when your rough version is a very large file out of which you only need a little portion. Before exporting you should make sure that the cut is alright. After exporting the cuts can no longer be changed, they will be a fixed component of the new file.

13. Mark the three objects. Right-click one of these objects and select **Special Functions** ▶**Export**. Click on **Select Filename** and enter a name, e.g. "Victoria", followed by **Enter**. Leave the preset format **32 Bit Float**. It is absolutely loss-free, even with an incorrect audio level.

14. Check **Replace original objects by exported audio file** and click **OK**. Now a new file is created and the three objects in the audio track are replaced by a single one.

Combining voice and music

After cutting the comment, you can combine it with some music. To do so you need to harmonize the volume of music and voice, i.e. turn down the music when the voice part starts.

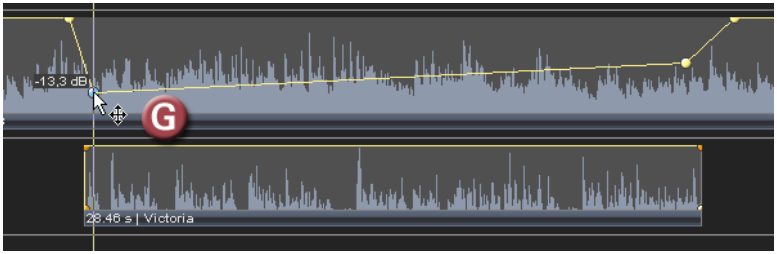
1. On two audio tracks, arrange comments and music to be in parallel. Choose a piece of music which is longer than the comment. You may have to copy new pieces of music onto your hard disk, as shown in tutorial **Capturing pictures and sound**.

2. Right-click the comment object and select **Special Functions** – **Change volume.** Finally, click on **Peak Search**. Note down the approximate values displayed for **RMS level**. They should be around minus 16 dB. The RMS level informs you about the loudness of a sound object. Click on **OK**.

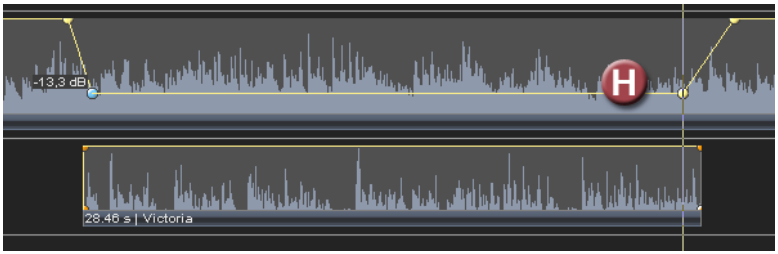
3. Determine the RMS level of the piece of music likewise. It will probably be distinctly higher for music. Should "Inf" be displayed you need to reactivate the audio track by closing the dialog box and clicking on . With the slider adjust the RMS level to correspond to the values of the comment object. Approximate or average values will suffice. Now click **OK**. Both audio samples should appear to be equally loud.

   Tip: By the way, the volume control allow very selective adjustment. It can be grabbed and moved with the mouse, that's clear. But you can even change the volume by exactly one dB by clicking either below or above the slider. Move the mouse wheel, and the volume is changed in tenths of dBs.

4. Play both objects. Although both audio samples are equally loud, we have to reduce the volume of the music while the comment is spoken. This is done by setting nodes (by double-clicking) as you will remember from chapter dissolve ramps (G). Due to a lack of space the display below is slightly compressed. If the nodes cannot be set as illustrated, make sure that tool **Normal keyframes** is enabled.



5. It is difficult to move both inner nodes to exactly the same level (G) with the mouse. This is why we have incorporated a special function. Highlight the node which is at the correct height. Right-click the other node which is to be aligned with it and select **Align**. Following this, both nodes will be on the same level (H) and the volume reduction between the two nodes will be constant.



6. You can now arrange both music and comments on your sound track. Try to coordinate pictures with sound and turn it into a harmonious little practice project to be played back in Wings Platinum.

When you have finished the soundtrack and start creating the presentation data, e.g. audio CD, video or EXE presentation, you should check and correct the audio level of the complete soundtrack. See **Determining the soundtrack peak level**. Further valuable information on how to deal with volume and audio level in the sound track can be found at Tips for volume and audio level in the Help topics.

Camera movement across still pictures

Camera movements will help you exceed the limits of still pictures. A camera movement only shows a certain section of a large picture. This section can change its position and size in dependence of time, thus producing a movement or zooming effect. The picture should be extra high-resolution to provide for sufficient picture information when zooming into it. In this example, we will use a demo picture from the Wings Platinum DVD.

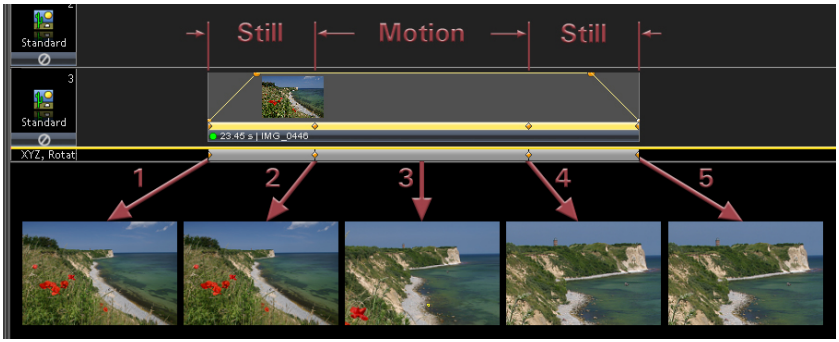
Info Before starting this tutorial you should at least have worked through tutorials 1 to 3 and have a basic knowledge of how to edit objects. The first tutorial of this workshop is Creating a project for a digital AV show.

Preparatory steps

1. You can continue editing your practice project or you create a new one. See Creating a project for a digital AV show.
2. Add picture **Panorama1** to the Media Pool. This picture is available on the Wings Platinum DVD. Unless you deselected it was copied to hard disk during the Wings Platinum installation. In the Media Pool click category **Pictures**.
3. Open the folder by clicking **Extras** in the main menu followed by **Open folder** ▶**Media Samples** and double-clicking folder **Pictures** and **Camera**. Drag image **Panorama1** from folder **Camera** and drop it on the Media Pool. See also Copyright for media samples.

Controlling via keyframes

In order to use keyframes (time markers containing values) for controlling images you need to be familiar with the way they work. When images are edited on the screen, the appropriate object is automatically provided with control tracks and keyframes. Keyframes are actually markers containing the values for certain parameters to influence the image, i.e. in this case for size, position, rotation of image or video. The area between two keyframes contains consecutive intermediate values, which become visible as motion, zoom or rotation. This is an example:



The key frames in the control track define position and size of the picture. Between (1) and (2) the image does not move, as both keyframes contain identical position parameters. In the first (2) and next set keyframe (4) different locations are saved, that's why the image moves and is expanding. The intermediate positions (3) are created consecutively. At the end, between (4) and (5), the image is still again.

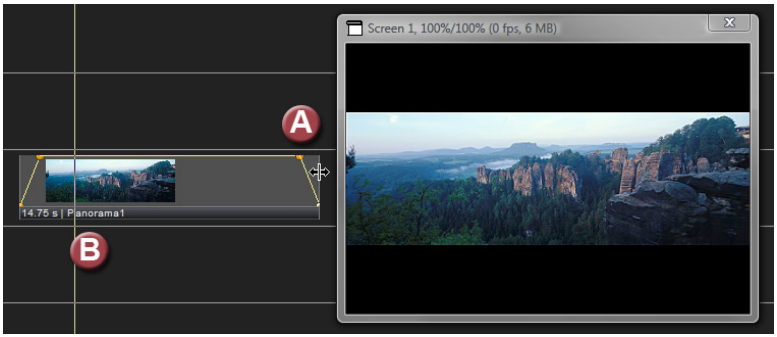
And this is exactly what you are going to practice now. Although In-Screen-Editing allows very simple editing, you should get used to following the basic steps described below:

1. **Concept:** Please consider carefully what keyframes you require for your effect and where in time they need to be located.
2. **Time position:** Move the Locator to the location where a keyframe is to be created or to the keyframe you want to edit.
3. **Tools:** Activate the required tools. Use the temporary activation option by holding the corresponding keys during editing. This has the advantage that you need not reset the tool. In topic Toolbar you will find a printable list of tools including shortcuts that should help you to learn the ropes.
4. **In Screen Editing:** Only the last step is editing of the object in the screen.

This is the approach we will also follow in this tutorial. It does not make sense to move images back and forth in the screen without realizing which keyframe you are actually editing. Now let's start with the tutorial. It will also give you some insight on how to design a camera movement.

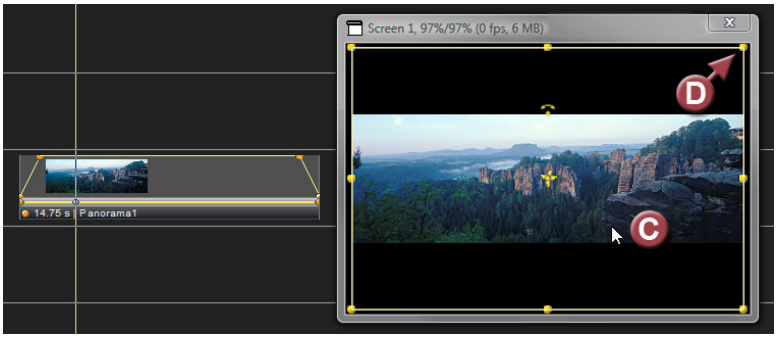
Now start the tutorial:

1. Drag picture **Panorama1** into a picture track and extend it to about 15 seconds. When the display duration is not displayed in the object info line, you can activate it under **Options** &endash; **Global Options** &endash; **Objects**.



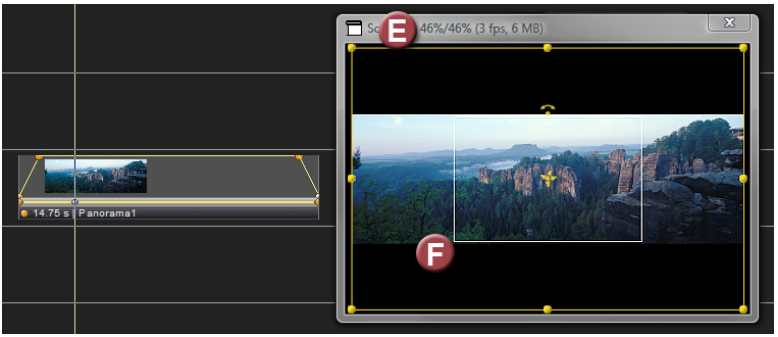
2. Place the Locator in the position where the camera movement is to start, i.e. in the first quarter of the object. If the screen is not open, open it now, e.g. by pressing **F10**. The panorama image is displayed in full, but with black borders at top and bottom.

3. First of all, you need to enlarge the image so that it fills the entire screen. When you click the panorama image in the screen (C), the image is slightly reduced in size and a yellow frame with eight handles (A) appears. In addition to this, the object has been provided with a control track and a keyframe.



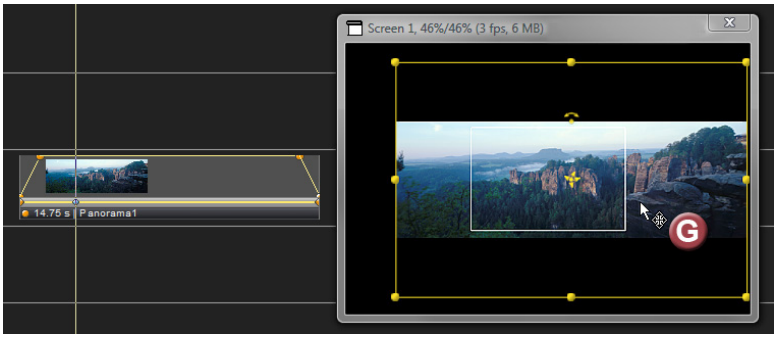
4. As the image should not move during the fade-in, the keyframe values you are going to create must also apply to the object beginning. This is

done by enabling tool **Keyframes constant from object beginning**, which is best done via key **B**. Hold the **B key** down, drag one of the screen handles in the corners (D) to enlarge the picture and let go again of the B key. Enlarge the image until it fills the white rectangle (F) in height. **Tip:** When you drag it with the mouse you can move it beyond the screen and adjust the correct size in one go.

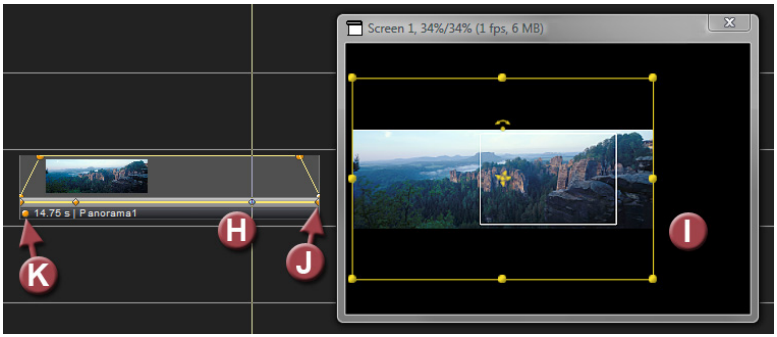


5. After letting go of the mouse the screen content is reduced in size so that the handles remain visible. This is done via the Auto Zoom function and applies only to the current representation on the screen used for editing but not to the camera movement itself. The percentage displayed in the screen window title bar shows by how much the representation on the screen is reduced in size (E); the two values stand for enlargement in X and Y axis. The area that will later on be visible during the show is marked by the white rectangle. So don't get confused: the decisive parts for your show are those that are visible within the white frame.

6. Now move the image slightly to the right, but not by grabbing the handles but by grabbing the area (G). You may want to extend the image even more to achieve a longer camera path for later on. Keep a close eye on the image. As you may notice, Auto Zoom keeps adjusting the display on the screen to keep the handles visible.



7. The next step is to define the target position for the camera movement. Move the Locator into the last third of the object before the fade-out (H). Enable tool **Keyframes constant to object end** by holding down the **E** key and adjust the image portion on the screen as it is supposed to be at the end of the camera movement (I).



8. When you look at the timeline you can see the second keyframe (H). It marks the end of the movement as the selected tool **Keyframes constant to object end** has caused its values to be automatically copied to the end frame (J). By the way, the orange dot in the info line (K) is always shown when In-Screen Editing has been selected for the object. In that case, the corresponding object on the screen receives a yellow frame with handles. This is very helpful for later on when it comes to editing complex collages with a high number of objects on top of each other.

9. Now you have completed your first camera movement and want to play it. As you may have noticed, the Keyframe Editor closes as soon as you click some empty space in the picture track. Move the Locator to a position before the object and start playback by pressing the space bar. Leave the screen display at the reduced size for the time being. This way you can watch how the image moves within the white screen field frame. Stop playback by pressing **Esc**.

10. If the image keeps also moving during the fade in or fade out the values for initial frame and first keyframe (L) or those for the second keyframe and the end frame (M) are not identical, which may be the result of a wrongly chosen tool (holding down keys **B** and **E**). However, this can be repaired very quickly.

11. If the image keeps moving during the fade in, highlight the first keyframe as illustrated above following which its parameters will be displayed in the Properties Table. Click **Copy values** followed by clicking on button **Copy values to beginning** (N). When you test the camera movement the problem should be solved. This function is very useful if the wrong tools are enabled.

12. Reset the screen display to its default size by right-clicking the screen and choosing **Reset Pan/Zoom**. Move the Locator to a position before the object and start Presentation Mode by pressing the **F5** key and playback by pressing the space bar. Following this, stop by pressing **Esc** twice.

13. You may have noticed that the image quality was not really excellent. By zooming in on the image, the display data are too low-resolution. To remedy this defect, you can optimize the display data. In main menu click on **Media Pool** and **Optimize picture sizes...**

14. No more settings need to be made in the dialog. Just click **Start** for Wings Platinum to determine the size and render the appropriate display data in the background.

15. When you start playback in Fullscreen Mode, the camera movement should be displayed at high quality. The display data size is shown in the Properties Table. Highlight the object and, in the Properties Table, click on tab **Picture**. Under **Output** the current size is shown next to **Display data** , e.g. **4112** pixels. This value refers always to the long side of the image. When this number is displayed in red, the resolution of the original image is insufficient and the image is upscaled by the graphics card during the presentation. Or, als an alternative, you could change the camera movement and reduce the zoom. Following this you need to **Optimize the picture size** again.

16. Now make some fine adjustments to your camera movement. You can speed up the camera movement by moving the two keyframes towards each other, which actually reduces the time for the camera movement. To give you the chance to gain some experience with some another tool, we will use a compression tool. Enable tool **Stretch objects** by holding the **W** key down and grab the end of the picture object to reduce it to about 7 to 8 seconds. The duration is displayed in the info line.

17. When you play the object, you will notice that the camera movement has doubled in speed, as the entire object including ramps and keyframes was compressed. While looking at the camera movement, you may also have noticed that the movement starts and finishes somewhat abruptly. This can be changed by applying so-called SmartMove keyframes.

18. In the Keyframe Editor right-click the first keyframe and select **Properties**. In the dialog popping up you will find all keyframe values and properties. Under **Ramp type** click and select **SmartMove**. Do the same for the second keyframe.

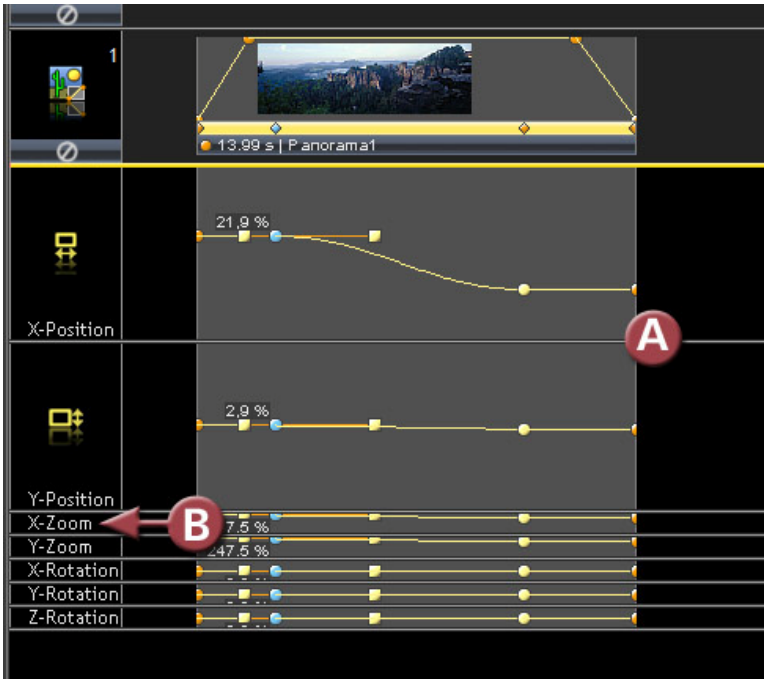
19. When you play the camera movement now, it runs smoothly and without any jerks. For the next camera movements you can choose this type of keyframe already during creation by enabling tool **Smart-Move Keyframes.**

Editing via Parameter Objects

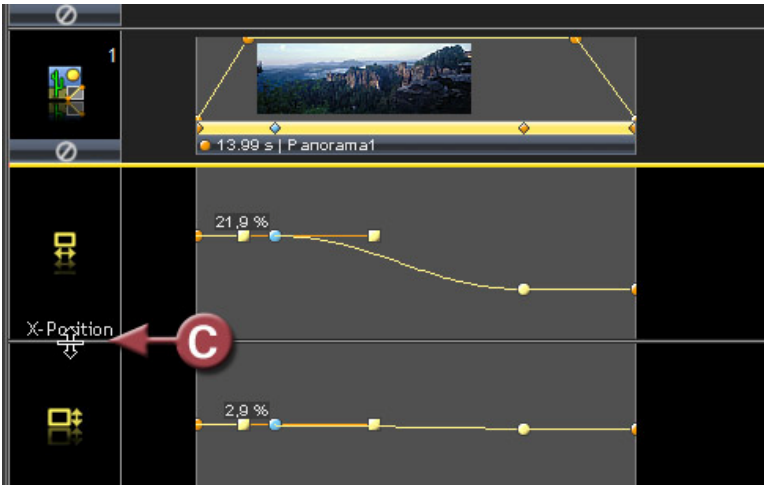
A keyframe for a combined control track contains numerous parameters, which can be edited jointly via In-Screen Editing. Although individual parameters can be edited via the Keyframe Properties Dialog there is no graphic display of the parameter curves, which puts some limits to differentiated editing. See also help topic Editing Keyframes via the Properties Dialog.

For these reasons, a combined control track can be converted into individual control tracks with parameter objects and then be edited in the Keyframe Editor. Following this, however, all parameters also must be edited individually. Therefore, you should only do so if you can't create the desired effect using combined control tracks. You may want to save the tutorial project before you continue.

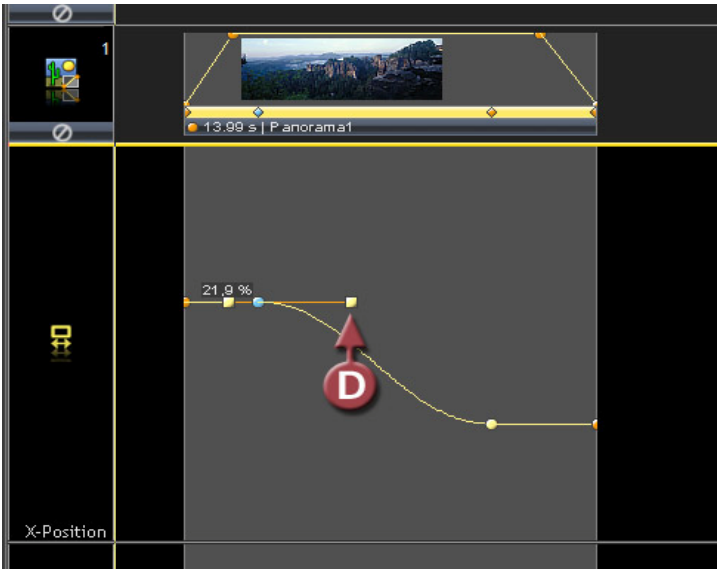
1. Right-click the control track in the object and select **Convert into single tracks**. The Keyframe Editor will open up and seven tracks with parameter objects for various directions of movement (A) be displayed.



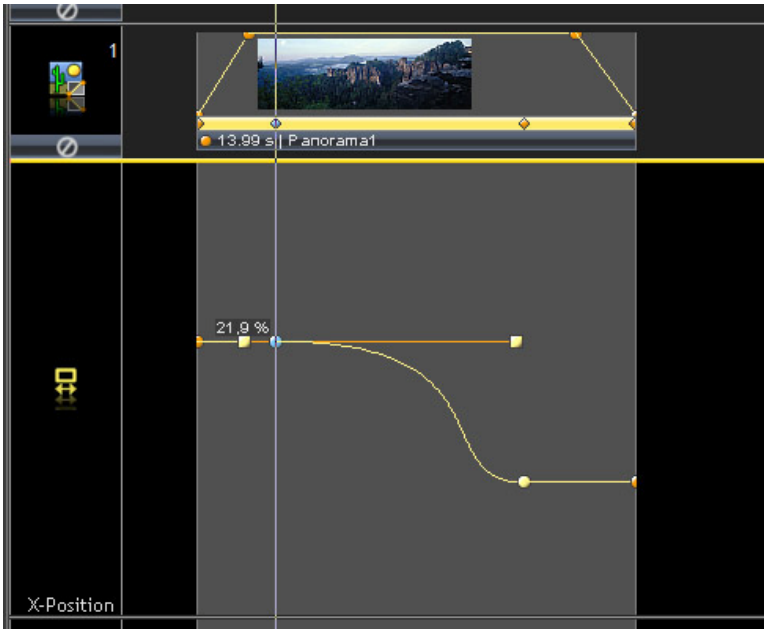
2. To see all tracks at full length, double-click one of the minimized tracks (B) while holding the **Shift** key down. The same way you can also minimize all tracks.



3. Increase the control track height for the X position. Grab the separation line (C) and drag it down until the track is double in height and the curve shape is clearly visible. More information about editing via the Keyframe Editor can be found in the Online help topic The Keyframe Editor.



4. Acceleration and deceleration of the movement can be influenced by changing the ramp shape. To do so, highlight the node for the handles to become visible. Now drag the handle (D) in horizontal direction. Hold the **H** key down, to allow only horizontal extension of the tangent.



5. As you may have noticed, the ramp changes its shape. Play the camera movement and notice the change in acceleration.

6. But you can also change the other keyframe as well. The illustration above shows an example with both keyframes being highlighted. By changing the tangents, the shape of the curve has changed completely. As mentioned above, you should make sure that you only drag the tangents in horizontal direction and do not rotate them accidentally. Otherwise the transition to the straight portion of the ramp will no longer be smooth.

At the example of the X position you have found out about the principle of editing in separate control tracks. Certainly, this works for the other parameters as well, but may be quite time-consuming. Therefore, you should edit individual control tracks if editing in combined control tracks turns out to be too difficult.

Editing and integrating videos

In this tutorial we are referring to videos in various formats, which are normally saved to hard disk when installing Wings Platinum from a DVD. Unless they are available you can also use other videos.

Video objects can be edited just like any other objects, which means that you can consolidate and practice what you have learnt in previous tutorials. The new topics for video editing are as follows:

- Installing AC3 filters and creating a project
- Importing videos and testing the performance
- Frame-accurate cutting
- Editing and synchronizing video sound
- Video as "picture-in-picture" effect
- Deinterlacing

As mentioned before, any faulty editing steps or clicking the wrong buttons can be undone, or situations be restored by using the **Undo** Function. So you needn't worry at all – just go ahead!

Preparatory steps

1st step

An AC3-filter should be installed on your computer as some videos contain AC3-coded sound. You can download the tool A**C3Filter** (Version **Full**) for free from the Internet at *www.ac3filter.net*.

During installation Wings Platinum should not be started. After installation the tool is configured to reduce AC3 audio to stereo, which is ok in most cases. Extracting the first audio files may take a while but after that everything will be as fast as usual.

2nd step

Start Wings Platinum and create a new project using the Wizard for **Audiovision**. In the dialogs make sure that the following settings are made:

- **Screen** ➔ Aspect ratio = **16:9**
- Video ➔ Check box Create and use intermediate video data

- **Timeline tracks** ➔ Number of video tracks = **0** (...will be created automatically at a later time)

For this project videos and images with different aspect ratios are added, which requires some adjustments. Everything you have learned before you can also use for video editing.

Adding and playing videos

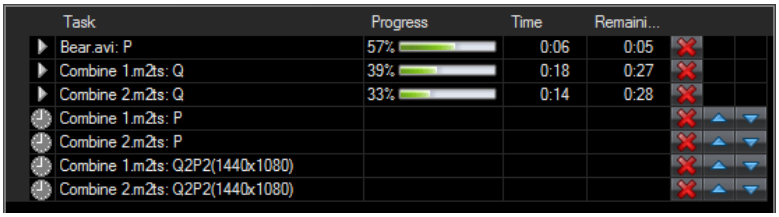
Importieren Sie zunächst die Videos in das soeben erstellte Projekt.

1. In the Media Pool click on category **Videos**. In the main menu click **Extras** and **Open folder** ▶ **Media Samples** and double-click folder **Videos**. Drag all videos except folder **MainConcept Loops** into the Media Pool.

   Note: Please note that the videos that have been made available for this tutorial by Klaus Stange (Bear), Zwerger & Schoner (white water rafting) and Dieter Hartmann (Flag and Combine) are protected by copyright.

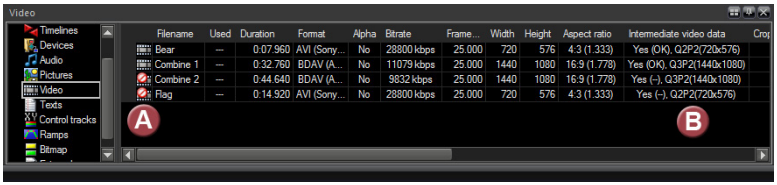
2. In the Media Pool there are now four videos available and Wings Platinum is rendering display data for the first video in the background. For rendering of display data and intermediate video data to be completed for all videos click **Options** in the toolbar and select **Project Options** - **Display data**. Under **Video** click and select **For all videos**. Close the dialog by clicking **OK**.

3. Click **Create display data** (twice, if necessary) for the button to be impressed . Following this, display data and intermediate video data are created for all videos located in the Media Pool. Depending on the computer performance and the processor type this takes up to 10 minutes. But once this has been done, there is nothing in the way of swift editing. The number of files remaining to be processed is indicated on tab **Tasks** in the preview window.



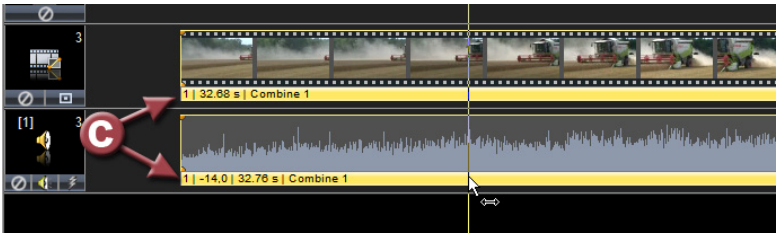
The list shows all the video data to be processed. If a progress bar is visible, the task is currently being processed. The clock symbol signalizes that a task is waiting. The letter behind the file suffix signifies the type of tasks: **Q** means Quick Preview, **P** means Preview and **Q...P... (.... x ....)** means Intermediate Video Data. They are always processed in accordance with their priority. The number of files that can be processed simultaneously depends on your processor (number of available processor cores). Click to delete the task. Click to move the task to the top position where it is the first to be processed. Click to move the task to the end of the list.

4. In the Media Pool you can see for which of the videos display data and intermediate video data have already been created: the prohibition sign has disappeared. Videos with a prohibition sign are still being processed (A).



5. If you highlight video **Bear**, the preview window shows a short preview, similar to images and audio files. Column **Intermediate video data** shows you whether optimized playback based on intermediate display data has been enabled for all the videos, which can be recognized by **Yes** (B). For the last two videos the necessary data are still missing, which can be recognized by **(--)**. Why Wings Platinum needs to create intermediate video data for videos will be explained a little later.

6. Drag video **Combine 1** and drop it into the black timeline space below the last track. Following this, Wings Platinum creates a video and a sound object and places them in sync into new and grouped tracks.

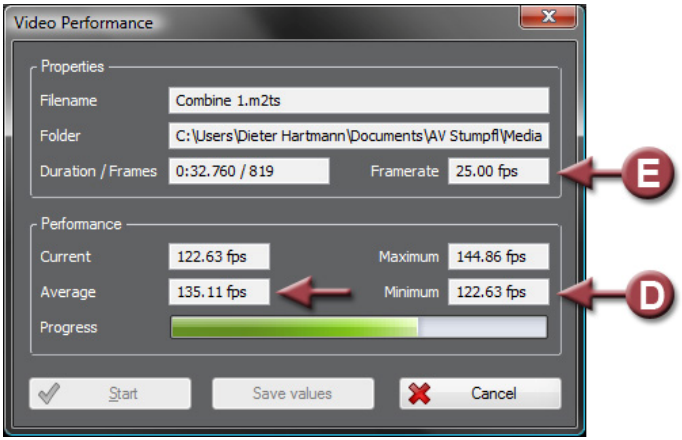


The group index is shown at the beginning of the info line (C). Grabbing one of the objects highlights both of them. This is useful for shifting objects as picture and sound remain in sync.

Info If you have imported many videos as raw material into the Media Pool, you can highlight all videos in the Media Pool and drag them all together into the timeline. The individual videos are then displayed in one track one after the other and can be looked through for rough cutting. **Note:** Video and sound are always placed in separate objects in Wings Platinum. Extracted video sound can be edited just like any other sound.

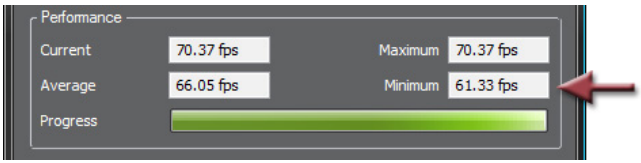
7. Move the Locator to a location in front of the video and play it by pressing **F5** and the space bar. Check whether your computer can play it without any problems. It is an ACVHD-video from a small HD cam which usually requires a lot of computer power. Playback in Wings Platinum is based on output-optimized intermediate video data so that your computer will hopefully be able to play it without any hiccups.

8. Since you may want to dissolve two videos it would be interesting to find out about your computer's performance. In the Media Pool right-click video **Combine 1** and select **Performance Test**. Click Start following which Wings Platinum will start testing how fast it can be output.



9. The values below **Performance** are highly interesting. The minimum value (D) should be about 25 to 30 percent higher than the frame rate (E) i.e. about 33 frames per second in our case. This computer would be able to play three such videos - which is a very good result thanks to the intermediate video data. Lets put this to the test: What would the performance be like without using intermediate video data?

10. Close the test dialog by clicking **Cancel**. Right-click video file **Combine 1** and select **Properties**. Uncheck box **Create/use intermediate video data**. Click **OK** and run the performance test once again.



11. In this example performance based on intermediate video data is about 80 percent better! This is quite a lot and you would be well-advised to open the Properties dialog of video file **Combine 1** to re-check box **Create/use intermediate video data**. All this is due to the fact that the data are prepared in a special way and they are played back without resorting to the customary Windows routines. Please bear in mind that only decoding is tested but not hard disk performance.

Frame-accurate cutting of videos and pitching

You may have noticed that the video keeps swaying somewhat uncontrollably at the beginning. This part should be cut off and you will even be able to do this frame-accurately as the preview data contain all the individual video frames. They are only at a lower resolution to allow even complex shows containing a lot of HD videos to be edited swiftly.

1. Move the Locator to the beginning of the video object and click button or the plus sign on the numerical keypad three times to stretch the time axis to allow accurate editing. Now click the video info line and the sound object will also be highlighted.

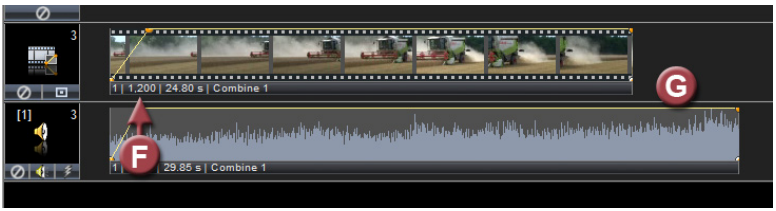
2. For the highlighting to remain you need to grab the Locator at the little triangle in the time display at the top. If you move the Locator across the object the screen window will show that the content keeps moving frame by frame. The fact that the wild swaying movement has come to an end and the image is still can be recognized by the tree tops in the top right-hand corner.

3. The Locator is now at the accurate cutting position. Right-click the Locator and choose **Cut Left Part**. Play the beginning of the video again and check whether the image is still from the very beginning. To return the time display to normal size click or the **X**-key (multiplication) of the numerical keypad. At the beginning of the object move the upper standard node so that picture and sound are faded in.

4. Now let's have a look at some other aspect. You may have noticed that the movement of the combine is not entirely smooth, which can be most clearly recognized at the end of the video. Play the video in Presentation Mode and note this slightly jerky movement. This is due to the fact the frame rates of video (25 f/s) and monitor (60 f/s) do not correspond. Therefore, every 0.2 seconds one frame must be shown twice, which causes this problem. It can be solved by accelerating the video to 30 f/s.

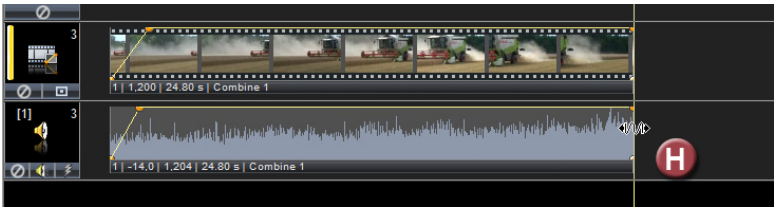
5. This can be achieved by pitching. At the end of the video cut off one third by right-clicking the cutting point and selecting **Cut Right Part**. This is necessary for pitching as there are not enough frames in the video data available for the full object length.

6. Right-click the video object and select **Properties**. For **Pitch** enter the factor **1.2** (25 f/s x 1,2 = 30 f/s) and close the dialog by clicking **OK**. The pitch factor is also displayed in the info line (F). Drag the right edge of the video to full length. When you look at the sound object you can see how much shorter the video has become (G).



7. When you play the video the combine motion will be much smoother and more homogenous. The observer will not notice that the combine is moving slightly faster. Pitching is not always necessary for 25 f/s videos, it depends on the type of movement. It makes sense for uniform movements but for people it tends to look unnatural. Sound can also be pitched. The Pro License allows maintaining the pitch - i.e. time stretching, which you can try out now.

8. Enable tool **Snap to objects** with the mouse and highlight the video track. Enable tool **Stretch/compress objects** by holding down the **W** key and move the right edge until it corresponds to that of the video (H). The magnetic effect makes the Locator snap to it. Disable tool **Snap to objects** again.



9. Drag video **Combine 2** and drop it into timeline behind the first video. As it has been placed directly into a video track, no audio object will be generated. However, this is something you can still do at a later time. Move the object on top of the first object to create a dissolve of about 1.5 seconds. You may have to cut off about 0.4 seconds at the beginning of the video. Just check what looks best and play the dissolve. In Fullscreen Mode check whether your computer is able to play the two videos without any problems.

10. Pitch video **Combine 2** using factor 1.2 as explained above. At the end you can cut off a small portion and adjust the dissolve via the ramp band. See below.

11. Now drag **Combine 2** from the Media Pool and drop it into the audio track following which the audio object will be created. Move it until it corresponds to the video object and shorten the audio object. Here syncing is no issue. Right-click the audio object and select **Properties**. At **Speed factor / Pitch factor** check box **Enable settings** and enter a value of **1.2** next to **Speed**. Click **OK** to finish.

12. When the sound is edited separately, it is no longer in sync with the image. However, this can be changed quite easily. Highlight the video object **Combine 2**, right-click the audio object and select **Special functions ▶ Align content**. Look at the audio object contents: it is aligned with the video without the position of the object changing.

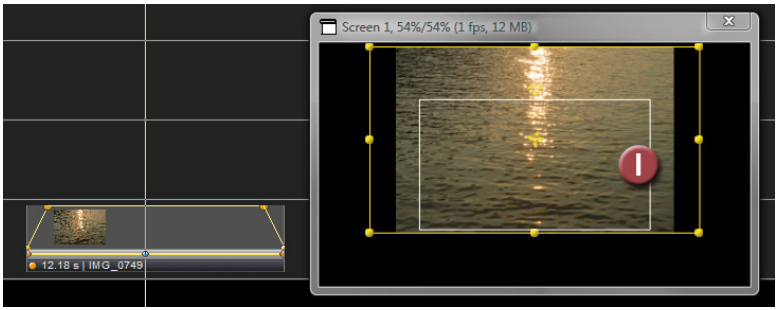
You can now play and test the whole sequence again. In the next paragraph you will learn how to combine videos as inserts with backgrounds.

Info A tip for later: When there are many video clips in one track of your project and you cut off the unwanted video portions you may end up with a lot of gaps between the video objects due to the cuts. There is a function which allows automatic closing of these gaps: Highlight video track and pertaining audio track by clicking the track head while holding the **Ctrl**-key down. Right-click such a gap and select **Close gaps** - **On whole track**. Refer also to *Efficient cutting of video and sound* in the help topics.

Video as "picture-within-picture"

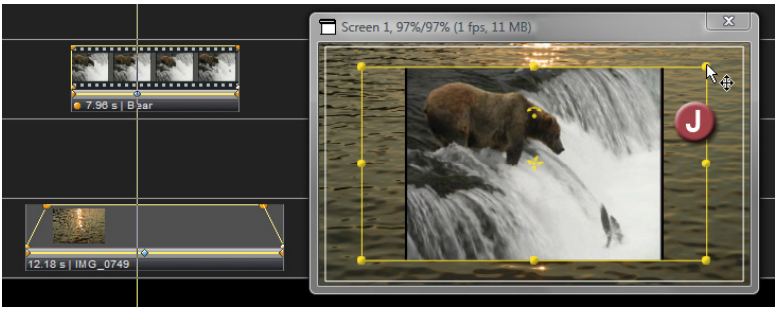
Standard-quality videos do not have the same sharpness as pictures. A possible solution is, for instance, a "picture-within-picture" effect - also called video insert - which you are going to create now.

1. Drag image **IMG_0749** (water surface) and drop it into the timeline below the last track. It is to serve as background and we need to get rid of the black bars on the screen first. This can be done via In-Screen Editing as described in the previous tutorial. Hold the **C** key down to enable tool **Keyframes constant for object** as the position is to apply to the entire object length. Adjust the picture as illustrated below (I) and extend the picture object to about 12 seconds.



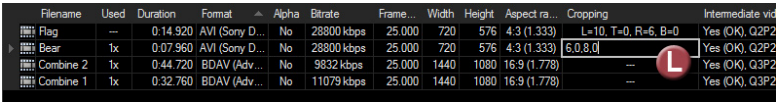
2. Right-click the screen and select **Reset Pan/Zoom**. Drag video **Bear** from the Media Pool and drop it into the video track. On the screen you can see that the video does not have an aspect ratio of 16 : 9 but one of 4: 3. This doesn't really matter because it is to be presented as "picture-within-picture" at a reduced size.

3. Click on the video and reduce it in size as illustrated below (J). Do so while holding down the **C**-key as we want it to be a static position. There is still something we are not quite happy with: the black bars on the right and the left side of the video.



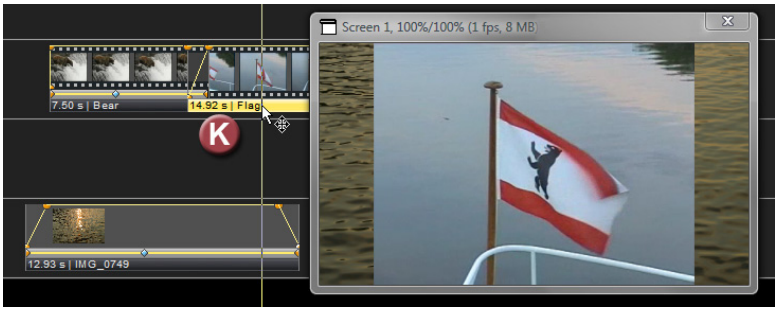
4. These black bars are caused by the camera and vary depending on the camera model used. This is not exactly beautiful and we are going to crop the edges. In the Media Pool click on category **Videos**. Here you can find column **Cropping**, which allows you to enter the cropping parameters.

5. Highlight line **Bear** and click entry field **Cropping**. Here you can specify the amount of pixels to be cut off the margin. The values are arranged clockwise: left, top, right, bottom. For video **Bear** you need to enter the values **6,0,8,0** (L). Do the same for video Flag but using the values **10,0,6,0**. For your own videos you need to determine the values yourself; they depend on the video camera.



Any modifications will become visible on the screen after confirming with **Enter**. Cropping can be assessed best if you change to playback in Fullscreen Mode, i.e. by hitting the **F5** key. This way, SD videos can be combined with images and HD videos to enhance their effect.

6. The next step is to fade video **Bear** over to video **Flag**. Drag the video from the Media Pool and drop it into the track behind the video with the flag. Move video Bear on top of the other video and create a dissolve (K).



7. When you play both videos you can see clearly that position and size of the videos differ. This can be changed by copying the control track of video **Bear**, pasting it into the Control Track Pool and applying it to video **Flag**.

8. Right-click the control track of video **Bear** and select **Copy to pool**. Following this, the control track is transferred to the Media Pool for further use. You can change the name **Control track 1** to **Picture-in-picture 1** making allocation easier for you after copying further control tracks into the pool.

9. Now drag the control track **Picture-in-picture 1** and drop it onto the video object **Flag** for the correct position to be transferred. Check it by playing the sequence. This method is particularly useful if complex keyframe effects are to be used for other pictures or videos, too.

All dynamic picture effects can also be applied to videos. In the control track pool ***Imported** you will find a few effects which you can try out.

Deinterlacing

Finally, let's look at some further advantages of intermediate video data for interlaced videos.

1. In the Media Pool, right-click video **Bear** and select **Properties**. Uncheck box **Create/use intermediate video data** and close the dialog by clicking **OK**.

2. Start video playback via the **F5** key and watch the bear catching his meal. The jumping salmons in particular show frayed contours which are caused by the DV video based on interlaced pictures. Such contours are mainly found with objects that are moved horizontally. To

eliminate this problem, Wings Platinum performs efficient deinterlacing during creation of intermediate video data.

3. Now that you know what a video looks like that has not been deinterlaced you can check box **Create/use intermediate video data** in the Properties of video **Bear** again. Further information on deinterlacing can be found in the help under *Deinterlacing of videos*.
4. Usually, you need not think about deinterlacing and video aspect ratios. Wings Platinum will automatically take care of all this. However, if a video is not correctly recognized you are now able to change the settings of videos in the Properties dialog.

Now you have learned a few basic editing steps for video integration and have been given some basic information. It is important to know that video sound must be extracted and will then be available for editing just like any other sound. For subsequent synchronization a number of special functions are available which can be found in the topics for video editing.

Refer also to the following Help topics:

Video editing

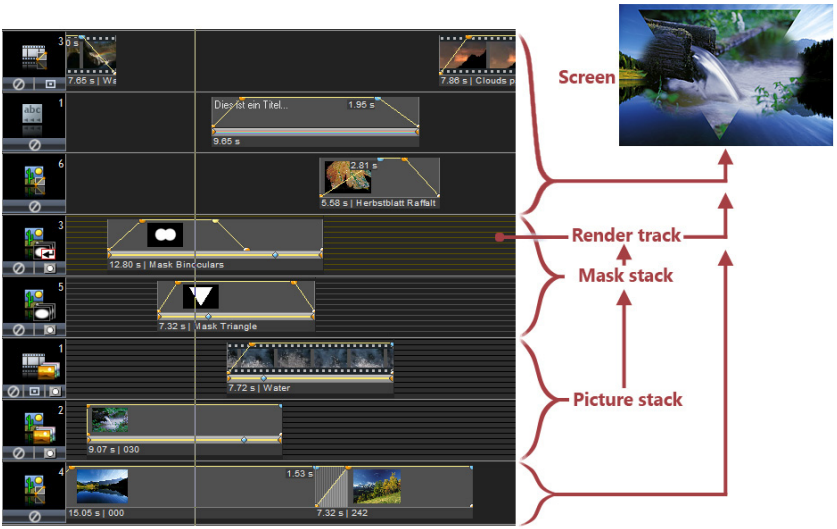
Cutting comments

Sound effects

Controlling the transparency of composite images via dynamic masking

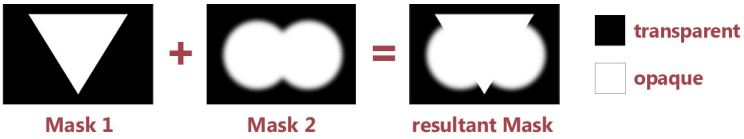
Wings Platinum offers an extensive range of functions for transparent masking of images and videos. To some extent you have already worked with this function in the tutorial **Editing sequences of pictures and objects** where the title, due to its transparent areas, could be provided with any type of backdrop. In this tutorial we are going to take it a few steps further and do some transparent masking of composite pictures with dynamic masks. These masks can be animated via keyframes, i.e. moved, zoomed or rotated independently of the image contents.

Please note that this tutorial requires an **Advanced license** or higher. Before you can actually start you should take a look at how the various functions are performed in order to understand the way dynamic masking works:



- Picture and video tracks to be masked are initially output to an internal, virtual **Picture stack**. The fact that the track contents are to be output to a picture stack can be recognized by the symbol in the track head and the black horizontal hatching in the track background.

- Masks are placed on tracks that output to internal, virtual **Mask stacks** first. Such tracks can be recognized by the symbol and the gray hatching. Suitable masks are images with alpha channel or images with a color channel that is interpreted as an alpha channel. All alpha channels in the mask stack are added, with the total defining the transparent area:



  In our example the white areas are displayed opaque, i.e. these are the areas of the picture stack that remain visible, while the other areas become invisible due to transparent masking. It is therefore the alpha information that decides whether a picture stack is visible or not.

- The top mask track has the additional task to **Render the picture and mask stacks** and send them to the screen. Only then will the masked composite image of the stack become visible. The location on the mask track defines the location where the masked composite image is added to the other composite images. **Important:** This render track must always contain a mask object in order for the picture and mask stacks to be rendered and output on the screen. Such a track can be recognized by the symbol and the yellow hatching. Please note that mask objects cannot be crossfaded in a track. However, if you attempt to do so there will be a hard edge at the end of the first object.

This should have provided you with enough theoretical background. Now let's take a more practical approach.

Using pictures with transparency as dynamic masks

1. Open one of your practice projects or create a new one using an aspect ratio of 3:2. Click **Extras** - **Open folder** ▶ **Media samples** and add images from the following folders:

   - **Pictures\Samples** ... unless these images are not already contained in the practice project.

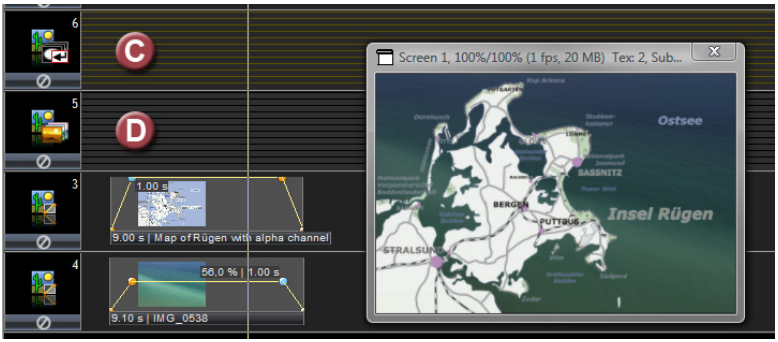
- **Effect Textures** ... for these images you should create a new Media Pool folder called **Masks** before you add them.

2. Drag image **IMG_0538** into the bottom picture track and image **Map of Rügen with alpha channel** into the track above it (A). After moving the Locator to one of the picture objects the screen shows quite clearly that the map has a transparent area. Since the sea still looks a bit bright adjust the ramp band to a value between 50 and 60 % opacity (B).

3. Use a similar line-up for the mask tracks. Add two more picture tracks by right-clicking a track head and selecting **Insert tracks...**. Next to **Picture tracks** enter **2** and click **OK**.

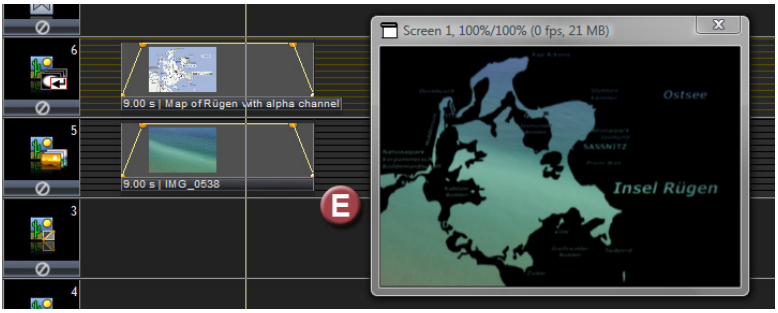
4. Highlight the lower of the two picture tracks for the parameters in the Properties Table to be displayed and click the plus sign next to **Routing / Masking** in the table at the bottom. Click **Target (direct)** followed by and select **Picture stack** so that the track head shows the symbol for picture stack (D).

5. Now highlight the upper picture track and select setting **Mask + Render** next to **Target (direct)** if you are using an Advanced License. With a Pro License or higher choose **Mask stack** and **Render stack** next to **Screen output**.



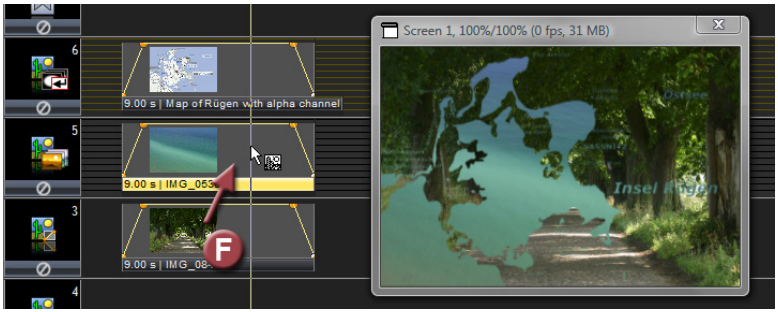
6. You have now prepared a track for the masks which sends the masked composite image to the screen (C). The other track outputs to the picture stack that is to be masked (D). Let's have a go.

7. Drag **IMG_0538** from the Media Pool and drop it into the picture track that outputs to the picture stack. Drag and drop image **Map of Rügen with alpha channel** into the mask track. If you move the Locator across the picture objects the result will now be completely different.



8. Only the alpha channel of the map image takes effect, while the actual image information has become irrelevant. The mask affects **IMG_0538** with the sea on it (E). The black areas are caused by the empty screen since there are no other tracks below the image.

9. Try dragging and dropping **IMG_0846** onto the lower picture track and the black areas will disappear. Although this looks interesting you should try substituting image **IMG_0538** with **IMG_0846** in the next step . The easiest way to do this is to hold keys **Ctrl** and **Alt** and drag one picture onto the other object (F).



10. Now place a second image onto the masked track. Slightly shorten object **IMG_846** and drag and drop image **IMG_0604** onto the same track behind it. Move it slightly on top of the other picture object to create a dissolve of about two seconds (G).

11. When you start playback, the two images start dissolving in the outline of the Island of Rügen. Of course you can also arrange very complex montages on several masked tracks: the very principle of this system allows masking of composite images, videos and even live videos. However, we want to enhance the effect even further by moving the mask.

12. Right-click the mask object and select **Control tracks**. At the very top check the box next to **Position, Size, Rotation** and click **OK**. Activate tool **SmartMove Keyframes** by clicking it and place a keyframe at a location which is about one second before the dissolve (H).

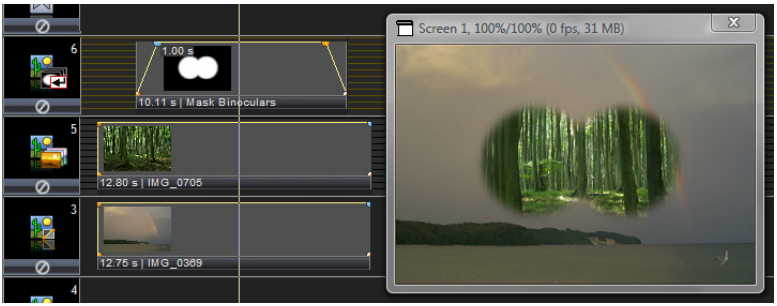
13. Move the Locator to a bit more than one second behind the end of the dissolve (I). Via In-Screen Editing extend the mask to the maximum of 1000 percent and press the **E**-key while editing on the screen to copy the value to the end frame as well. Set tool **SmartMove Keyframes** back to **Linear keyframes**.

14. When you start playback, the mask, due to the zoom, allows access to the actual image, while the dissolve from the parkway to the cliffs at Königsstuhl is taking place. You can refine all this even further by shortening the dissolve slightly and by increasing the smart factor for the first keyframe from 50 to 60 percent.

Combining masks and transparency of videos

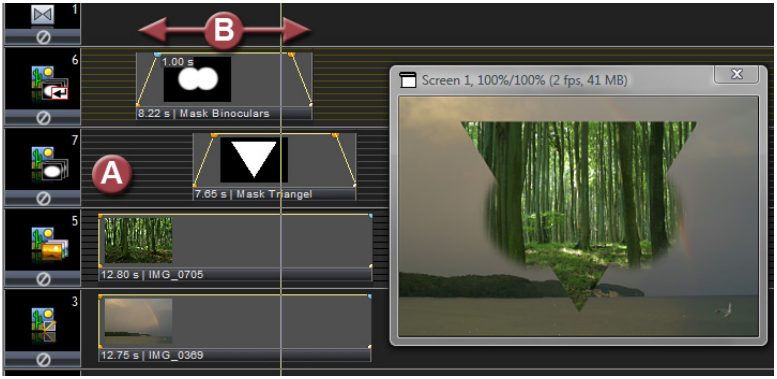
The following steps require a Pro License or higher. If you have no Pro License you can still do the tutorial with the Demo version.

1. Drag and drop images into the existing tracks as illustrated below. For mask use image **Mask Binoculars** from folder **Masks**, which you created initially in the Media Pool.



2. Masking should now comprise a second mask. Right-click a track head and select **Insert tracks** ▸ **Picture**.

3. Right-click the new track and click the plus sign next to **Routing / Masking** in the Properties Table. Click **Target (direct)** followed by and select **Mask stack** so that the track head shows the symbol for mask stack (A). From the mask folder drag and drop **Mask Triangle** into the track and position both mask objects as illustrated below.

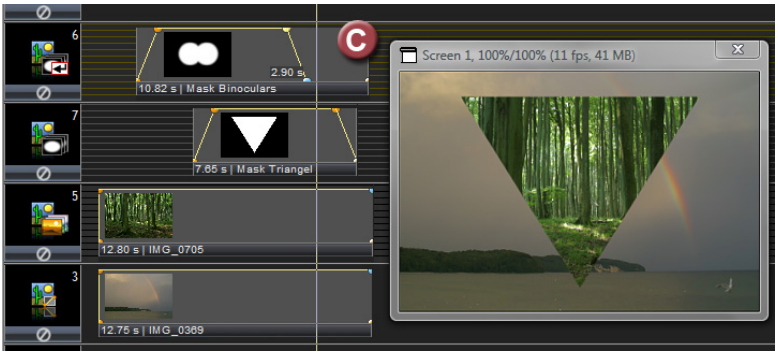


Playing the objects exemplifies the following:

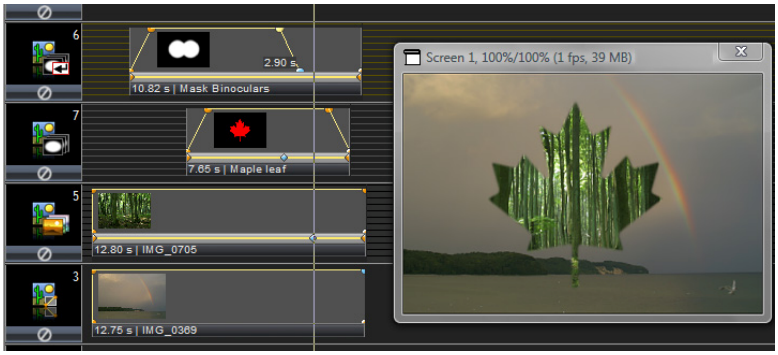
- The contents of the masked tracks, i.e. the image of the forest, only becomes visible when the mask is faded in on the render track.
- The second mask is added and makes a larger portion of the masked image visible.

- When the object is faded out on the render track, the second mask below it loses effect. Basically, the render function is linked up with an object on the render track, i.e. the render area is limited (B).

4. If the second mask object is to be complete, extend the upper mask object to go beyond the lower mask object and define the duration of the upper mask via the ramp band (C). The render area is now long enough for the second mask to be the sole mask.

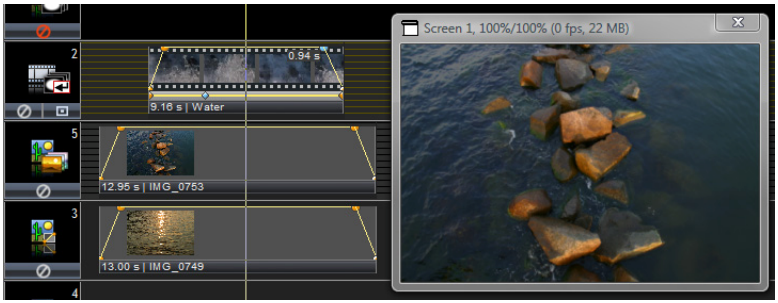


5. You can also use image color channels for transparency control. The Media Pool contains image **Maple leaf** in red. Right-click it and select **Properties**. Under **Alpha channel** click and select **Red channel**. Close the dialog by clicking **OK**. The red channel is now used for transparency control. Drag the image onto the triangle object to exchange it. The image with forest on it is masked by the red channel. The portion can be improved even further by extending and/or moving mask and forest image via In-Screen Editing.



6. Videos can also be used for transparency control. Click **Extras** - **Open folder** ▸ **Media samples** and drag video **Water** from the folder **Videos** into the Media Pool. Drop it onto a video track and play it. Extend the video so that it is played in full screen format. This video of bubbling water is to be used for controlling the transparency.

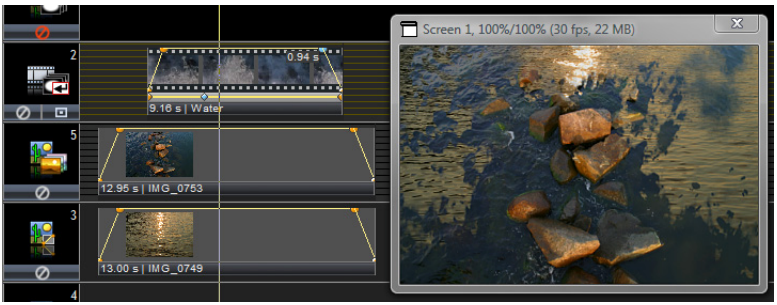
7. Highlight the video track head so that its parameters are displayed on the Properties Table and click the plus sign next to **Routing / Masking**. Click **Target (direct)** and and select **Mask stack**. Further below at **Screen output** select **Render stack**. Deactivate any other mask tracks; currently we don't need them. Drag and drop two images into the picture tracks and arrange tracks and objects as illustrated below.



8. The video image is played at full opacity on the masked track . In order to control the video image brightness we need to activate Luma keying for the video that serves as mask object. Highlight the video object and, on the Properties Table, select tab **Video** and place

a checkmark next to **Realtime effects** below **Output** for tab **Effects** to be displayed.

9. Click the plus sign next to **Effect 1** and **Effect** below it for the select button to appear. Click on and select **LumaKey**, following which three more entries will appear. You can leave their default settings.



10. When you start playback now, the brightness will modulate the transparency of the bubbling water. Instead of the brightness you can also use certain colors to control transparency. Further information can be found in der help under *Transparent areas through Chroma Keying*. Chroma and Luma Keying also work for live videos and images.

So far, this tutorial has given you some insight into the basics of transparency control. In the examples we have only used one masked track but it is possible to use any number of images, videos and live video inputs that output to the masked picture stack. It is also possible to work with several "functional units" consisting of mask tracks, with the top one containing the render function and masked tracks that output to the picture stack. Such functional units are always separated from each other by the render track which defines the location where the masked composite images are to be added to the other composite images. Further information can be found in the help under *Dynamic transparency masks*.

Speaker Support with interval music and video loop

During a Speaker Support show the presenter is able to influence the progress of the presentation. A simple way to do so is via pause markers causing Wings Platinum to pause the show. The moderator can take all the time he needs to make his comments and then press a button to continue the presentation. During this pause, music or other sounds can be run in the background in a loop. This function is also available for videos and allows animated background images to be displayed.

- The show is to run in sync with the sound track and stop automatically at certain positions to allow for live comments. The presenter determines when the presentation is to be continued.
- During the intervals some special interval music is played at low volume which is faded out automatically when the show with the synced music sequences continues.

This tutorial requires the Pro License as a minimum. As this tutorial deals with more advanced functions you should already be familiar with the general usage of Wings Platinum and have some basic knowledge of how to edit objects. If not, you should work through the following tutorials:

Creating a project for a digital AV show

Capturing pictures and sound

Editing sequences of pictures and objects

Creating and editing a soundtrack

Setting pause markers for Speaker Support

1. Open project **Workshop - Speaker Support with interval music**. In the main menu click **Extras** followed by **Open folder ▶Sample projects** and double-click project **Workshop - Speaker Support with interval music**.Please do not mix it up with the project **Demo - Speaker Support...**

   If the folder containing the sample projects does not open up... it may not be available on your hard disk. This folder can be found on

the Wings Platinum DVD at Wings Platinum\Sample Projects. If necessary, copy it onto the hard disk and to the same folder that contains also the folder Media Samples (see item 2).

2. In answer to a message reporting any missing files, click **Yes** followed by **OK**. Search for the files in folder **Media Samples**.

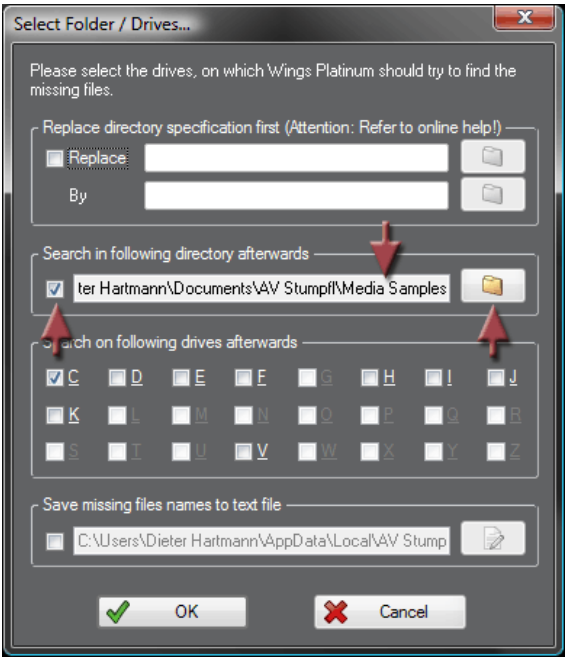
   This folder can be found in the following locations:

   Windows XP:

   C:\Documente and Settings*User name*\My Documents\AV Stumpfl\Media Samples

   Windows 7 and Vista:

   C:\User*User name*\Documents\AV Stumpfl\Media Samples



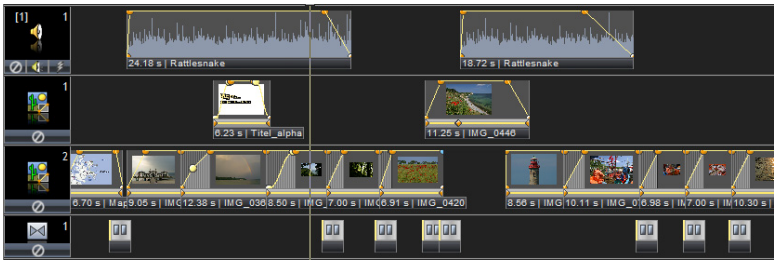
3. This projects contains a few pictures, some music samples and a video. You should continue by entering the corresponding display data size for your monitor or video projector: On the Media Pool category

Screens right-click **Screen 1** and select **Properties**. Under **Presentation** enter the width of your monitor or the video projector resolution, respectively at **Picture display data**.

4. Close the dialog by clicking **OK** and the display data will be created in the background.

5. Now add a marker track by right-clicking the dark gray area below the tracks and selecting **Insert track** ▶**Marker**.

6. At certain locations the presenter needs to make a few comments. Therefore, you should set pause markers at the following positions in time: 8.0 s, 31.0 s, 37.0 s, 42.0 s, 44.0 s, 1:05.0 s, 1:10.0 and 1:15.0 s. Now right-click the corresponding position and select **Insert Pause Marker**.



Once you have finished setting the pause markers, your project should correspond to the illustration above. In this illustration, however, the timeline is slightly compressed to be able to display a largest possible area.

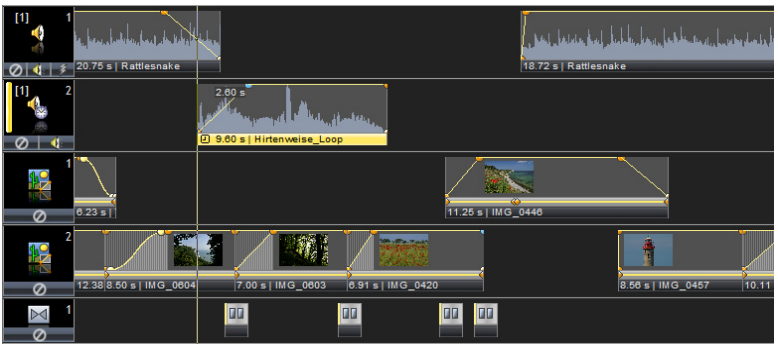
7. When you start playback from a location before the map, the Locator will stop at the pause marker. Press **Enter** to continue playback. To continue paused playback Wings Platinum offers a number of remote control options. More information on this can be found in topic Remote-controlling Wings Platinum.

8. You may have noticed that the music stops very abruptly at the second pause marker, as the sample is far to long. Move the end of the sound object until it is faded out before the pause marker and the music ends harmoniously. As the music stops at the pause marker this is certainly not a good way to provide the desired interval music.

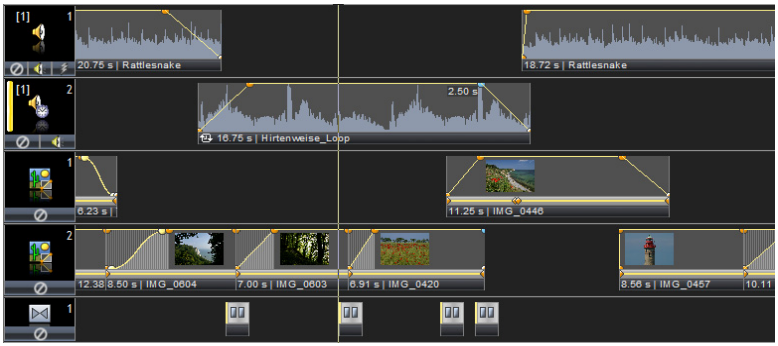
Creating asynchronous loops for interval music

In order to play interval music during paused playback we need to change over to Loop mode and an asynchronous audio track the playback timing of which is independent of the timeline. **Note:** Unfortunately, professional sound cards without "multi-client" capability are not suitable for asynchronous playback. See also Asynchronous audio playback.

1. First of all, create an audio track in Asynchronous Mode. Right-click the track head of the uppermost picture track and select **Insert track ▸ Audio**.
2. Highlight the track head for the parameters in the Properties Table to be displayed. Place a checkmark next to **Asynchronous mode for presentation** and close the dialog by clicking **OK**. The track head will now show an additional clock symbol as a sign for asynchronous mode with separate timing.
3. Drag the audio file **Hirtenweise_Loop** from the Media Pool to the asynchronous track and position the object as displayed below. Move the upper node until the music fades in softly.

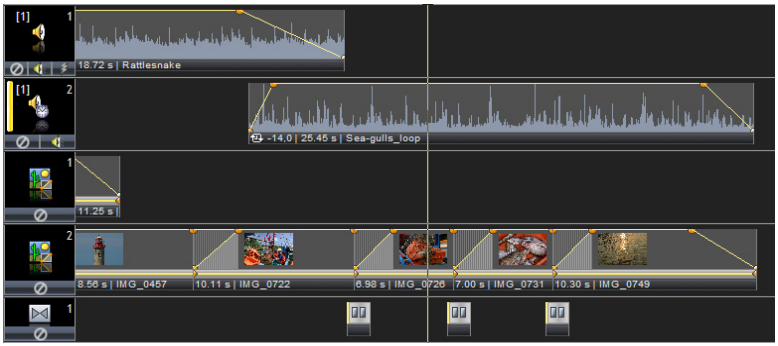


4. For the piece of music to continue and restart as long as desired for the presenter to explain some details, the object needs to be put into Loop Mode. Right-click the object **Hirtenweise_Loop** and select tab **Audio** on the Properties Table. Under **Output** place a checkmark next to **Loop**.
5. The symbol for asynchronous mode in the object info line additionally displays the loop properties. Extend the object at the end as displayed below and edit the ramp band to produce a soft fade-out.



6. When you start playback from the map, the show will start as before. However, when the Locator stops at the first pause marker, the music continues to play. You can continue playback any time. At the end of the object the interval is faded out in sync for the actual sound track to be seamlessly continued The volume of interval music can be reduced via the ramp band or the controls in the object properties.

7. Now add the sounds **Sea-gulls_loop** (...sounds of sea gulls and water) likewise behind the picture object showing the light house. Position and edit the object as it is displayed below and extend it until the end of the last picture object.



8. Now check playback of the entire sequence and optimize it, if necessary.

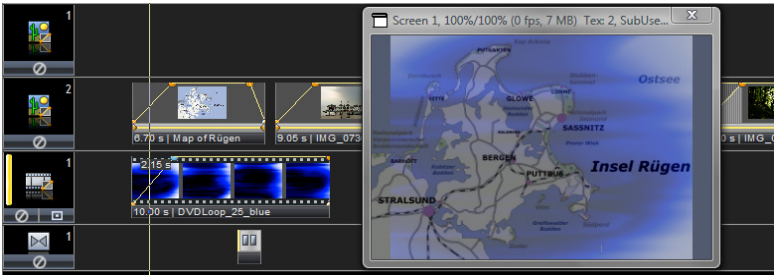
When editing the sequence, please bear in mind that the objects on an asynchronous track cannot be crossfaded by moving them on top of each

other. By the way, further information on how to produce your own, loopable file, can be found in topic Creating a loop file.

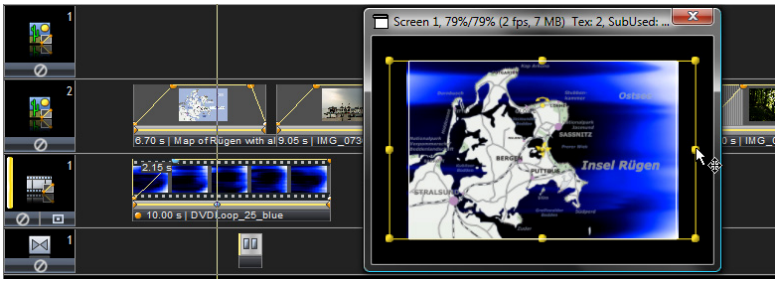
Animated background with video loop

The map of the island of Rügen at the beginning of the sequence has already been incorporated. Now we want to provide the map with an animated background. This can be done via a video loop.

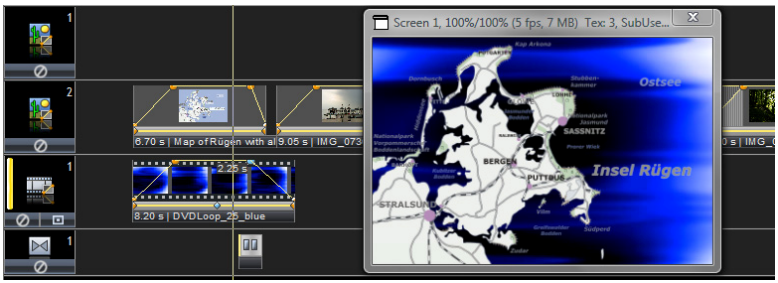
1. First of all, add a video track by right-clicking the track head of the marker track and selecting **Insert track ▶ Video**.
2. Drag the video file **DVDLoop_25_blue** from the Media Pool into the video track below the map and edit the node at the beginning until the video is faded in softly. When you play and look at the composite image in the screen window the following two problems will become apparent: Firstly, the video does not fill the screen completely and secondly, the map has no transparent areas.



3. In the Media Pool you will find a second version, i.e. **Map of Rügen with alpha channel**. Drag this picture file and drop it onto the object in the timeline to replace the current picture. It is much clearer now that the video is too narrow.
4. In order to display the video in Fullscreen format you can extend it in length via **In-Screen Editing**. Right-click the video object and select In-Screen Editing following which the yellow frame with its handles appears. Click once into the screen and the Auto Zoom function will bring out the handles even better.



5. Hold the **C** key down, grab the left or right handle and drag the video until it fills the screen completely, i.e. touches the white frame on the right and the left. To return the screen to normal right-click the screen and select **Reset Pan/Zoom**.



6. Shorten the loop video object to correspond roughly to the map object length. Usually, it looks quite good if the fade out extends slightly to the next picture. Now we need to enable asynchronous looping.

7. Other than for audio objects, asynchronous loop playback requires no separate track. Highlight the video object and click on category **Video** on the Properties Table. Check the boxes next to **Loop** and **Asynchronous**.

8. Start playback from the video beginning. The animation in the background continues even after the Locator has stopped at the pause marker. You may have noticed that the text is not very well readable in brighter areas. This can easily be corrected.

9. Right-click the video object, select **Control tracks** and check box **Color** in the dialog. Close the dialog by clicking **OK**. Highlight the control track of an object for the Keyframe Editor to be displayed.

10. In the Keyframe Editor, double-click the control track to set a keyframe. On the Properties Table click the white field next to **Color** and, using the color selector, choose light blue as color for the video (... press **F1** for help). In the screen window any alterations in color can immediately be assessed and adjusted. Once you have finished color selection by closing the dialog transfer these settings to the entire object by clicking **Copy values to beginning and end**.

For even more flexibility in show presentation by using mix groups, move on to the next tutorial. We will show you how the presenter can call up the map at any time. See **Mix groups - Spontaneous change of contents**.

Mix groups - Instant change of contents

Mix groups allow instant changes between pictures, videos and music at any time. The contents are sorted into several parallel tracks, which are allocated to various mix groups. During the presentation you can enable the corresponding mix group, thereby displaying their contents on the screen.

This tutorial complements the project used for the tutorial **Speaker Support with interval music and video loop**. The following extension is to be implement:

- During a presentation it should be possible at any time to fade in a map to allow an instant response to questions from the audience. The actual show should be paused and continued after the explanations based on the map have been given.

If you have not yet worked through tutorial Speaker Support with interval music and video loop you should do so now. This tutorial requires the Pro License or higher.

Creating mix groups

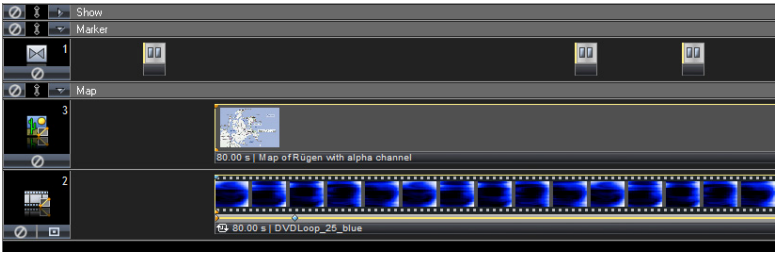
The presenter of a show wants to be able to change over to the map and continue at any time with his show after he has made a few explanatory comments. This is the perfect application for mix groups. Mix-groups allow fading over from current contents to parallel contents that were previously not visible on the screen. Telling you how you can do so will be purpose of this tutorial.

1. First of all, open the project you created during the tutorial **Speaker Support with interval music and video loop**.
2. Before you go on you should organize the present tracks into group tracks. Right-click the uppermost track head and select **Insert track ▶Group**. Double-click the field with the double arrow , enter **Show** as the name and click **OK**. Right-click the track head of the marker track and select **Insert track ▶ Group**. Enter **Marker** as the name for the group track and click **OK**.
3. Now add an additional group track and a picture track as follows: Right-click the empty black space below the marker track and select **Add tracks...** following which a dialog box will appear. Next to **Picture tracks** enter **1** and check the box next to **Group tracks**. After clicking

OK both new tracks are shown. Change the name of the new group track from **Pictures** to **Map**.

4. Duplicate the video track with the background video by right-clicking the track head and selecting **Duplicate track**. Now grab the new video track with the mouse and drag it to the very bottom. You may have to use the vertical scroll bar to change the timeline portion.

5. The new tracks are used for fading in the maps via mix groups. In order to structure the timeline more clearly, hide all the tracks belonging to the actual show. Right-click a free area in the tracks to deselect all objects. Following this you click on button of group track **Show** for all the tracks to be hidden. Following this your timeline, except for the two objects, should look as displayed below.



6. In order to make it look exactly as displayed above, move the video object to right until its beginning is located at 0:12.0 s (i.e. behind the map at the beginning of the show). Right-click the video object and select **Change duration**. Enter a duration of **1:20** and click on **OK**.

7. Now drag the picture file **Map of Rügen with alpha channel** into the picture track and extend the object as you did with the video. Put the picture track into alpha mode. Move the nodes for both objects to the left to achieve a hard fade-in.

8. Now define two mix groups. One group should contain all the groups used for fading in the map. A second mix group should contain all the other tracks for the actual show. Let's start with the tracks below the group track **Map**. Double-click the track head of the picture track to open the Properties dialog. Next to **Mix group** click on and select **M**. The choice of letter is insignificant, but M = Map can easily be remembered. Close the dialog by clicking **OK**. In the track head, bottom left, an **M** will be displayed for the mix group.

9. Assign mix group **M** also to the video track. Mix group **M** has now been set up for the map.

10. Assign all the tracks of the actual show to mix group **S** (S = show). For this purpose, open the group track **Show** by clicking and enter mix group **S** for all the tracks. As you may have noticed, no mix group can be assigned to the asynchronous audio track - it cannot be controlled via mix groups. Therefore, you should disable this track, as it may be played along when the map is played. **Tip:** You can open the drop down menu immediately by right-clicking the field where you expect the button to be.

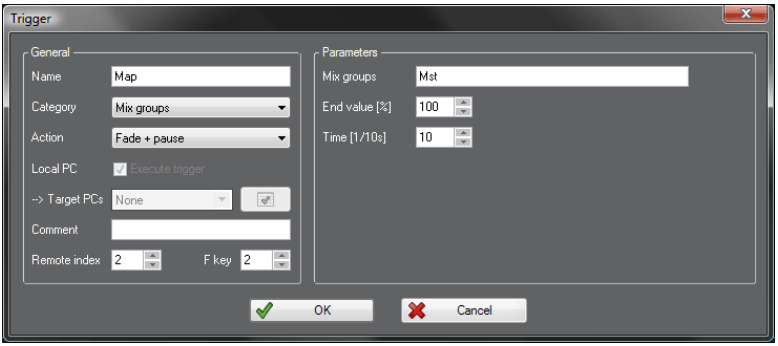
11. Continue by adding the trigger which allows you to activate the appropriate mix groups at a later time. In the Media Pool click on category **Trigger**. Right-click some free space and select **Add trigger**. Choose the following **General** settings:

    - Name Map
    - Category Mix groups
    - **Action** **Fade + Pause** ...ensures that playback is paused after fading in the map.
    - **F key** **2** ...this is the function key you press to execute the trigger later on.

12. On the right, under **Parameters** you make the settings for the type of fade:

    - **Mix groups** **Mst** ...turns the **Map** bright and **Show** and **Text** dark. I.e. capital letters stand for fading-in and small letters for fading out. The Mix group **Text** will only be needed at a later time. The trigger, however, can already be set up now.
    - **End value** **100 %** ...is the target value for the fade-in.
    - **Time** **10** ...for a dissolve time of one second.

    If, at the end of all this, the dialog shows the setting below, you can click **OK**.



13. Create a second trigger likewise, making the following settings:

    - Name Show
    - Category Mix group
    - **Action** **Continue + fade** ...ensures that the show is continued and faded over
    - **F key** **1** ...this is the function key you press to execute the trigger later on
    - **Mix groups** **mSt** ...turns Map and the Text dark and the Show bright
    - **End value** **100 %** ...is the target value for the fade-in.
    - **Time** **10** ...for a dissolve time of one second

14. Nearly there. You only need to activate the mix groups in the Timeline Properties. In the Media Pool click on category **Timelines**. Right-click **Timeline 1** and select **Properties**.

15. In the dialog under **Mix groups** place a checkmark next to **Activate** and enter mix group **S** as default for playback start. Finally, close the dialog by clicking on **OK**.

16. Start playback by pressing **Ctrl** + **F5** followed by pressing the space bar for the presentation to run in a window which allows you to see the Locator. After playback start, it's always the show that's running, i.e. mix group **S**. When playback is running, or in pause mode, you can change over to the map using the **F2** key, give detailed explanations as long as you need and return to the show by pressing the **F1** key.

Creating additional mix groups...

Let's assume that you would like to have the option of fading in the additional text ***National Park*** in the map. This can be done via the text function and an additional mix preset.

1. In the Media Pool click the plus sign next to category **Screens** and select **Screen 1** below it following which the screen fields etc. are shown on the right. Right-click some free area in the right section of the Media Pool and select **Add ticker field**. Following this a new ticker field for text output appears on the screen and the corresponding Properties dialog pops up. Select **Font height 7.0** and Attributes **Bold**, **Italic** and **Right**. Finish by clicking on **OK**.

2. Right-click the track head of the picture track below the group track **Map** and select **Insert track ▶Ticker.** Following this a ticker track is created which is automatically linked with the ticker field. Right-click the ticker track and select **Insert Ticker Object**. In field **Text** enter **National Park**, followed by clicking on **OK**.

3. Right-click the ticker object and select **Change duration**. Enter **1:20** for **New duration** and click on **OK**. Align the ticker object until it is in the same location as the map and the video.

4. Assign a new mix group to the ticker track, e.g. **T** as in text.

5. You can now duplicate and modify trigger **Map**. To do so, right-click trigger **Map** and select **Add trigger.** Enter **Map + Text** next to Name, **3** next to **F key** and make the following settings under **Parameters**:

   - **Mix groups MsT** ...turns **Map** and **Text** bright and the **Show** dark.

   End value and **Time** can be left as they are. Close the dialog by clicking **OK**.

6. When you start the presentation the show is run and you can call up the map without additional text by pressing **F2** and the map showing National Park with **F3**. If only the map is displayed, you can fade in the text ***National Park*** by pressing **F3** and make it disappear by pressing **F2**.

Mix triggers allow you to combine any mix groups. Tracks that are not part of a mix group are always visible. As trigger execution is also possible via

remote control, the mix group function can also be executed via serial command, MIDI or DMX, etc. Via key frame control, text ***National Park*** can also be positioned differently and displayed in a different color - as you know from previous tutorials.

The following Help topics are also available:

Visual effects

Presenting with mix groups

Remotely controlling Platinum

Optimum show presentation

During the tutorials and workshops you will have found out about the high quality of playback. The next logical step is therefore direct presentation of a show from the timeline. You only need to be sure that your computer has enough capacity for proper playback and that the display data, the textures, have a sufficiently high resolution. Actually, there are only restrictions for very complex shows that contain a high number of simultaneously running videos. In such a case, output of a video file would be a feasible alternative for presentation at full quality. See Methods for video creation.

The following steps should be performed after show completion and before the presentation is actually run the first time.

- Check and, if applicable, correct the peak level of the sound track. See Peak level of the sound track in the help topics.
- Checking and optimizing display data
- Setting markers and creating triggers for key control (...available from the Advanced License and up)

Following this, you can start your show in fullscreen mode and control via function keys. The audience will not see any program windows or even the Windows Desktop on the screen.

Checking and optimizing display data

Display data are images at a certain size supplied to the 3D graphics card for display. For maximum quality they should be exactly the same size as they appear on the monitor or video projector. Depending on how the pictures are displayed on the screen (zoom, camera movement, insert, etc.) they may require completely different display data, which can be created quite easily. Our example is based on a standard show with a resolution of 1400 x 1050 pixels, which is the resolution the HDAV reference video projector JVC DLA-SX21 or Canon XEED models would require. For a video projector or display with a different resolution you can change the values accordingly.

1. Load your show or practice project in Wings Platinum and click on category **Screens** in the Media Pool.
2. Right-click the Screen and select **Properties**. On the right dialog side under **Presentation** check the value at **Picture display data**. The value

should identical with the monitor or video projector resolution width if the screen touches the sides on the left or right. If the screen touches the top and the bottom, on the other hand, you need to calculate the optimum entry. If necessary, correct this value and close the dialog by clicking on **OK**.

3. In the main menu, click **Media Pool** and **Optimize picture sizes** followed by **Start**.

4. In the toolbar below the main menu, click **Create display data**, for the necessary display data to be recreated.

Should your show features high zoom magnifications, you should check whether your computer is still capable of playing these parts. For this purpose, use Fullscreen **Presentation Mode**, which can be started by pressing **F5** and terminated by pressing **Esc**. Refer also to the Help topic Playback Modes.

If playback is no longer possible without any problems... you can take certain measures, which are explained in the following Help topics under **Problems**:

There is no image in the screen window...

Jerky dissolves with hardware rendering ...

Intermittent sound during playback...

*Saving r*esources

Optimizing the presentation PC

Setting markers and creating triggers for key control

In Fullscreen Presentation Mode playback can only be controlled via keys. Therefore, the actions are by default restricted to the following:

- **Start playback** from the current Locator position and **Pause** by pressing the space bar (in turn).
- **Jump** to the next or previous position marker by pressing **Ctrl** and the **cursor** keys left/right. This requires the Pause Mode to be enabled.
- **Stop** by pressing the **Esc** key
- Terminate fullscreen mode by pressing Esc twice.

But it is also possible to assign trigger actions to various function keys. The following ones are important for our project:

- **Continue** ...continues paused playback. As opposed to the space bar this function is obvious.
- **Pause** ...to activate Pause Mode. As opposed to the space bar this function, too is obvious.
- **Play** ...starts playback of the specified timeline. As an option, playback can be started from a position marker, provided a marker mode and remote index, if applicable, have been specified.
- **To Position** ...causes the Locator to jump to the specified position marker. If the Remote Index is zero, the Locator jumps to 0:00 seconds. Jumping to a position marker is possible, provided a Marker Mode and remote index, if applicable, have been specified.

The next steps require the Advanced License or higher.

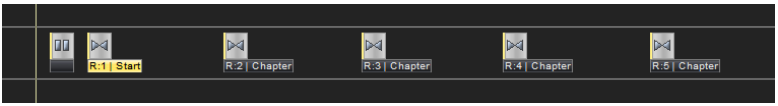
Now set a few position markers in your show. They should preferably be located at the beginning of the show and at the beginning of a new topic or chapter.

1. Right-click a marker track and select **Insert position marker**. If a marker track is available, right-click a track head and select **Insert track ▶Marker**.
2. Double-click the marker and click **First free remote index**. Enter the designation under **Comment**, e.g. **Start** and close the dialog by click-

ing on **OK**. The info line will now show the remote index **R:1** and the designation.

3. Move the position marker to the beginning of the show. Set a pause marker immediately in front of the position marker. The sense of this action will become clear to you during testing.

4. The same way add additional keyframes at different locations, e.g. at the beginning of chapters. These position markers have remote indexes **2**, **3**, **4** and **5**. At the end of all this, the marker track should about look like this (the distances in time have been compressed for the purpose of this illustration).



5. Now create the triggers for starting the actual function. In the Media Pool click on category **Trigger**. Right-click some free area in the right Media Pool section and select **Add trigger**.

6. For **Category** click on and select **Timeline**.

7. For **Action** click on and select **Play.**

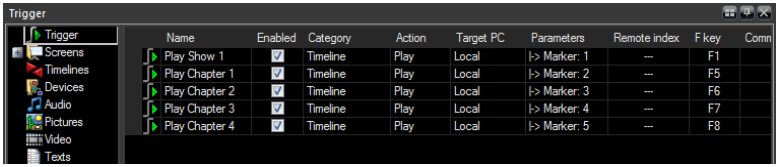
8. Enter the corresponding designation at **Name**, e.g. **Play show 1**. At the bottom, enter **1** next to **F key**, which stands for the **F1 key**.

9. On the right, under **Parameters** define remote index **1** as playback position next to **Position marker** and close the dialog by clicking **OK**.

10. Now create four additional triggers for the other position markers. To do so, right-click the trigger you have already created and select **Add trigger.** The Properties Dialog will appear showing the settings of the first trigger. Now you only need to enter the **Name** (e.g. Play chapters 1…4, etc.), the **F key** (F5…F8) and the **Position marker** (2…5). The assignment of function keys may appear a bit strange to you, but for this tutorial we have planned to use **F1** to **F4** for starting shows and **F5** to **F8** for jumping to certain chapters. Later on you will be completely free in your choice.

11. Once all triggers have been created, you can once again check the parameters for every individual triggers in the Media Pool. For any neces-

sary corrections right-click the corresponding trigger and select **Properties**.



12. Now you can test the functions of the keys. Start playback before the pause marker by pressing the space bar. The Locator will move to the pause marker and put Wings Platinum in Pause Mode. Press the corresponding function keys to jump to the corresponding location for playback. Just try it.

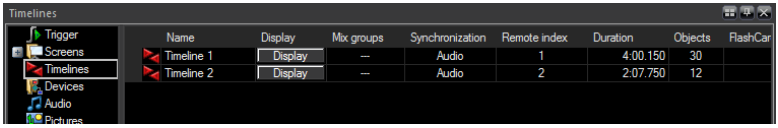
13. While Wings Platinum is in Playback or Pause Mode, you can use the function keys for direct triggering of certain actions. When Wings Platinum is in Stop Mode, the function keys resume their normal functions. If you want to start the trigger action directly in Stop Mode you need to hold the **Shift** key while pressing the corresponding function key. Just try it out a few times. Of course all this works in fullscreen mode, too.

Organising a program in several timelines

If you need to present several shows in the course of an event, you can create also one timeline for every show and start playback of the corresponding timeline via function keys. We will show you how to do this by creating a short sequence in a second timeline.

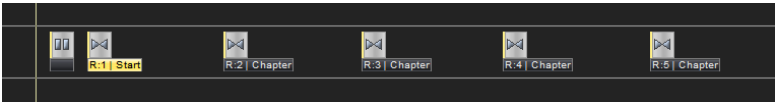
1. In the Media Pool click on category **Timelines**. Right-click a free area and select **Add timeline**.

2. For **Timeline 2** in column **Remote index** enter **2**. The same way you define remote index **1** for **Timeline 1**.

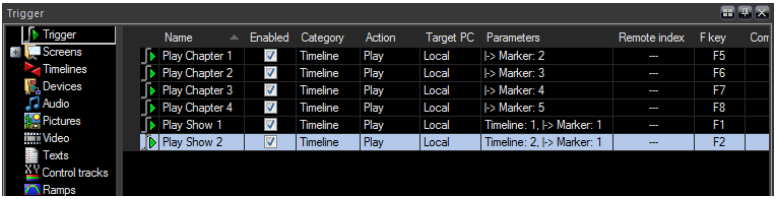


Info Every function or every type of object, respectively has its own remote indexes. Thus it is possible that there are remote indexes with the same number for timelines, position markers, triggers, mix groups, etc.

3. In the Media Pool click on category **Pictures**, highlight a few and drag them into the empty timeline. Following this, a track is created containing a sequence of pictures.
4. The same way, drag some music into the timeline to create a short, sound-tracked passage of about one to two minutes.
5. Now add a marker track and create the same marker structure as for the first show: i.e. a position marker with remote index **1** at the beginning of the sequence for playback start and four additional position markers with remote indexes **2** to **5** for the chapter beginnings.



6. In the Media Pool click on category **Trigger**. Now that there is a second timeline available, you need to specify the destination for trigger **Play show 1**. Double-click the green trigger symbol next to **Play show 1**. Under **Parameter** and **Timeline** enter the remote index **1**. This way the trigger does not refer to the current timeline, but always to **Timeline 1**.
7. Now create a new trigger by right-clicking trigger **Play show 1** and selecting Add trigger. Enter **Play show 2** for **Name** and the figure **2** next to **F key**. Under **Parameter** you specify the destination: **Timeline** = **2** and **Position marker** = **1**. Below you can see the Media Pool with all triggers and can check whether everything has been entered correctly.



8. This configuration allows you to start both shows in timeline 1 and timeline 2 directly via the keys **F1** and **F2**. Keys **F5** to **F8** for jumping to chapters are effective in both shows, depending on which of the timelines is presently active.

This way shows and complete events can be most conveniently controlled. You can draw up your individual concept for operation, which can also include other trigger actions such as **To position** and **Continue**. Triggers can not only be started via function keys but also via the Control Panel, the trigger scheduler or serial command.

Refer also to the following topics in the Help topics:

Executing triggers

Control Panel for direct operation

Remote control of Wings Platinum

Time-related conditions for triggers

Creating a multidisplay show via one computer

In this tutorial we are going to show you how easy it is to create and present a multidisplay show via one PC. You can control up to four displays provided the PC has two graphics cards. This tutorial is based on the assumption that you know how to handle Wings Platinum in general. If not, we recommend working through the tutorials of workshop Digital AV Show first.

In this tutorial you will be provided with detail knowledge about the special features of a multidisplay show illustrated at the example of a panorama show for two projectors:

- Creating a project and setting up the multidisplay screens
- Getting rid of distortions via Display Warp
- Adjusting soft edge masks

For our example we are going to use panorama format at 1900 x 768 pixels, projected with two projectors and a resolution of 1024 x 768 pixels each. On the other hand, we are using a computer with a **Multidisplay License** for two displays. Your computer must have three graphics card outputs in order to allow proper adjustment and show programming on a separate monitor.

Creating a project

As usual, you should use the **Wizard for Mixed Media Projects** to create your show.

1. In the main menu click **File** - **New** and select **Project Wizards** in the left field of the dialog displayed.
2. From the list, select **Creation of a mixed media project** and click **OK**.

Project Name

1. Select **Create new project in selected folder**.
2. Enter the required name under **Project Name**, e.g. **Multidisplay Tutorial**.
3. Click and select the corresponding project folder.

4. Under **Comment** you can add any remarks for your project.
5. Click **Next**. The Wizard will now create a project file in the specified project folder.

Media

1. Specify the types of media you want to use for your project. For this exercise you should only choose **Audio**, **Pictures** and **Video**.
2. At the bottom you should specify that you want to create a **multidisplay project**.
3. Click **Next**.

Multidisplay Screen

Here you can make various settings for screen and display configuration.

1. Under **Output settings** and **Display size** enter the resolution of an individual video projector, i.e. 1024 x 768 pixels for our tutorial.
2. At **Displays** enter the number and arrangement of displays, i.e. in our case, **2** x **1** for two video projectors arranged next to each other.
3. The next step is to enter a **Total size** of 1900 pixels in width. The resulting overlap is 148 pixels which are displayed immediately above. As an alternative, you could also have specified the overlap and the width of the whole picture would have been the result of this entry.
4. Next to **Multidisplay configuration** click and select **All displays on the master starting with monitor 2**.
5. Click **Next**.

Video

The following options refer to video playback:

- Display data for HD videos at higher resolution ...this option is not required.

- **Create and use intermediate video data** ...this option should be enabled to ensure secure high-performance playback of videos.

Click **Next**.

Pool template

This dialog allows you to select a project template, Media Pool components of which can be transferred to the new project. Thus you can use previously created ramps and effects in a new show.

1. Place a checkmark next to **Add Media Pool components from following project template**.
2. The preselected template **Default Pools** contains a few ramps and control tracks for effects.
3. Click **Next**.

Media Pool

1. Select the components you want to import. Without previous selection of a separate template, you should leave the settings for **control tracks** and **ramps**.
2. Click **Next**.

Timeline tracks

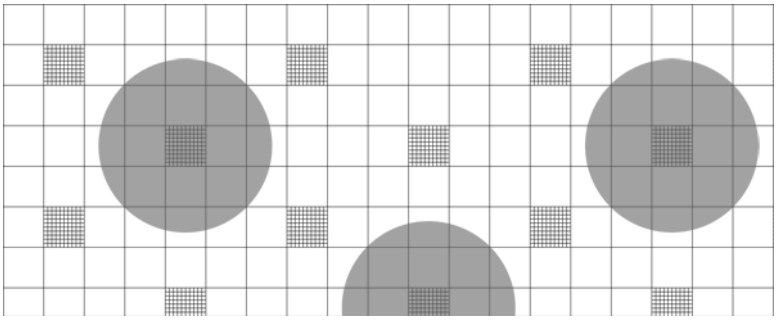
1. Here you specify the number of the corresponding track types to be created in the timeline. Do not worry about the entries; tracks can be added or removed any time.
2. Checking **Group tracks automatically** installs additional group tracks which allow hiding and displaying of tracks.
3. Click **Finish** and the timeline with the corresponding tracks appears.

Aligning the video projectors and adjusting the softedge masks

Align the video projectors by means of test charts. Do so by modifying test chart **Pattern black, white background.tif** which was copied to folder

Media Samples\ Test Charts when installing the program from DVD-ROM. The corresponding folder can be found by clicking **Extras** - **Open Folder ▶Sample Media.** If it is not available you may have chosen to install the program without test charts. In any case, the pictures can always be copied from the Wings Platinum DVD at Drive:\Wings Platinum\Media Samples\Test Charts.

1. Open picture **Pattern black, white background.tif** with an image editing program and crop the picture to the total size plus a border of 1 pixel. In our example this would be for 1901 x 769 pixels for a total size of 1900 x 768 pixels. The border along the periphery is necessary as the pictures are cropped by one pixel for display via hardware rendering.



   The cropped grid should look as illustrated above. **Important:** It must **not** be scaled as it will be reduced in sharpness due to interpolation.

2. Save the picture as **Pattern 1902x770.tif** for the size to be immediately recognizable.

3. Drag the test picture **Pattern 1902x770** or any additional ones into the Media Pool and arrange the pictures in the timeline.

4. To ensure that Wings Platinum uses an unscaled version of **Pattern 1902x770** go to the main menu and click **Media Pool - Optimize Picture Sizes** followed by **Start**.

5. Check by right-clicking the object **Pattern 1092x770** and selecting **Properties**. At **Resulting Picture size**, **➔Picture size** must be exactly **1900 pixels**. After checking, close the dialog by clicking **OK**.

6. In order to start fullscreen presentation at high quality on the slaves, press the **F5** key. You can now align the video projector by using the

picture **Pattern 1902x770**. The lines should be exactly one pixel wide and very well visible to allow proper control of the overlap. The circles clearly show whether the picture is distorted or not. For better alignment in the overlap area two triggers have been set up in the Control Panel for hiding/displaying the softedge masks. Alignment can be judged more easily without softedge mask. In the Control Panel click on trigger **Hide softedge**.

7. Once the overlap area is in perfect alignment, click **Show softedge**, followed by clicking category **Screens** in the Media Pool.
8. In the right Media Pool section click **Screen 1**, following which the corresponding grayscale and ramp band are displayed in the area of the Properties Table.
9. Set a "Spline" node by double-clicking the ramp band while holding the **O** key. By moving the node, adjust the ramp until a homogenous overlap is displayed on the screen.
10. Position the test patterns with control tracks and keyframes in the overlaps. See also Motion: Position - Zoom - Rotation. For softedge mask adjustment test pictures **Grey_steps_1** and **Grey_steps_2** are very suitable. All the other test pictures can be used to check homogeneity with different tonal values and colors.

Show production

In principle, shows containing pictures, videos and sound are created in the same way as you were shown in the previous tutorials. For multidisplay shows, however, the various playback modes for Preview and Presentation are of greater importance. In addition to this, you need to transfer the alterations to the slaves after editing the timeline to check them at full size and quality on the video projector.

- **Preview Mode** works at reduced display quality to ensure swift editing. This is particularly important for multidisplay shows. In this case, editing at full quality would only put unnecessary strain on the system. As usual, Preview Mode is started by hitting the space bar or via the mouse.

- **Presentation Mode** uses high-resolution pictures and video files for display, although this can be varied depending on the application. Presentation Mode is started by pressing the **F5** key. This mode ensures optimized performance.

Make the following test to see the difference:

- Open the slave screens by pressing **Ctrl** + **F6** and move the locator across the test images showing the grid pattern. It is displayed at reduced quality and is not very focused as it is based on lower resolution display data.
- Now press the **F5** key and notice the quality on the screen. There should be a marked difference in quality. Press the space bar to start playback and **Esc** to stop it.

More detailed information about the two playback modes can be found in topic *Playback modes for screen display*. For videos, in particular, there are a few additional options:

When you **edit** your show you should remember that any alterations in the timeline need to be transferred to the slaves by pressing **F7** before they can be displayed via the video projectors. Now create a short sequence as you were shown in the previous tutorials; use some videos, too.

As long as your computer is able to display all videos in real time in Presentation Mode at original quality (set button in the track head to) it is possible to run the presentation directly from the timeline. To ensure high performance create optimized display data for pictures at the end of the production. See Optimizing display data for pictures in the Help topics.

Simultaneous usage of a number of videos or even HD videos very often requires a mixdown to ensure a faultless presentation without any jerks. This means that you create a video containing the entire visual information and play it back from a video track in Exclusive Mode. For our multidisplay show we need of course two split videos, i.e. one video file for every slave.

You should now be familiar with the most important steps for creating and presenting a multidisplay show via one PC.
The following topics can be found in the Help topics:

Presenting videos

Warping screen or display contents

Show Control Functions

Creating a multidisplay show using master and slaves

In this tutorial we would like to show you what you need to consider for a multidisplay show. We assume that you know how to handle Wings Platinum in general. If not, we recommend working through the tutorials of workshop Digital AV Show first.

In this tutorial you will be provided with detail knowledge about the special features of a multidisplay show illustrated at the example of a panorama show for two projectors:

- Creating a project and configuring the multidisplay screen
- Configuring network connections
- Aligning the video projectors and adjusting the softedge masks
- Producing a show using hardware rendering for screen display
- Creating and transferring the split videos for video presentation

In our example we are going to use panorama format at 1900 x 768 pixels, projected with two projectors and a resolution of 1024 x 768 pixels each. We are using one master and two slaves, each of which need to be provided with a **Multidisplay License**.

Creating a project

As usual, you should use the **Wizard for Mixed Media Projects** to create your show.

1. In the main menu click **File** - **New** and select **Project Wizards** in the left field of the dialog displayed.
2. From the list, select **Creation of a mixed media project** and click **OK**.

Project Name

1. Select **Create new project in selected folder**.

2. Enter the required name under **Project Name**, e.g. **Multidisplay Tutorial**.
3. Click and select the corresponding project folder.
4. Under **Comment** you can add any remarks for your project.
5. Click **Next**. The Wizard will now create a project file in the specified project folder.

Media

1. Specify the types of media you want to use for your project. For this exercise you should only choose **Audio**, **Pictures** and **Video**.
2. At the bottom you should specify that you want to create a **multidisplay project**.
3. Click **Next**.

Multidisplay Screen

Here you can make various settings for screen and display configuration.

1. Under **Output settings** and **Display size** enter the resolution of an individual video projector, i.e. 1024 x 768 pixels for our tutorial.
2. At **Displays** enter the number and arrangement of displays, i.e. in our case, **2** x **1** for two video projectors arranged next to each other.
3. The next step is to enter a **Total size** of 1900 pixels in width. The resulting overlap is 148 pixels which are displayed immediately above. As an alternative, you could also have specified the overlap and the width of the whole picture would have been the result of this entry.
4. Next to **Multidisplay configuration** click and select **All displays on the master starting with monitor 2**. Place a checkmark next to **Create slave PCs automatically** and enter the IP address of the first slave PC. Click on **Select computer** to have all the active computers in the network displayed and select the corresponding one. The second slave receives the next higher address.

5. Click **Next**.

Video

The following options refer to video playback:

- Display data for HD videos at higher resolution ...this option is not required.
- **Create and use intermediate video data** ...this option should be enabled to ensure secure high-performance playback of videos.

Click **Next**.

Pool template

This dialog allows you to select a project template, Media Pool components of which can be transferred to the new project. Thus you can use previously created ramps and effects in a new show.

1. Place a checkmark next to **Add Media Pool components from following project template**.
2. The preselected template **Default Pools** contains a few ramps and control tracks for effects.
3. Click **Next**.

Media Pool

1. Select the components you want to import. Without previous selection of a separate template, you should leave the settings for **control tracks** and **ramps**.
2. Click **Next**.

Timeline tracks

1. Here you specify the number of the corresponding track types to be created in the timeline. Do not worry about the entries; tracks can be added or removed any time.

2. Checking **Group tracks automatically** installs additional group tracks which allow hiding and displaying of tracks.
3. Click **Finish** and the timeline with the corresponding tracks appears.

Configuring the presentation network

In our tutorial the presentation network consists of a master and two slaves linked up via the network. Via this network connection, media files and project configuration are transferred from the master to the slaves and playback is synchronized.

You should therefore make sure that there is a functioning connection between all presentation computers. For this purpose, the **internet protocol (TCP/IP)** and the **Client for Microsoft networks** must be installed. In addition to this it is also important that the computers have a static IP address and the address is not obtained automatically. For information on how to verify or alter this, refer to Static IP addresses in the network.

In Wings Platinum make the following settings:

1. In the tool bar click on **Options** and select **Global Options** - **Network**.
2. In the dialog displayed different settings must be made for master and slave computers:

   For the master

   - Under **Mode** click **Master** and add a checkmark next to **Enable** under **Network connections**.

   For the slaves

   - Under **Mode** click **Slave** and add a checkmark next to **Enable** under **Network connections**.
   - Click on **Select computer** and choose the master. The context menu will only show active computers, i.e. the master computer should be activated and be part of the network. Otherwise you can also enter the TCP/IP address manually.
   - Moreover, you need to specify a drive you want the media files transferred by the master to be copied to. Folder **Wings Plati-**

num 4 Slave Sync will be created automatically. **Important:** Make sure that the folder is cleared for network access.

3. Close the Options Dialog by clicking **OK**. For the slaves answer the question for the global program start options with **Yes**. After this, the following settings are made in the **Global Options** - **Program** start for proper multidisplay mode with several PCs:

   - **Startup delay** ...no changes. Here you may want to make your own settings for automatic mode or joint starting of PCs.
   - **No action** ...after program start no projects are loaded or selection dialogs displayed since the project is transferred from the master.
   - **Ignore last autosave status** ...is enabled because the project is transferred from the master.

Any other options for program start will be disabled.

4. Click on tab **Control Panel** at the bottom of the Project Explorer and the control panel fields displaying the status of the multidisplay PCs will appear:

- **Green** ...network connection established, idling condition, everything OK.
- **Blue** ...the slave is running a multidisplay presentation and is in Play or Pause Mode.
- **Yellow** ...slave computer is active; during a file transfer the data rate to be transferred is displayed additionally.
- **Red** ...Error. Network connection not ok.

Examples:

Presentation network ok

File transfer, all computers are active

Presentation; the slaves are in Play or Pause Mode

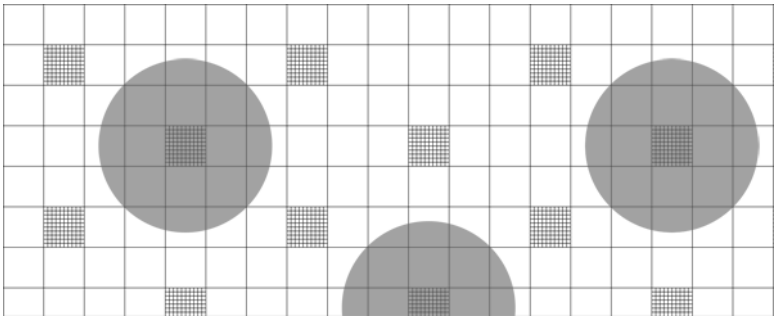
Error; no network connection to the right slave

In the course of the tutorial you will be able to find out about the various status displays in practice. Network configuration is now complete.

Aligning the video projectors and adjusting the softedge masks

Align the video projectors by means of test charts. Do so by modifying test chart **Pattern black, white background.tif** which was copied to folder **Media Samples\ Test Charts** when installing the program from DVD-ROM. The corresponding folder can be found by clicking **Extras** - **Open Folder ▶Sample Media.** If it is not available you may have chosen to install the program without test charts. In any case, the pictures can always be copied from the Wings Platinum DVD at Drive:\Wings Platinum\Media Samples\Test Charts.

1. Open picture **Pattern black, white background.tif** with an image editing program and crop the picture to the total size plus a border of 1 pixel. In our example this would be for 1901 x 769 pixels for a total size of 1900 x 768 pixels. The border along the periphery is necessary as the pictures are cropped by one pixel for display via hardware rendering.



The cropped grid should look as illustrated above. **Important:** It must **not** be scaled as it will be reduced in sharpness due to interpolation.

2. Save the picture as **Pattern 1902x770.tif** for the size to be immediately recognizable.
3. Drag the test picture **Pattern 1902x770** or any additional ones into the Media Pool and arrange the pictures in the timeline.
4. To ensure that Wings Platinum uses an unscaled version of **Pattern 1902x770** go to the main menu and click **Media Pool - Optimize Picture Sizes** followed by **Start**.
5. Check by right-clicking the object **Pattern 1092x770** and selecting **Properties**. At **Resulting Picture size**, **Picture size** must be exactly **1900 pixels**. After checking, close the dialog by clicking **OK**.
6. Before the pictures can be displayed on the slaves you need to transfer the project and all the necessary files onto the slaves.
7. Make sure that all slaves within the presentation network are ready for use and that the buttons **Enable network** on all computers are depressed.
8. On the master click **Enable file transfer** in the toolbar or press **F7** alternatively to start file server and data transfer. The data volume to be transferred is displayed in the Control Panel.
9. Press the **F6** key to enable Locate slave timelines. When you move the locator across the test images, the locators on the slaves must also move. Press **Esc** to stop playback or presentation mode, respectively.

10. In order to start fullscreen presentation at high quality on the slaves, press the **F5** key. You can now align the video projector by using the picture **Pattern 1902x770**. The lines should be exactly one pixel wide and very well visible to allow proper control of the overlap. The circles clearly show whether the picture is distorted or not. For better alignment in the overlap area two triggers have been set up in the Control Panel for hiding/displaying the softedge masks. Alignment can be judged more easily without softedge mask. In the Control Panel click on trigger **Hide softedge**.
11. Once the overlap area is in perfect alignment, click **Show softedge**, followed by clicking category **Screens** in the Media Pool.
12. In the right Media Pool section click **Screen 1**, following which the corresponding grayscale and ramp band are displayed in the area of the Properties Table.
13. Set a "Spline" node by double-clicking the ramp band while holding the **O** key. By moving the node, adjust the ramp until a homogenous overlap is displayed on the screen.
14. Position the test patterns with control tracks and keyframes in the overlaps. See also Motion: Position - Zoom - Rotation. For softedge mask adjustment test pictures **Grey_steps_1** and **Grey_steps_2** are very suitable. All the other test pictures can be used to check homogeneity with different tonal values and colors.

Show production with differentiated screen display

In principle, shows containing pictures, videos and sound are created in the same way as you were shown in the previous tutorials. For multidisplay shows, however, the various playback modes for Preview and Presentation are of greater importance. In addition to this, you need to transfer the alterations to the slaves after editing the timeline to check them at full size and quality on the video projector.

- **Preview Mode** works at reduced display quality to ensure swift editing. This is particularly important for multidisplay shows. In this case, editing at full quality would only put unnecessary strain on the system.

As usual, Preview Mode is started by hitting the space bar or via the mouse.

- **Presentation Mode** uses high-resolution pictures and video files for display, although this can be varied depending on the application. Presentation Mode is started by pressing the **F5** key. This mode ensures optimized performance.

Make the following test to see the difference:

- Open the slave screens by pressing **Ctrl** + **F6** and move the locator across the test images showing the grid pattern. It is displayed at reduced quality and is not very focused as it is based on lower resolution display data.
- Now press the **F5** key and notice the quality on the screen. There should be a marked difference in quality. Press the space bar to start playback and **Esc** to stop it.

More detailed information about the two playback modes can be found in topic *Playback modes for screen display via hardware rendering*. For videos, in particular, there are a few additional options:

When you **edit** your show you should remember that any alterations in the timeline need to be transferred to the slaves by pressing **F7** before they can be displayed via the video projectors. Now create a short sequence as you were shown in the previous tutorials; use some videos, too.

As long as your computer is able to display all videos in real time in Presentation Mode at original quality (set button in the track head to) it is possible to run the presentation directly from the timeline. To ensure high performance create optimized display data for pictures at the end of the production. See Optimizing display data for pictures in the Help topics.

Simultaneous usage of a number of videos or even HD videos very often requires a mixdown to ensure a faultless presentation without any jerks. This means that you create a video containing the entire visual information and play it back from a video track in Exclusive Mode. For our multidisplay show we need of course two split videos, i.e. one video file for every slave.

Producing and transferring the split videos

...not revised yet!

For your show to be played back at full quality without any jerks, the two split video files need to be created and transferred to the slave computers. The basic approach for creating a video is explained in the Online Help topics under **Creating videos**. All these methods can be used, but we recommend trying out the WMV format selecting a frame rate of 60 frames/s.

Now let's consider the things that are particularly important for creating split videos and for the presentation later on:

- For video rendering select the display the split video is to be created for on page **Timelines**.
- On page **Video** choose a profile and enter the total output size by clicking on . These pixel values correspond to the screen size.
- On page **Further actions** you should select **Insert as presentation into the current project** for the video to be automatically placed for presentation on a video track in Exclusive Mode.
- After generating both video files, they can be found in the video tracks in Exclusive Mode (...to be recognized by the additional projection screen symbol in the track head). When the videos are added to the tracks, Wings Platinum creates a new screen field with a suitable setup for the position and links it up with the track and the correct target computer. See also Video Track Properties.
- Transfer the videos to the slaves via by pressing key **F7** as you did during production. Of course, this requires the entire presentation network to be enabled. This may take a while, depending on the size of the files. Progress is displayed in the Control Panel.
- Now you can play back the show by pressing the **F5** key. For this purpose, the visual information of both split videos is used, whereas the sound comes from the sound tracks. For playback in Presentation Mode, all options, such as Speaker Support, remote control, show control, etc. are available. See also Presenting videos.
- If you want to continue editing your project, followed by playing it in Presentation Mode (**F5**) you need to disable the video tracks in Exclusive Mode. Otherwise, the topmost active video track in Exclusive Mode is played back.

You should now be familiar with the most important steps for creating and presenting a multidisplay show.

The following topics can be found in the Help topics:

Presenting videos

Warping screen or display contents

Show Control Functions

Copyright for media samples

Folder **Media Samples** on the Wings Platinum DVD and, if applicable, on your harddisk, contains a few media files (images, video, music) to be used for workshops and as production examples. All these media are protected by copyright. They must only be used in the context of finding out about Wings Platinum. Any other usage, in particular commercial usage, such as public performance, reproduction by copying or printing, requires the usage rights to be acquired from the authors. Information on further usage of media samples and contact information can be found on the Internet. The following media are available in folder **Media Samples**:

- **Gemafree music** from the Highland music archives (folder **Highland Samples** and **fotoforum Workshop**). See www.highland-musikarchiv.com.
- Pictures of the **Elbsandstein mountains** by Mathias Michel (folder **Camera**), www.mm-vision.com.
- Pictures of the island of **Rügen** by Dieter Hartmann (folder **Samples**). See www.quattrovision.de.
- Pictures and HD videos of **Norway** by Petra and Gerhard Zwerger-Schoner (folder **fotoforum Workshop**). See www.zwerger-schoner.at.
- DV video **Bear** by Klaus Stange (folder **Videos**). See www.avttention.de.
- DV video **Flag** by Dieter Hartmann (folder **Videos**). See www.quattrovision.de.
- **DVD loops** in MPEG2 format by MainConcept (folder **Videos**). See http://www.mainconcept.de.

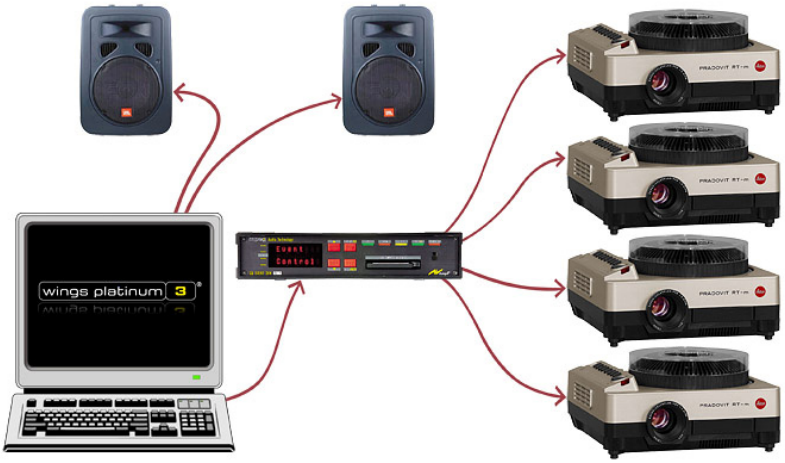
Producing a Slide Show

What steps are necessary to produce a slide show?

A computer with Wings Platinum is a very convenient medium for producing a slide show. For this purpose, your projectors must be directly controllable via computer or a control unit.

System components

A modern Multi Image system consists of several projectors, a control unit and a playback device for sound which usually also supplies the data signal for the control unit. A very modern and compact system is, for example, the SD EC 2X4, as it combines control unit and audio player in one unit. In addition to this, you need a loudspeaker system, consisting of amplifier and two loudspeakers or two active loudspeakers with integrated power amplifier as an alternative. The sequence of pictures and dissolves and sound are arranged on the computer with Wings Platinum.



Programming and immediate testing of the show, however, requires a set up as illustrated below. The control unit is the link between computer and projectors.

In the case of the **SD EC 2X4**, sound track and control information for **presentation** are stored on a storage card – a Compact Flash Card – the size of a postage stamp, which means that the computer is not required. You can use the IR remote control to call up complete shows or individual sequences, or even to control volume and sound. A microphone can be connected for moderation purposes.

Of course, any other system configurations are also feasible. In any case, it stands to reason to use Wings Platinum for programming complicated and comprehensive AV shows. This software is flexible enough to adjust to virtually any hardware. A description of various hardware combinations can be found in the Help under Control Units and Slide Projectors.

Using Wings Platinum to produce a show

In Wings Platinum, a show is produced via media objects. This means that you arrange pictures and music as desired, and that the result of your work is immediately visible in screen window, the virtual projection screen. It may help to start thinking about the show concept and the central theme of your show beforehand. But even while working at the show will Wings Platinum give you maximum freedom to make changes and improvement.

The following steps, which will be dealt with in detail in this workshop, are required to produce a slide show:

Creating a project: The fastest and simplest way to create a project is via the Project Wizard. It assists you in providing and setting the most important information for device and software configuration.

Capturing media: Scan your slides and save music and sounds on your hard disk. Wings Platinum helps you to do so in a variety of ways. Or, you can copy existing picture and audio files onto your hard disk and import them into the Media Pool. It should do to start out with a few files. Further files can be added any time.

Arranging pictures and sound: Drag the corresponding pictures and pieces of music from the Media Pool into the corresponding track in the timeline. All the resulting objects can be shifted, dissolved or cut in the same way, which means that learning to edit is quite easy. Any editing steps are immediately visible in the screen window when playing back the object. In the background, the pictures are automatically allocated to the virtual trays by Wings Platinum.

Dissolving slides and testing dissolves: After preparing a sequence or a whole show in Wings Platinum, you should test it with your real slides and do some fine-tuning. The Tray Editor informs you about the location of the slides within the trays. For actually sorting the slides into the trays you had better print out list of slides for every tray. Start up your system and install the full trays in your projectors. With activated device control you can now test the sequence by projecting the real slides onto the large projection screen. The projectors are controlled exactly as programmed in Wings Platinum. However, you will notice that the dissolves in the simulation may come across differently compared to projections on the real screen. This is why you should try to optimize your show with real slides and projectors. After all, what can be seen on the real screen is more important than anything.

Creating a presentation medium: When you have completed your show and want to present it without PC you need to create presentation data. For a slide show, this could be an analog tape, an audio CD or a CF Card, depending on the control technology used and the type of presentation. As an alternative, you can output the show as EXE presentation or video DVD - a practical addition, if you do not want to set up your projection system or want to post the show. ...See also Why digital projection?

Creating a slide show project

In this tutorial, you will find out about how to create a new project for a standard slide show with one screen field. We will use the Wizard to do so, but, first of all, we would like to give you a general overview:

- A **Project Folder** and the subfolders **Audio**, **Pictures** and **Video** are created on hard disk to accommodate all your project files produced during production.
- Device Control in Wings Platinum is configured for the **hardware used**, i.e. for your control unit and the types and number of projectors used.
- Wings Platinum is configured for the **type of production**, i.e. for example how you want to use digital pictures, what the format of your pictures is to be and the number of tracks you want to work with.

Step by step, the Project Wizard will help you start your project. It is important to establish a sound basis for your project. Changes in the settings can be made at any time later on.

Info This workshop is based on the full versions of Wings Platinum. For the Demo Version and the Basic Version most of the instructions, but not all of them, can be carried out. Information about the restrictions can be found in the Help under **General** – **Licenses and functions.**

Preparatory steps

Before your can actually project your show via slide projectors you need to enable usage of slide projectors in Wings Platinum.

1. In the tool bar below the main menu click on **Options** and select **Global Options** - **General** on the left.
2. Under **Slide projection** check box **Enable usage of slide projectors**.
3. Now click **Help** on the left and enable the Help function for **Audiovision**.
4. Close the dialog by clicking **OK** and terminate Wings Platinum. After restarting Wings Platinum usage of slide projectors is enabled and you can create a project.

This is how you create a project:

1. Click on **File** – **New** in the main menu.
2. In the dialog box popping up, select **Project Wizards** in the left dialog window .
3. From the list, select **Creation of a new AV project** and click **OK**.

Project Name

1. Select **Create new project in selected folder** to determine where the files are to be stored .
2. Enter the required name under **Project Name**, for example **Exercise 1**.
3. Click on and access the drive or open the directory you want to create the new project folder in. Choose a drive with sufficient memory capacity. Now click on **Create new folder** and enter the name, e.g. **Exercise**. Finally, click on **OK**.
4. Under **Comment** you can add some remarks, e.g. **First lesson of the Wings Platinum tutorial**.
5. Click **Next** and the Wizard will create a project file in the specified project folder.

Info If you want to save all projects to the same locations, you can specify a **standard folder** under Options. However, this is only for later.

Screen

The screen window is used for show previews. Several parameters need to be entered:

1. Specify the **Aspect ratio** of the screen you want to use for your show. It is useful to choose the same aspect ratio as that of your pictures. The aspect ratio can still be changed at a later time via the Screen Properties.
2. The settings under **Screen Settings** can normally be left as they are. The picture display data size is automatically adjusted to match your monitor. Of course, modifications are also possible at a later time.
3. Click **Next**.

Slide Projectors

1. Place a checkmark next to **Pictures are also to be displayed with slide projectors**.
2. Now select **Number** (a maximum number of 3 projectors for the Basic and the Starter Version) and **Type** of slide projectors used. **Please note for Rolleivision MSC XXX Twin**

   A Rolleivision MSC Dissolve Projector needs to be set up as two individual projectors in the device control system. In Wings Platinum it behaves like a two-projector system.
3. Under **Device Port** select a control signal (e.g. Stumpfl DLC) or a protocol (e.g. Kodak P-Com) for projectors to be controlled serially by the computer. The first projector addresses are selected automatically.
4. Select the **Serial port** of your computer for controlling your control unit or projectors, e.g. **Com 1**.
5. Only uncheck **Use brightness correction ramp** in exceptional cases. The correction ramp provides for harmonious dissolves by compensating for characteristic lamp and slide projector properties. The correction ramp can also be adjusted individually to match your projector.
6. Click **Next** twice. Presumably you won't use any videos.

Pool Template

This dialog allows you to select a project template which is used as a basis for taking over Media Pool components into the new project. This way you can use ramps and effects as templates for a new show.

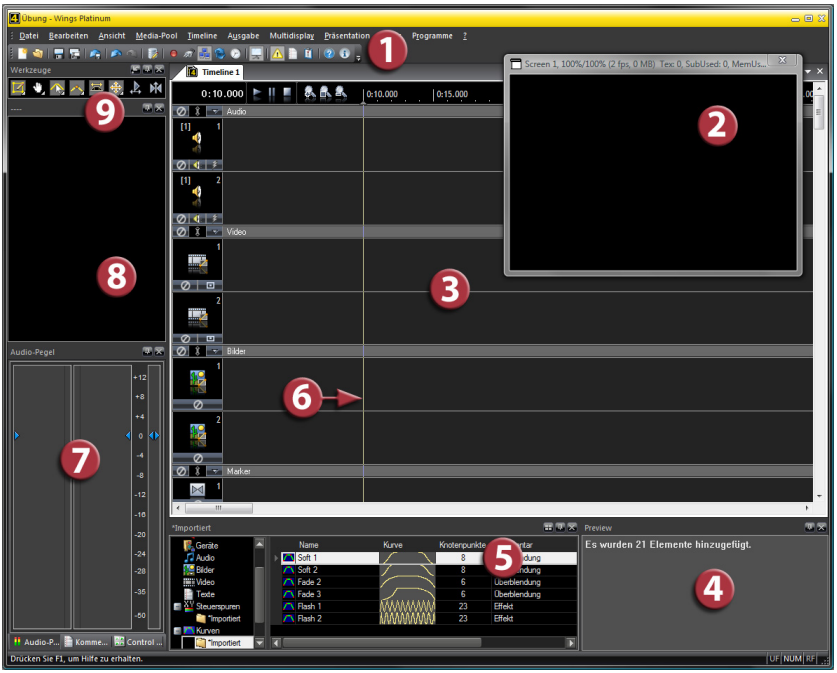
1. Place a checkmark next to **Add Media Pool components from following project template**.
2. The preselected template **Default Pools** contains a few ramps and control tracks for effects. If you want to import ramps from a different project template, highlight the corresponding template by clicking it.
3. Click **Next**.

Media Pool

1. Select the components you want to import. Without previous selection of a separate template you should leave the settings for **control tracks** (only available with the Advanced License or higher) and **ramps**.
2. Click **Next**.

Tracks in the timeline

1. Here you can enter the number of audio and image tracks you want to use for programming. Choose 2 sound, picture and video tracks each. Leave one marker track and set the universal track to zero.
2. Click **Finish** to create the slide show project and to display the timeline window.



1. **Main menu** and the **Tool bar below the main menu** with buttons
2. **Screen** for show preview
3. **Timeline** with tracks. In the picture, the green group tracks among other things are not displayed.
4. **Preview Window** to display media and messages
5. **Media Pool** with a number of different tabs
6. **Locator,** which marks the corresponding position in time
7. **Project Explorer** for managing the different categories, additional tabs for the Slide Tray Editor, audio level display and text input.
8. **Toolbar** for editing various objects and components.

Capturing pictures and sound

As a necessary precondition for this tutorial you should already have created a project. You can use pictures and audio files from the Wings Platinum DVD. They are normally saved to hard disk when installing Wings Platinum. We will show you how to add these media files to the Media Pool. Please note that all media files contained on the Wings Platinum DVD are protected by copyright.

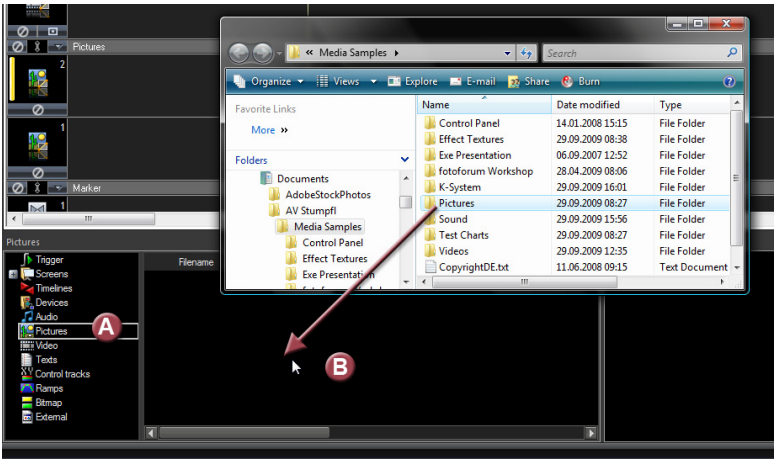
As you may well suspect, the Media Pool accommodates all media files of a project, e.g. picture, audio, video and text files. In addition to this, other items which are also important for your project, such as screen and device configurations and a collection of user-defined dissolve ramps are also managed in the Media Pool.

Clicking the wrong buttons while trying to reproduce the workshop is really no problem. Virtually anything can be undone. The Undo Function will help you undo or restore editing steps most easily. The **Undo** and **Redo** keys can be found in the function bar below the main menu.

This is how you can import existing media files

1. Folder **Media Samples** contains various picture and audio files which you can use for this workshop. In the main menu click **Extras** followed by **Open folder ▸Media Samples**, following which Windows Explorer will open. If this is not the case the sample files may be missing on your computer. Insert the Wings Platinum DVD and click **Install sample media** in the selection dialog.

2. In the Media Pool on the left highlight category **Pictures** (A). Bring the Windows Explorer window to the foreground and drag and drop folder **Pictures** into the Media Pool (B), following which the files are listed in the Media Pool.



3. Since Wings Platinum renders the media display data in the background it may take a while before the pictures are displayed. The number of files remaining to be processed is indicated in the bottom right corner on tab **Tasks**.

4. In the Media Pool click category **Audio** and drag and drop folder **Sound** from the Windows Explorer to the Media Pool.

5. If you highlight an audio file the Preview window on the right will show the graphic display of the audio.

6. Click on category **Pictures** and mark a picture file and the picture is enlarged and displayed in the Preview window.

Info If you have added large amounts of data into the Media Pool, you may be confronted with blue crosses in the Media Pool as an indication that display data have not been created. In such a case you can have the display data created all at once. Just click on **Create display data** in the tool bar below the main menu. This may take a while, depending on the number of files. You can, however, continue editing, since this process is running in the background.

Creating new media files

Wings Platinum offers various ways of creating new media files, e.g. recording sound via a sound card, copying sound from audio CDs, scanning pictures or capturing them via a camera (WebCam, video camera or digital camera) from the screen. The type of process depends on your audio source or the image capturing device available. All these procedures are explained in more detail in the Wings Platinum Help, in the following chapters:

Copying audio samples from audio CD

Recording sound via a sound card

Scanning pictures

Capturing pictures via video camera

As an example, we will show you how to copy a piece of music from an audio CD.

Insert CD and make preparations

1. Insert an audio CD into your CD ROM drive. If the Windows Media Player should start up a little later, abort it.

   Info You can prevent the Media Player from starting up by holding the **Shift** key for a few seconds while inserting the CD into the CD ROM drive.

2. In the main menu click **Media Pool** and **Create new files**.
3. In the left window section, click on the plus sign next to **Audio** and **Pictures** to display the subordinated items. These are the options for creating new media files. Now click **Audio CD**.
4. In the centre of the pop-up dialog you will find a list of audio tracks of this CD starting with 01. Should this list be empty, choose the correct CD drive at the top.
5. As **target directory**, Wings Platinum has chosen the corresponding folder. You don't need to make any changes.

6. If you have access to the Internet, you can download the names of the music titles and other information from a data base on the Internet.

   To do so, click on **Track names from Internet database**. When there is no Internet connection, you are requested to dial up.

7. If you do not have access to the Internet or if the name of your audio CD is not contained in the database, you can enter the **base file name**, e.g. an abbreviation of the CD title. In combination with the number, the tracks are then clearly defined. However, you can also enter individual names for your tracks. Just mark a name on the list and click the name again. Enter the corresponding name and press the **Enter** key.

Listening to and copying track samples

1. Highlight a title and click to listen to the sample.

   Info Some, usually professional sound cards, do not support this function. For these cases, you can directly connect a headset to the CD ROM drive.

2. If you click any other titles while playing back, playback changes over to the selected titles.

3. Click on to terminate playback.

4. Highlight the titles you want to copy (... one or more).

5. Click on . The dialog appearing allows you to keep track of the progress. The copied titles can then be found in the Media Pool.

   Info If you only require a small portion of a piece of music, you can also copy portions. You should, however, choose a larger section which leaves you enough scope for editing the sound object at a later time. Further information can be found upon pressing the **F1** key.

6. Terminate the Record Dialog by clicking **OK**.

Viewing, listing to and organizing media files

You have now added a number of files to the Media Pool and may continue adding further files at any time. As you can image, a comprehensive show may comprise hundreds or thousands of media files in the Media Pool. In the following we will show you how to view or listen to media files and how these files can be structured and organized in a system.

Viewing and listening to media files

1. In the Media Pool click on category **Audio** and highlight an audio file to make the graphic of the audio appear in the Preview window.
2. Move the mouse to the Preview Window and the mouse pointer will be provided with a Play symbol. After a mouse-click playback is started at exactly this location in the audio file. Click the preview window once again to stop playback.
3. If you click any other files in the Media Pool while playing back, the corresponding files are immediately played back. This way, pieces of music can easily and comfortably be compared and selected.
4. You can also sort the listed audio files according to different criteria. In the line containing the column headers click on **Duration**. Following this, all audio files are sorted in a descending order in accordance with this criterion. Click on **Duration** again to reverse sorting, i.e. the longest piece of music is now at the top of the list. After clicking on **Name** the files are again in alphabetical order.
5. Now click on **Pictures** and highlight a picture file to display the picture in the Preview window.
6. Of course, it is also possible to sort the pictures in accordance with the available criteria. Moving the scroll bar at the bottom to the right will cause further criteria to appear. Under **Comment** you can enter your personal remarks with regard to a file. Using the mouse, you can grab a column at its header and move it to any location, e.g. column

Comment to the very left. This means that the columns can be arranged and organized in any desirable way.

7. For category **Pictures** you can choose a different form of display which allows several pictures to be viewed at a glance, just like on a lightbox. Just click on button **Activate lightbox view** in the function bar below the main menu.
8. Just like on a normal lightbox you can sort and move the pictures by grabbing them with the mouse and dragging them to the desired location. In order to have free spaces for sorting, right-click the first picture in the top left-hand corner and **Insert empty row**.
9. You can also test dissolves of pictures. With the right mouse button, drag a picture onto another picture and a test dissolve will be displayed in the timeline window as long as the right mouse button is kept pressed. You can also test dissolves with various other pictures by just dragging the picture onto other pictures. If you don't like the dissolve time, you can change it by hitting a number key on the main keyboard between 0 (zero seconds) and 9 (4.5 s).
10. This test functions is an excellent means for evaluating individual pictures. Right-click a picture with the mouse-pointer and move the mouse-pointer slightly on it to make the picture appear in the timeline window.

Structuring content

The left side of the Media Pool consists of categories. They help you organize everything contained in the Media Pool. You can create as many folders and subfolders for every category as you like and name them in accordance with the contents. These folders are created, shifted and renamed, just like in the Windows Explorer. By highlighting a folder its contents are displayed in the right section of the Media Pool.

1. Right-click category **Pictures** and select **New Folder**. Name the new folder to specify a group of motives or a topic, e.g. **Landscape** and press the **Enter** key.

2. Now right-click folder **Landscape** to select **New Folder**; Name it for example, **Coast**. Repeat this procedure and create a new subfolder in folder **Landscape** called **Forest**, for instance.

3. These folders can now be used to accommodate the corresponding pictures. Click on category **Pictures**. Keep the **Ctrl** key pressed and highlight a few pictures with coastal motives on them. Grab them and move the pictures into folder **Coast**. Do likewise with any other groups of motives.

4. When clicking one of these folders in the Project Explorer, the pictures contained therein will be displayed.

5. This way, contents can also be organized in accordance with other criteria, e.g. according to Pop, Classic, Noises, Language, etc. for **Audio**.

6. For sorting a vast number of pictures into various folders you can open the corresponding folder in a separate window. Right-click a category or a folder and select **Open in new window**.

7. In list view, the folder contents can also be sorted in accordance with certain criteria. To do so, click at the header of a particular column, e.g. **Name**, for all the lines to be sorted in accordance with this criterion. Click again to reverse sorting. Sorting works likewise for all columns.

8. Presumably you may not be able to see all columns. Move the scroll bar to the right to see even the very right columns. If one of the last columns appears to be more important to you, drag the corresponding header to another location, e.g. further to the left. This way the order of columns can be arranged in accordance with your individual requirements.

Attention! Please bear in mind that the folders in the Project Explorer do not exist on your hard disk, but they are only used for structuring Wing Platinum! Wings Platinum only stores the references to the media files on the hard disk.

If you would like to take a break, save your practice project by clicking on **Save project** in the function bar below the main menu. You should now go on to the tutorial **Editing sequences of pictures and objects**. You will be

supplied with some basic information about how to deal with objects, which you may use for sound and video editing as well.

Editing sequences of pictures and objects

As a necessary precondition for this tutorial you should have added media files to the Media Pool. See tutorial Capturing pictures and sound. We can now start arranging a show in the timeline. First of all, you will learn how to edit objects. The next step will be harmonization of audio and picture objects. As mentioned before, any faulty editing steps or clicking the wrong buttons can be undone or situations be restored by using the Undo Function.

The Undo/Redo and keys can be found in the function bar below the main menu.

Editing objects

As was mentioned before, the way (media) objects are edited is identical for all types of media. This is why the explanations below are valid for all types of media. Let's start with a few basic "finger exercises".

1. If you haven't done so, load your project **Practice 1**. After starting up Wings Platinum, dialog **Create new project** pops up. Click **Last Projects** in this dialog and you will be presented with a list containing your Practice project as well.

2. Click on category **Pictures**. Using the mouse, grab a picture with the mouse and, while keeping the mouse button pressed, drag and drop it into a picture track, which can be recognized by a cactus, the symbol for pictures. Let go of the mouse button and an object is created.

3. For editing, the toolbar at the left side of the timeline is of central importance. Check whether tool **Edit object in timeline** is enabled (top button). If this is not the case, do so by right-clicking it or by pressing key **T**, as in "Timeline". Now you can grab the object at the info line (A) and shift it in time (to the right or left) or to other picture tracks. If this is not possible, check whether the dragging tool is set to **Unconfined dragging**. If necessary, press key **F** to enable it.

Info You can have a list of tools printed and place this sheet next to the keyboard to remember the tools and the shortcut more easily. Click Print Toolbar in the same Help topic.

4. Grab the beginning of the object (B) to extend or shorten it. The end can be modified the same way; fade-in and out times will not change. The yellow ramp band represents the progression in brightness. When it runs at the top of the object, it represents full brightness, while, at the bottom near the info line, it means that the object is completely dark.

5. To change fade-in and fade-out time enable tool **Stretch/Compress fades**. Alternative shortcut via key **D**, as in "Dissolve". Dragging the object beginning or the end (C) changes the fade-in or out time. The time is displayed at the top node, when you highlight it. The overall duration of the picture object is displayed in the info line to the left of the name.

6. Test the effect on the screen. In the event that the screen window is not visible, click on **Display screens**. Using the mouse, move the Locator to a location in front of the object and press the space bar to play back the object. Press the **Esc** key to stop playback.

7. But playback can also be started in a different way: After you have clicked the gray area of a track to position the Locator you only need to briefly click the right mouse button while keeping the **left mouse button** pressed. To stop, simply click the timeline. Just try it a couple of times and will get extremely fast.

8. Drag a second picture from the Media Pool into the picture track and move the picture object created thus (D) on top of the first one to produce a dissolve in the overlapping area.

9. Grab the dissolve at the hatched area (E) and the mouse pointer is provided with an X-symbol. Now move the dissolve in time by moving it to the right or the left. This way dissolves can also be synchronized with music. More about this later on.

10. Now modify the length of the dissolve. In the toolbar, enable tool **Stretch/compress fades**. Grab the beginning (F) or the end and drag the dissolve to achieve the required length of time. If you want the dissolve time to be displayed numerically, you need to mark one of the upper dissolve nodes by clicking on it beforehand. **Tip:** Temporary activation of a tool has the advantage that you can't forget to change over to other tools or to disable tools. **Tip:** Temporary activation of a tool has the advantage that you can't forget to change over to other tools/disable tools.

11. Play back the dissolve at fullscreen size. Click a location before the first object to position the Locator. Double-click the screen window to make it change over to fullscreen mode and press the space bar to start playback. Stop playback by pressing the **Esc** key, pressing the Esc key once again will cause the screen to return to window size.

12. In the Media Pool highlight several pictures. This works just like in the Windows Explorer:

    - Hold the **Ctrl key** down to highlight a number of pictures by clicking them.
    - Press the **Shift** key while clicking two pictures to mark all other pictures located between those two as well.

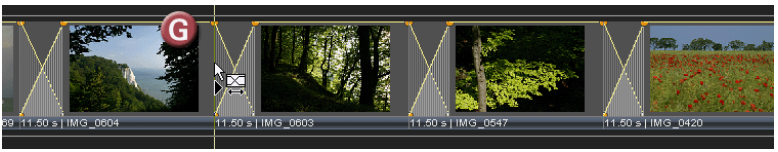
- An additional alternative: Right-click the Media Pool and a **Context menu** will pop up offering six different file selection functions. Just try them out.

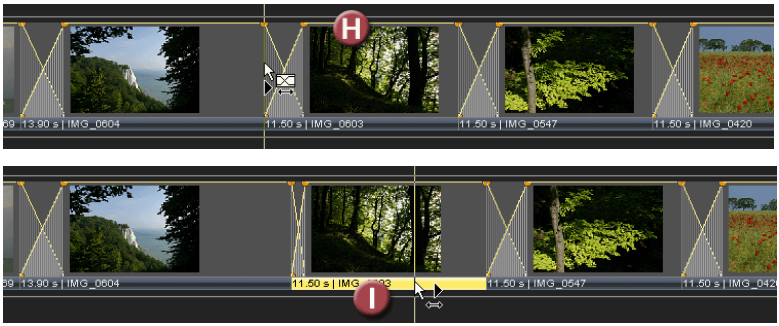
Info Try to start by testing dissolves on the lightbox in the Media Pool and determine the sequence of images you want to use in accordance with the tutorial in the chapter above. If you don't know anything about this yet, find the corresponding information under Sorting on the lightbox.

13. Now drag the highlighted pictures into the picture track to a location behind the existing picture objects and a dissolve sequence will be created. Fade-in, display and fade-out times are identical and chosen in accordance with the standard settings. Choose your own standard settings for future applications: Create a picture object with the required time settings. Right-click this object and select **Ramp** &endash; **Set durations as default**. Any further sequence of pictures dragged into the picture track will be created in accordance with these default settings.

14. Now we want to add a piece of music to the timeline. To do so, click category **Audio** in the Media Pool and drag the desired audio file into an audio track. Try to place the dissolves in a way which fits in harmoniously with the music. Of course these dissolves can also be varied in length. Keep testing the effect by playing back the sequences and continue practising what you have learnt so far.

15. If there are many objects in the timeline, function **Shift following objects** may be useful, which is enabled by clicking the button in the toolbar (shortcut via key **Q**). When shifting dissolves (G) all following objects are shifted along (H).





Tool **Shift following objects** can also be used for shifting objects (I) and for adjusting the right object edge (fade-out). Just try out how the various functions work and what effect they have. This may be a good idea if you need a gap to add a new image.

16. The next step is a fading in a title. With slide projectors you need to use a negative title, i.e. white or transparent writing and a black background.

17. Picture **IMG_0369** is an excellent picture for a titel fade-in, as it has large, quiet areas. Drag **Titel negativ** into a second picture track. If your project does not have a second picture track you can also drag the picture into the empty blue area of the Timeline to automatically create an additional picture track. For this purpose, however, your version must support a sufficient number of tracks.

18. Place picture object **Titel negativ** in parallel, i.e. at the same location in time, with the picture object **IMG_0369** (J) to produce a fade-in. Grab the Locator and move it and you can see the immediate effect in

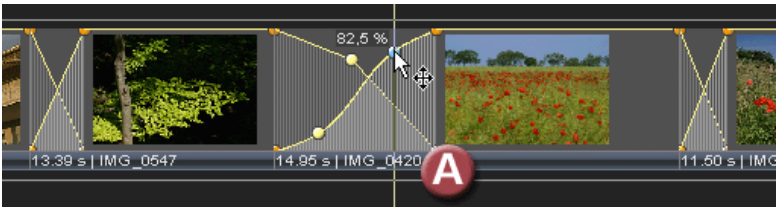
the screen window. For how to produce a "softer" title fade-in using a modified ramp, refer to the next section.

19. If the image with the title appears to be too dark on the screen, this may be due to the automatic brightness clipping. You can disable it for the object with the title by right-clicking the object with the mouse and selecting **Properties**. Place a checkmark next to **Disable brightness clipping** and close the dialog by clicking on **OK**.

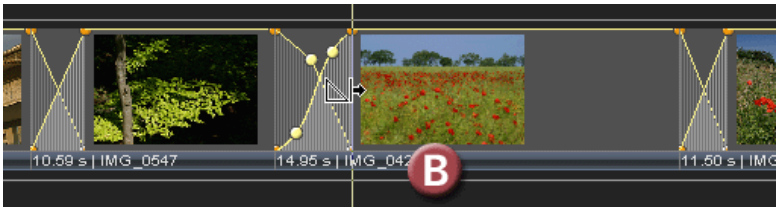
Editing dissolve ramps

Via ramps, dissolves can be given an individual touch. As you know, every object has four red standard nodes. They are linked up by a ramp band which has different functions depending on the type of medium. For images, it's the brightness that is normally changed to simulate a slide dissolve. For sound objects the ramp band refers to the volume and to transparency for videos. By setting additional nodes, the form of the ramp band can be changed very selectively.

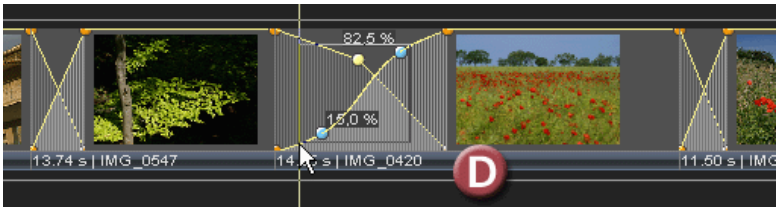
1. Shift beginning or end of a dissolve to extend it in length. Provide the ramp band (fade out) with an additional node by double-clicking it. Grab it and move it up. Now set an additional two nodes as **Splines** into the fade-in portion. In the toolbar, click tool **Spline Keyframes** and set a node in the ramp. When shifting you will notice the difference &endash; the ramp band starts bending. Use it to design harmonious ramps (A). Delete a node by double-clicking it.



2. While pressing the **D** key, grab the end of a dissolve and change its length. The ramp properties will remain the same (B, C). Even when you change the height of a red standard node, will the ramp properties remain the same.



3. Now highlight all nodes of the fade-in. This is done by double-clicking the nodes while holding the **Ctrl** key down or by drawing a **frame** with the mouse. When drawing a frame, make sure that you start near the ramp band (D) and the X-symbol at the mouse pointer will disappear. Just practice this a few times.



4. When you grab one of the highlighted nodes, all other marked nodes are moved along. Only either the nodes of a fade-in or those of a fade-out can be shifted this way. Example (E) is a Spline. This is why the ramp shape changes. If you do the same with standard nodes, the ramp band will behave more neutrally. Just try it out.

5. Go on editing a few more ramps in the way we have shown you. Keep checking the effects of your changes in the screen window by playing back the corresponding positions. Now drag some more pieces of music into an audio track and arrange them in line with your dissolves. You will see that it works in the same way as for picture objects.

6. It goes without saying that the ramps created such can also be used for other pictures without nodes having to be set and adjusted individually. Category **Ramps** in the Media Pool can be used for collecting your own ramps. Click on the category to open it. This is where you will add your own ramps in a few moments.

7. Right-click the hatched area of the dissolve you provided with additional nodes and select **Ramp &endash; Copy to Pool**. Repeat this for some other ramps to collect a number of very different ramps in the Media Pool.

8. In the Media Pool, ramps are displayed as objects which can be edited in the Properties Table. A ramp object consists of three portions: Fade-in portion (H), middle portion (I) and fade-out portion (J). The time aspect of these portions and the value of a standard node are irrelevant for the Preview Window. It only gets important when the ramps are moved into the timeline as objects.

Note: This illustration is based on Wings Platinum 3, but it still applies. However, the curves are not shown in the Preview Window but in the Properties Table.

9. The middle portion (I) of the ramp object is usually a straight line. However, it can also be shaped as illustrated by ramps **Flash 1** and **2**. You can define a **standard ramp** for new picture objects by double-clicking the required ramp in the Media Pool. It will be provided with a red frame and a yellow symbol (F). This ramp is applied to all new picture objects when dragging picture files into the timeline.

10. In the Preview Window, the ramps can be edited in a number of ways. Right-click the Properties Table to display a context menu the functions of which are explained in detail in the Help under Predefined ramp forms. Double-click the Properties Table title bar (G) to detach and enlarge the window, which allows the ramps to be edited more accurately and comfortably. Double-click the title bar and the Properties Table returns to its old location.
11. Do you want to apply the ramp form prepared such to an object? Grab a ramp in the Media Pool and drag it onto a dissolve. Finished. But it's also possible to apply parts of a ramp to an object by dragging the ramp onto a fade-in or middle portion of an object, for example. Try using an extreme curve. This way you can easily see the immediate effects of the changes.
12. As mentioned before, all ramps can also be used for audio and video objects. Just try out dragging a ramp onto a sound object. Practice using what we have told you in your Practice project and keep refining the dissolves of audio and sound.

The next step is to create your sound track. This you will do in the tutorial **Creating and editing the sound track**.

Creating and editing the sound track

As a necessary precondition for this tutorial you should already have completed tutorial Editing sequences of pictures and objects where we have used pictures to show you how to edit objects and ramps. You may even have dragged a few sound objects into the timeline and found out that they can be edited and dissolve just like picture objects. However, there are a few audio-specific functions, such as setting the volume, audio cuts or correct audio level control. This and more is what you will find out about in this lesson. As mentioned before, any faulty editing steps or clicking the wrong buttons can be undone or situations be restored by using the Undo buttons and . But let's get started now...

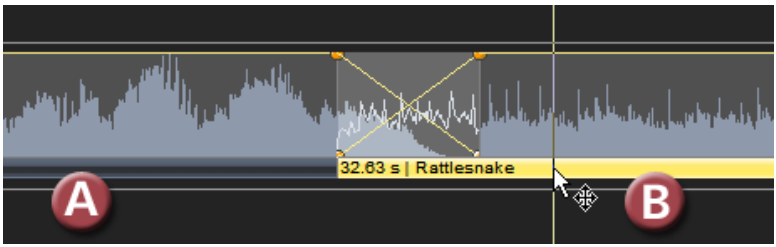
Why do I need a sound track?

In a show, the sound track, essentially, has two functions: First of all, it carries the emotion and secondly, it forms the time schedule for a show. When using still pictures, slide changes can be harmonized with the rhythm of the music, which you are going to do at the end of this tutorial.

Dissolving music and adjusting the volume

Load your tutorial project and start with a simple audio dissolve.

1. In the Media Pool click category **Audio**. Drag audio file **Einsamer Wolf** (A) followed by **Rattlesnake** onto an audio track. Move them on top of each to produce a dissolve. By the way, audio dissolve are frequently called crossfades in musical jargon. Play the crossfade and, if necessary, extend the overlapping area by shifting the objects (B).



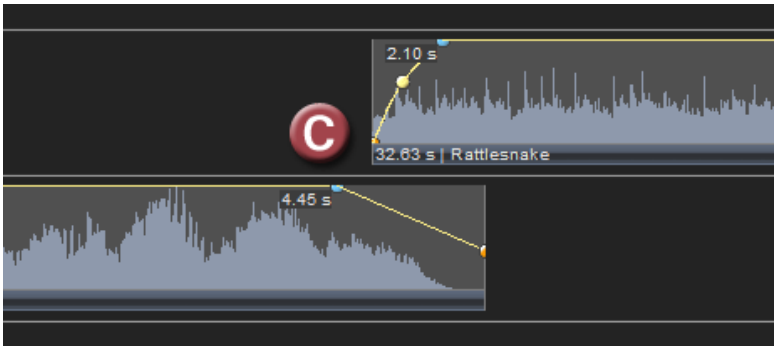
2. Audio file **Einsamer Wolf** is to be used as a sort of low-key overture, so **Rattlesnake** should be slightly louder and more dominant. Therefore you must change the volume. Highlight object **Rattlesnake** and the pa-

rameters will be displayed in the Properties Table. Right-click object **Rattlesnake** and select **Properties**. Under **Peak Level** / **Sample** you can see that this piece of music has a peak level of 0 dB which means that the volume cannot be increased without losing information during output. Click **OK** without making any changes.

3. We therefore have to reduce the volume of **Einsamer Wolf**. Right-click this object and select **Properties**. Reduce the volume with the slider by five to six dB. **Tip:** The volume controls allow very selective adjustment. They can be grabbed and moved with the mouse, that's clear. But you can even change the volume by exactly one dB by clicking either below or above the slider. Move the mouse wheel, and the volume is changed in tenths of dBs. Finish by clicking **OK**. The set volume is displayed again in the info line in front of the file name.

4. Now play this part and make adjustments, if necessary. You may have the feeling that this dissolve is not really harmonious enough Well, let's try an asymmetrical dissolve. Move one of the objects onto a second audio track. If it should remain fixed in time you hold the **V** key to temporarily enable tool **Vertical dragging**.

5. This way, you can edit both the superimposition of audio information and both ramps independently (C) and have maximum freedom to do whatever you feel like. Let's try to create a dissolve as illustrated below.



Place further pieces of music one after each other. Usually, moving them on top of each other will achieve good results, in particular when you shape the dissolve ramps by means of nodes. Adjust the volume of every object to

match the existing objects in the audio track. To provide ample scope for adjustments, start by reducing the existing pieces of music in volume.

Hold the **Ctrl** key and click the info line of both objects to mark them. Right-click one of the sound objects and select **Special Functions** – **Change volume**. Reduce the volume with the slider by six dB and click **OK**. This will reduce the volume of both objects, while the relation of the volume values will remain constant.

Prior to the sound montage you can cut a sound object by moving beginning or end of the object with the mouse. If you want to cut off a large chunk, it is easier to use the functions in the context menu. Right-click about the location in the sound object where you want to make the cut and select **Cut left part**, **Cut right part** or **Divide**. Practice using these functions for a number of sound objects and add further pieces of music to your sound track.

Recording and speech editing

High-quality recording of language is a very delicate task. The text must be formulated, you need a good microphone and a quiet room with good acoustics. In addition to the speaker you need at least one extra person for the technicalities and for speech control during recording.

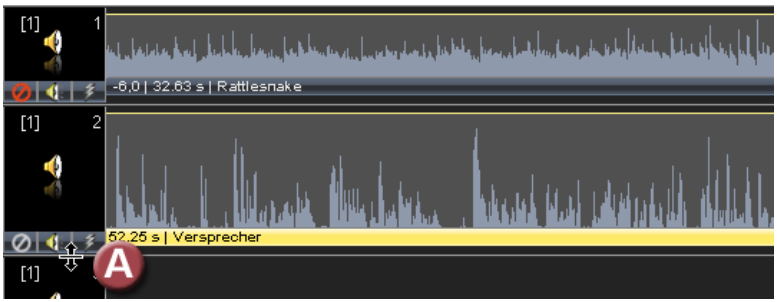
If possible, do not connect the microphone directly to the computer – sound card microphone inputs do not allow for high quality. It's better to apply the microphone signal to an external preamplifier first – this could be a recorder in Record Pause Mode or an audio mixer – to amplify it before it is recorded via the sound card's Line Input. Any details as to how record with a sound card can be found in the Help under Recording sound via sound card.

Just continue recording and stop only for longer breaks. The less the speaker is aware of the technical details around him, the better will be the quality of his speech and you can fully concentrate on speech control. You will end up with a recording consisting of several large files which can be edited unhurriedly at a later time. Once the rough version is located in the timeline, you can cut it up into pieces and compare different versions. The best versions can be exported as new files, so you can delete the large file containing the rough version from the hard disk after editing is completed. Exporting, however, is not absolutely necessary. Taking into consideration that you will only need about 10 percent of the rough version it would clear-

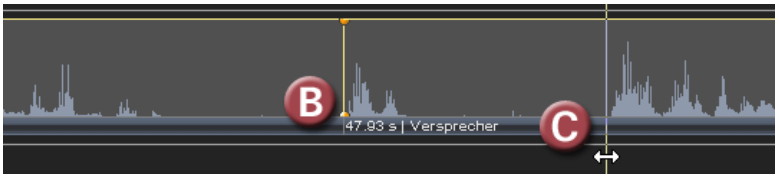
ly be a waste of space to continue using the large file and the rough version for your project.

This tutorial will help you to find out about the principles of speech cutting illustrated at an example file.

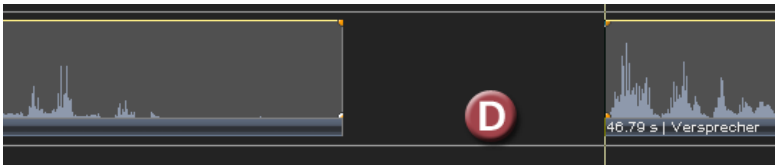
1. Drag file **Versprecher** from the Media Pool into an audio track in parallel with the arranged pieces of music. If there is no vacant audio track, you can simply drag the sound file into the empty dark gray area of the timeline. A new audio track is then created automatically for the object.
2. To be able to listen to the speech object without music, you should deactivate all other audio tracks by clicking button in the track head, which then turns into a red symbol .
3. First of all you should listen to the whole speech file in one go. You may have noticed that the file contains a few slips of the tongue which you may want to cut out. Start out by enlarging the display. Click the zoom-in button at the top left side of the timeline three times. As an alternative, you can also use the **plus** key on the numeric keypad for zooming.
4. Now grab the lower separation line in the track head with the mouse and pull it down (A) to increase the track height. You can even choose a larger track height than in the illustrations to allow accurate editing.



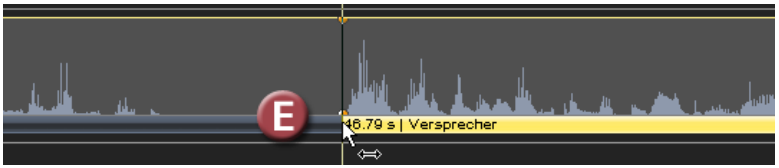
5. Now play the sound object until you hear the first slip of the tongue and stop. Move the Locator to a position before the slip of the tongue, right-click the Locator in the sound object and select **Divide** (B).



6. Now move the Locator to a position after the slip of the tongue but before the part that is correct again. (C). Right-click the Locator in the sound object and select **Cut left part** and the mistake will disappear (D).



7. Now you only need to remove the gap. Press the **F3 key** or click **Snap to Objects** in the function bar and the Locator will turn magnetic. Click the track head of the track containing the sound objects to be edited and it will be highlighted in yellow. This restricts the magnetic effect to this track only. Now grab the right sound object at the very beginning of the info line and move it towards the other object until it snaps accurately in place (E).



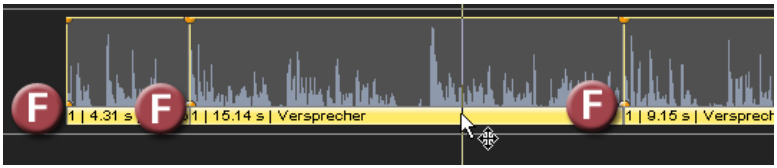
8. Play the section to check whether cutting was ok. You may have to press the **X**-key on the numerical keypad (multiplication) to return to the normal display. As an alternative, you can also use the zoom button for this purpose.

9. All the other mistakes can be cut out likewise. Don't forget to deactivate Mode **Snap to objects** by clicking on (...or, alternatively, by briefly pressing the **L** key). After the sentence finishing with "... von British Columbia bewahrt." there should be no further mistakes. This is

where you should divide the object. Example file "Versprecher" in the audio track should now be split up into four objects. The first three objects should be used as comments. There are two ways to continue. We would like to show you both.

10. The first would be Grouping, which means that the "audio chunks" are sort of stuck together and can be shifted just like one object. Hold the **Ctrl** key and click the info line of the first three objects to mark them.

11. Right-click one of these objects and select **Grouping** ▶**Create new group**. Following this, these three objects are defined as Group **1**, which can also be seen at the beginning of the info lines (F). Whenever you grab one of these objects, all other objects of this group are highlighted as well and can be moved along.



12. An alternative is to export these three objects into a new file. This is a good way when your rough version is a very large file out of which you only need a little portion. Before exporting you should make sure that the cut is alright. After exporting the cuts can no longer be changed, they will be a fixed component of the new file.

13. Mark the three objects. Right-click one of these objects and select **Special Functions** ▶**Export**. Click on **Select Filename** and enter a name, e.g. "Victoria", followed by **Enter**. Leave the preset format **32 Bit Float**. It is absolutely loss-free, even with an incorrect audio level.

14. Check **Replace original objects by exported audio file** and click **OK**. Now a new file is created and the three objects in the audio track are replaced by a single one.

Combining voice and music

After cutting the comment, you can combine it with some music. To do so you need to harmonize the volume of music and voice, i.e. turn down the music when the voice part starts.

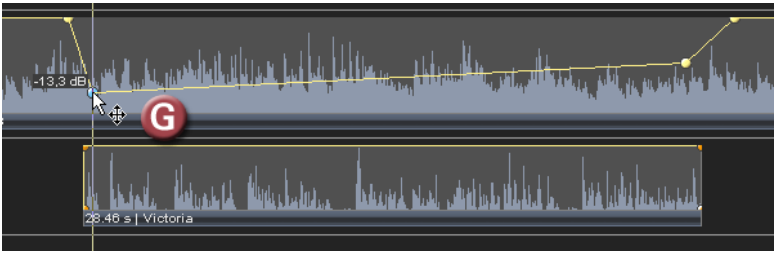
1. On two audio tracks, arrange comments and music to be in parallel. Choose a piece of music which is longer than the comment. You may have to copy new pieces of music onto your hard disk, as shown in tutorial **Capturing pictures and sound**.

2. Right-click the comment object and select **Special Functions** – **Change volume.** Finally, click on **Peak Search**. Note down the approximate values displayed for **RMS level**. They should be around minus 16 dB. The RMS level informs you about the loudness of a sound object. Click on **OK**.

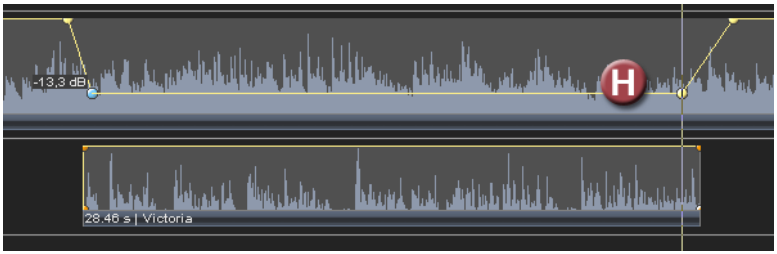
3. Determine the RMS level of the piece of music likewise. It will probably be distinctly higher for music. Should "Inf" be displayed you need to reactivate the audio track by closing the dialog box and clicking on . With the slider adjust the RMS level to correspond to the values of the comment object. Approximate or average values will suffice. Now click **OK**. Both audio samples should appear to be equally loud.

   Tip: By the way, the volume control allow very selective adjustment. It can be grabbed and moved with the mouse, that's clear. But you can even change the volume by exactly one dB by clicking either below or above the slider. Move the mouse wheel, and the volume is changed in tenths of dBs.

4. Play both objects. Although both audio samples are equally loud, we have to reduce the volume of the music while the comment is spoken. This is done by setting nodes (by double-clicking) as you will remember from chapter dissolve ramps (G). Due to a lack of space the display below is slightly compressed. If the nodes cannot be set as illustrated, make sure that tool **Normal keyframes** is enabled.



5. It is difficult to move both inner nodes to exactly the same level (G) with the mouse. This is why we have incorporated a special function. Highlight the node which is at the correct height. Right-click the other node which is to be aligned with it and select **Align**. Following this, both nodes will be on the same level (H) and the volume reduction between the two nodes will be constant.



6. You can now arrange both music and comments on your sound track. Try to coordinate pictures with sound and turn it into a harmonious little practice project to be played back in Wings Platinum.

When you have finished the soundtrack and start creating the presentation data, e.g. audio CD, video or EXE presentation, you should check and correct the audio level of the complete soundtrack. See **Determining the soundtrack peak level**. Further valuable information on how to deal with volume and audio level in the sound track can be found at Tips for volume and audio level in the Help topics.

Testing your show with slide projectors

Now that you have prepared a few sequences with music in your practice project, it's about time to test your show with the real slides on the large projection screen. You need to take a few preparatory steps:

- **Set up your projection system**, as described in the operating instructions of your control unit.
- **Fill the slide trays** as indicated in the Slide Tray Editor.

Even when you have not been using your own pictures for practising, you should now practise dissolving with projectors and a few real slides in the trays. The fact that the slides do not correspond with the pictures in the timeline should not be a problem Just concentrate on how the projectors react and how they dissolve.

Checking tray sorting and printing lists of slides

1. Open your practice project and click **Timeline** in the main menu and **Assign slide tray positions**. Should there be an error message saying that there are not enough projectors for a correct assignment of slides, modify the dissolves in question until the sequence can be run on the available projectors. How this is done, is explained in the Help under Collision of dissolves.
2. When the slides are assigned without any error message, you can print out the list of slides for sorting the slides into the trays. In the Project Explorer, click on tab **Slide trays**.
3. Right-click a picture in the corresponding tray and select **Print slide tray**. Proceed likewise for the other trays.
4. Now sort the slides into the trays in accordance with the lists and install the correct trays at the projectors.
5. To avoid Wings Platinum resorting the slides in the Editor, you should lock the slides. Right-click a slide and choose **Select all slides**. Now all slides in the trays should be highlighted.
6. Right-click a highlighted picture and select **Lock slide in tray slot**. As Wings Platinum can no longer re-sort the slides, you can only make changes which do not require any re-sorting. Otherwise you will be confronted with a message in the Preview Window when playing back,

saying that there are not enough projectors for a correct assignment of slides.

Testing dissolves with projectors

1. Activate your projection system. Make sure that all cables, i.e. also the serial connection between control unit and computer are connected correctly .

2. In the tool bar below the main menu click on **Enable device ports**. As a sign for communication between the control unit and the computer, button is impressed and displayed in color. In addition to this, PC LED will light up at the Stumpfl control units. The devices will carry out all programmed sequences in synchrony and follow the Locator. After starting the first synchronization process it may take a few seconds for the devices to respond.

3. Start playback and the slide projectors will play back the programmed sequence exactly and in sync with the music. After stopping playback and in order to do some more and lengthy editing, it would be a good idea to disable the device control again to protect slides and lamps. As an alternative to pressing button you can also press the **F8** button. The lamps will be faded out and the devices set to standby mode – provided they support this mode, e.g. Ektapro and Leica RT projectors.

4. You can now check your show by running it on the projectors and make corrections, if necessary. In the course of complicated dissolves you may find out that the display on the large screen looks different from the simulation in the screen window. This is why it is so important to use your projectors to "fine-tune" the show. The reason for this is mainly to do with the inertia of halogen lamps. During very fast fade-ins, in particular, they only react with a delay.

Once your whole show is perfect, you can continue by creating the presentation medium, which allows you to present your show even without computer. What presentation medium you require, depends on the control technology used. Remarks on presentation media to be used can be found in the

manuals of your devices. Wings Platinum supports output of the following presentation media:

- **Analog tape** ... control signals are recorded on one track. This requires a suitable control unit and a tape recorder.
- **Audio CD** ... control information is copied into the 16th bit of the audio data. This requires a CD writer. The most convenient way to do so is via the Advanced License of Wings Platinum and up as it allows direct output of audio CDs in Wings Platinum. For playing back you need a CD player with digital output (... bit 16 must be output without any modifications!) and a corresponding control unit.
- **CF Card** ... containing control information and MP3 compressed audio files. The presentation data are generated by Wings Platinum and copied onto CF card. For copying onto CF Card, the computer must be equipped with a CF Card drive. Presentation is on a Stumpfl unit with integrated MP3 player, e.g. SD Event Control or SD EC 2X4.
- **EXE presentation** ...may be an interesting alternative to presentation via slide projectors. This requires a computer for playback.

In the Wings Platinum Help you will find further information on how to create presentation media under **Exporting media**.

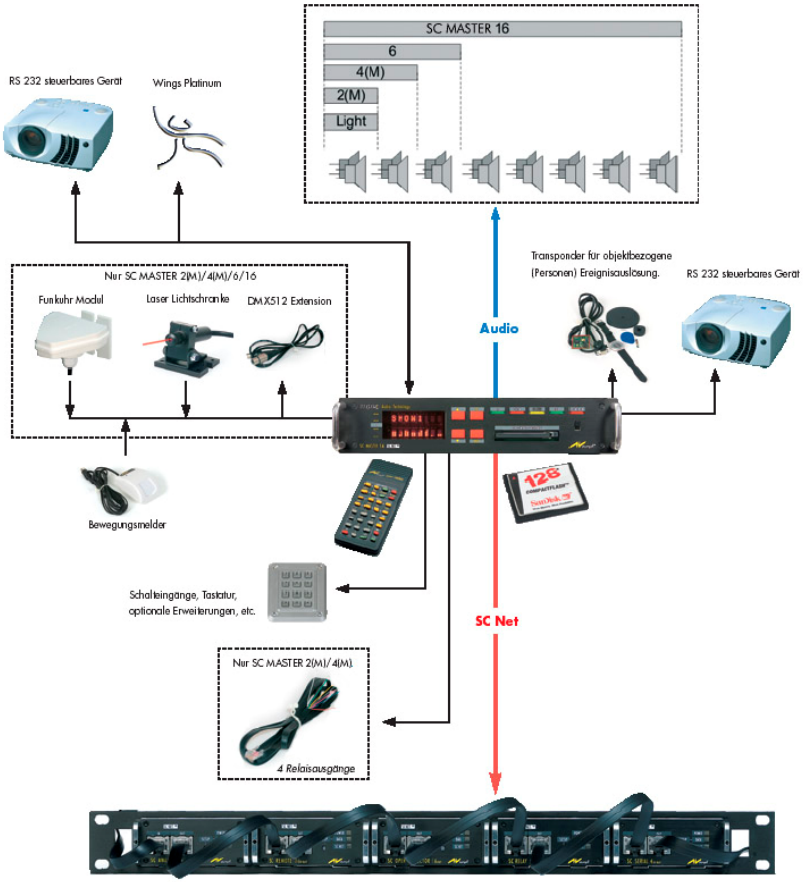
Show Control Examples

The Stumpfl Show Control System

In the Wings Platinum concept we have informed you about the various ways of media integration and about uniform editing of various media objects. One thing that plays an essential role for Show Control projects is permanent and accurate synchronization of all media and devices. No matter, where you move the Locator, all devices immediately assume the current status – and this works as well while editing the program.

This high degree of convenience during production is based on intelligent and powerful control technology: the Stumpfl SC Net System. The heart of an installation is the **SC Master** unit. This is a show controller with integrated MP3 player and up to 16 audio channels, which allows connection of additional **SC Net** Modules to perform any type of control tasks, e.g. switches (relay or open collector), 0 - 10 Volts, DMX, RS 232, servomotors, etc. All SC Net modules are run via one single bi-directional connection, which also serves as a power supply.

SC Master / SC Net system overview



SC Master units

SC Master units are the central control units in an installation. They feature a show controller and an MP3 player allowing undelayed reading of audio data from CF Card. The CF Card also contains the program for media control. You can choose between six different models:

- **SC Master 16** ....features 16 audio channels with balanced outputs
- **SC Master 6** ...features 6 audio channels with balanced outputs (allows software upgrade to SC Master 16)
- **SC Master 4** ...features 4 audio channels with unbalanced outputs and a remote-controllable mixer with 4 stereo inputs and a microphone input
- **SC Master 2** ...features 2 audio channels with unbalanced outputs and a remote-controllable mixer with 3 stereo inputs and a microphone input (allows software upgrade to SC Master 4)
- **SC Master Lite** ....features 2 audio channels with unbalanced outputs
- **SC Master Lite LS** ...features 2 audio channels with unbalanced outputs and a 2 x 20 Watts amplifier

In addition to the SC Net ports, the devices (SC Master 16 in our case) partly feature further ports, such as DLC-IN/OUT (control of slide projectors), REMOTE (for DMX or IR control), RS 232, DATA IN/OUT (for transponder or external keyboards). For the details refer to the manuals of the corresponding devices.

SC Net Modules

The SC Net System is a flexible solution to perform nearly all types of media control. Various SC Net modules for different output /input requirements are available, which are connected via one single bi-directional data line.

What would you like to know?

What types of modules are there?

SC Net Modules

- **SC RELAY 8out** ...Switching module with 8 floating relays for any switching operations. Type of switching contact: SPST-NO (single-pole single-throw – normally open), maximum relay load: 30 VDC / 3 A, 48 VAC / 3 A, art. no: SCN-REL8O
- **SC OPEN COLLECTOR 16out** ...Module with 16 open collector switching outputs for switching any type of load. Open collector switches are particularly suited for high switching frequencies, as they are non-wearing compared to relays. Type of switching contact: Transistor open-collector outputs, maximum contact breaking capacity: 48 VDC / 400 mA, maximum sum current of all contacts: 2 groups of 1,000 mA each, art. no: SCN-OC160

- **SC ANALOG 8out** ...This module allows control of room illumination, floodlights, servo motors and other devices operated with 0 to 10 V DC. It has 8 control channels. Output type: Voltage output 0 – 10 V, 10 bit resolution (approx. 10 mV steps), maximum output current: 20 mA (source and sink), art. no: SCN-ANA8O
- **SC ANALOG 16in** ...16 analog input channels turn this module into a powerful unit for interactive control operations and for recording brightness values or position data in the program via connected sliders or joysticks. Input type: Voltage output 0 – 10 V, 10 bit resolution (approx. 10 mV steps), input impedance: 100 kOhm, art. no: SCN-ANA161
- **SC SERIAL 4in-out** ...This module has four configurable RS232 outputs/inputs for controlling any type of components via the corresponding ports, such as, for example, professional CD players, DVD players, video recorders, data projectors, displays, etc.In / outputs:Standard RS232 voltage level, art.no.: SCN-SER4IO
- **SC DMX in-out** ...This module features an output for illumination control and other devices responding to DMX512 protocol. Up to 256 devices can be controlled. Outputs: Standard DMX512 voltage level, art. no.: SCN-DMXIO
- **SC SERVO 16out** ...Standard modelling servo motors can be connected to this module. The rotary movement is conveniently programmed by drawing a ramp in Wings Platinum. This feature, which allows rotary positioning, allows interesting mechanical effects to be implemented without any extra efforts. Outputs: Standard PWM output (positive pulse) and power supply (max. 1,000 mA for 8 servo motors), art. no.: SCN-SRV8O
- **SC REMOTE 16in-out** ...A combination of switching inputs and outputs allows one optical acknowledgement (LED) per channel, which makes this module an ideal unit for any type of external control (e.g. keypad for permanent installations, limit switches, feedback signals, buttons, other switching contacts). Inputs: Digital inputs with hysteresis, ON when 7 VDC are exceeded, OFF when signal falls below 3 VDC, maximum input voltage 12 VDC, input impedance: 5 kOhm, outputs: Control of LEDs, 20 mA per channel

Cable Connections and Power Supply

One single signal line made of standard CAT5 cable with a maximum length of up to 1,000 m controls all SC Net modules. Due to their compactness, these units can be placed next to the devices to be controlled, so that the lengths of the numerous connecting cables can be kept short.

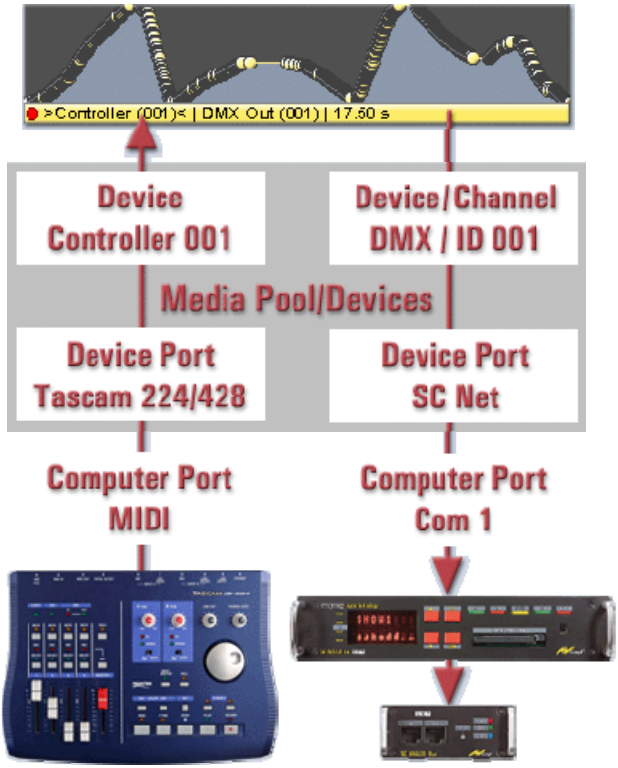
SC Net Modules are supplied via the SC Master unit and the signal line. For special applications, the modules can also be supplied via the external power supply NG1. The power supplied additionally is not only available for the module connected to the power supply unit, but for all SC Net modules within the network.

Iso-PlugIn

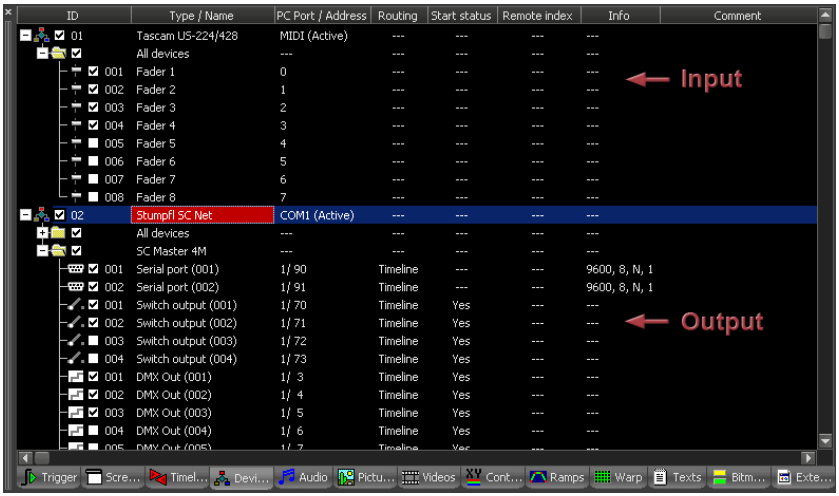
In a widely branched network of cables, where the signal line ground is connected to external devices, ground loop and differential voltage may occur. This may obstruct proper functioning of the system. A protection against this is formed by the Iso-PlugIn (IP), which is used for complete isolation of SC Net communication incl. power supply from the module inputs/outputs. SC Net modules can be ordered with built-in Iso-PlugIn, although subsequent retrofitting is also possible at any time.

Device structure and data flow

Wings Platinum with its modern software architecture permits control of nearly an unlimited number of devices. Connection from software to Show Control hardware is via device ports which are allocated a computer port and a protocol. In principle, the integration of input and output devices is identical, as many devices operate bi-directionally.



In our example both an input and an output device are linked up with a data object. In the Media Pool, the hard is displayed as **Device ports** and devices, e.g. **control channels**, **slider controls**, etc. From the Media Pool, you simply drag a control channel or a slide control onto the data object or into the timeline.



- **Device ports** always feature a protocol and are linked up with a **computer port.** The remark **Active** means that the device control is currently enabled, otherwise the it is disabled (**inactive**).
- Devices are split up into categories, e.g. switching channels, analog channels (0 – 10 Volts), DMX channels, faders, etc. Within one category they are distinguished by their **ID numbers**. Type of device and ID number allow a clear identification within Wings Platinum and are displayed in the object info line. The hardware, on the other hand, uses **addresses** which, in their structure, depend on the type of devices used.
- By unchecking the column **ID** a device port or a device can be disabled.

Examples of typical projects

Sample projects

Every installation is different and has its special requirements. By way of examples we would like to show you some classical applications to allow you make immediate and full use of the potential of Wings Platinum for your productions.

In our explanations we will concentrate on the essential steps necessary for a particular project. On order to find out about the details, use the Help function. Click on the **links** to proceed to further topics and press the **F1** key to quickly access the required information.

Controlling devices

In Wings Platinum, all media and devices can be arranged, programmed and controlled within one single project. Any function required, such as switches, 0 – 10 Volts control voltages, DMX control channels or serial commands are simply arranged in the timeline tracks as objects. Everything you arrange in the form of objects is carried out synchronously by the connected devices and, if necessary, they even follow the Locator during editing. Everything is absolutely and constantly synchronized.

The Wings Platinum Advanced License and up allows you to program up to 32 control channels (switches, DMX, voltages of 0 – 10 V or servo motors). One of these 32 channels may be an RS 232 channel. To be able to use an arbitrary number of control channels you require the Show Control Module.

In this example you will find out about the steps which are necessary to control devices:

1. Creating a project with device ports and control channels
2. Programming data objects and testing the program with devices to be controlled
3. Using external input devices for control purposes (optional)
4. Creating presentation data

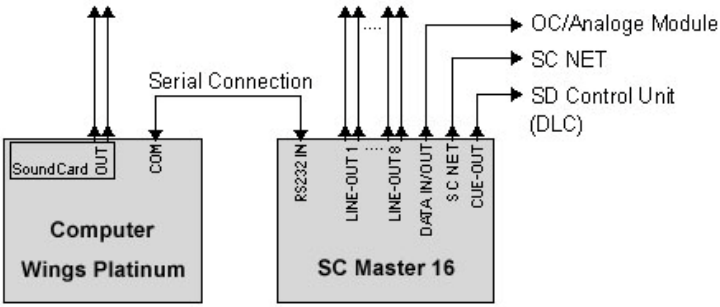
Creating a project

The simplest way of creating a project is via the Project Wizard for **Mixed Media Projects**. You should proceed as follows:

1. Enter **Name** and **Folder** for your project.
2. Under **Media** select **Show control** and click on **Next**.
3. In the **Show Control** dialog click on and select the serial port for connection of the Master Module.
4. Click on **Add SC Net Module** and a dialog box will appear.
    - Now click on and select the corresponding module, e.g. **SC Master 16**. Under **Device functions** / **Number of devices** the functions supported by the module are displayed.
    - Under **SC Net Address** consecutive addresses are set automatically. Enter a different address if the preset one does not match your device set. For the Master component you always need to choose address **1**. See also *Setting SC Net addresses at the hardware*.
    - Under **Device functions / Number of devices** select the corresponding resources. If you know that you only require a certain number of functions from among the total of available functions, you can enter a lower number. This may be useful for DMX, for example.
    - Click on **OK**. Following this, a device folder is displayed in the **Media Pool** – **Devices** carrying the module name.
5. You may have to repeat this procedure at item 4, to add further modules. Finally, click **Next**.
6. Under **Timeline tracks** you can specify the required number of tracks . For Show Control functions you need universal tracks (0 – 10 Volts, DMX, switches) and marker tracks (RS 232) and audio tracks, if applicable. Do not worry about the entries; tracks can be added or removed any time.
7. Click on **Finish** and the timeline will be displayed.

Controlling devices via data objects

1. In the Media Pool click on category **Devices**. The devices added via the Wizard are available as folders.
2. By clicking on the plus sign next to a folder, the control channels of a device are displayed.
3. Start up your system. Check whether the Module addresses correspond to those specified in the Media Pool. See *Configuring the SC Net System*.



4. Before using a control channel you should name it appropriately, e.g. room illumination, screen up, gobo, etc. Right-click the control channel, select **Properties** and enter the corresponding name.
5. Using the mouse, grab a control channel and drag it from the Media Pool into a universal track. If no suitable track is available yet or if the data object is to be created in a new track, drag the control channel into the empty timeline space below the tracks. A new universal track is then created automatically.
6. When you look into the Media Pool, you will see a checkmark next to the control channel you have just dragged into the track. This means that it is active. By removing or placing a checkmark, devices or control channels can be activated or deactivated.
7. Data objects can be modified in their duration, while the output values correspond to the ramp band progression to be recognised by the turquoise line. Via the ramp shape you can change the values arbitrar-

ily at any speed, i.e. dimming, moving, rotating or whatever function the devices to be controlled allow.

- There is one important difference between data objects and other types of objects: the last value of an object is retained. This means that a spot light, for example, maintains its brightness level, even if the object has already been terminated. Therefore, you only require data objects if you want to modify values. The decisive factor is the location of the red standard node:

  Compared to other objects, a data object only has two standard nodes. They are always located at the beginning and the end of an object. Additional nodes are blue and are set by double-clicking. See *Editing objects* and *Editing the ramp band*.

- In accordance with the ramp shape, the output control voltage at 0 % = 0 Volt and at 100 % = 10 Volts.
- For DMX data objects the ramp shape is output in accordance with the DMX512 protocol. Exact values for triggering special functions can be programmed via functions **Assign value** or **Value markers**. See *Outputting defined values*.
- For switches there are special switch objects which are very efficient for programming because they can only assume two conditions. See *Programming switches*.
- Serial commands are markers sending a sequence of characters. See *Programming serial commands*.

8. After placing the first data objects into the tracks you will be able to control a device. If the device control has not been enabled yet, click on **Enable device ports** in the function bar below the main menu.

9. Move the Locator to a position just before the data object and start playback by pressing the **space bar**. If you prefer starting playback with the mouse, click the gray area of a track, hold the left mouse key and right-click in addition to this. This sounds rather complicated, but is quite simple in practice. It is also an extremely fast way in combination with positioning the Locator. To stop, simply click in the timeline. As an alternative, you can also press the **Esc** key.

   Info When you press the **space bar** during playback, Wings Platinum is put into Pause Mode. This mode does not allow editing. Clicking the timeline cancels Pause Mode.

10. As you will have found out, all connected devices are run and controlled synchronously. The same applies to pictures, video and sound. When you edit object and move the Locator in the timeline, all devices are also run synchronously which means that optimizations will be mere pleasure. Detail information on how to add audio information to your project, can be found under Recording sound via sound card and Copying sound from audio CD.

Using external input devices

Wings Platinum offers a variety of ways to control processes via external input devices. You can, for example, use external sliders to adjust volume or light, or keys to operate switches. These control data can even be recorded in data objects. To find out about this function in principle, we will show you how to control a switch via a key on the PC keyboard.

1. Create a data object for a switch, e.g. for a relay.
2. Click one category **Devices** in the Media Pool . Right-click the Media Pool and select **PC Hardware**. ...See also *Configuring the device control*.
3. Click the plus sign next to **PC Hardware** to display the keys to be allocated.
4. Using the mouse, grab the corresponding key, e.g. **Ctrl key left** and drag it to data object for the switch. The data object info line will show the name of the allocated control element.
5. Right-click the corresponding data or switch object, select **Mode** and **Start Recording**. A red point is displayed at the beginning of the info line as an indication for this mode.
6. If the device control has not been enabled yet, click on **Enable device ports** in the tool bar below the main menu.
7. Enable Record Mode for the Timeline by clicking **Record Mode** in the tool bar and the button is displayed with a frame around it and in color.
8. Move the Locator to a position in front of the data object. Start recording by pressing the **space bar** while holding the **Ctrl** key. The length of the data object corresponds to the time window that allows recording.
9. Pressing the **Ctrl** key will close the switch, releasing it will open the switch. Enter rhythmic blinking, for example.

> **Info** Recording in a data or switch object works only when a device or output channel has been assigned to the object.

10. After stopping recording by pressing the **Esc** key or clicking the mouse key, the recorded data object is put into mode **Playback of recording** which can be recognized by the green arrow.
11. Play back the data object to check your entries. If you want to modify certain switching pulse, you can simply modify the ramp band.
12. Highlight the corresponding nodes by moving across the switching pulse with the mouse while holding both the mouse key and the **Ctrl** key pressed. Now grab one of the highlighted nodes and move the switching pulses.

In addition to mode Start recording there is also the Live mode, which however does not record any actions in the data object. For more information about Controlling via external input devices refer to the Help topic *Using external input devices*.

Creating presentation data

Once you have completed your project you can create presentation data for the SC Master.

- If you project includes also sound objects, you should start out by checking the audio level of the sound track. ...See Help topic *Sound track peak level*.
- Creating the presentation data is very simple. All the corresponding information about it can be found in the Help topic *Producing a CF Card*.
- After copying the presentation data onto CF Card, playback from an SC Master, i.e. without computer, is easy.

Multi-channel audio playback

Multi-channel audio productions require the Wings Platinum Pro or Multidisplay License or the Show Control Module. See Versions and Licenses. First of all you create a project containing the corresponding audio tracks. Subsequently, the presentation data for the SC Master is generated and copied onto the CF Card. In addition to MP3 audio samples, the CF Card also contains a show file (***.wsh***) which contains playback information for the audio data and, most of the time, also information for the devices to be controlled.

In this example you will find out about the necessary steps for playback of multi-channel sound via an SC Master 16:

1. Creating a project
2. Assigning audio channels to the tracks and sound cards
3. Recording sound and editing the soundtrack
4. Creating presentation data

Creating a project

The simplest way of creating a project is via the **Project Wizard** Creating a new Mixed Media Project. You should proceed as follows:

1. Enter **Name** and **Folder** for your project, click on **Next**.
2. Under **Media** select **Audio**, click on and select 16 output channels. No other media should be selected for this tutorial. Click **Next**.
3. For **Object ramps** you can accept the default setting and click on **Next**.
4. Under **Timeline tracks** you need to specify the required number of tracks. Select one or two audio tracks and place a checkmark next to **per stereo output.** One track can even accommodate cross fades, so two tracks should be plenty even for more complex sound montages. Do not worry about the entries; tracks can be added or removed any time.
5. Click on **Finish** and the timeline with the corresponding tracks will be displayed.

Assigning audio channels

Link up the outputs of your multi-channel sound card with the outputs in Wings Platinum. If you have no multi-channel sound card, you can also use several normal stereo sound cards. However, playing back may become asynchronous, as every sound card has its own time clock. The longer the playback time, the more will deviations and tolerances become audible. This disadvantage, however, does not affect synchrony when playing back from CF card via an SC Master.

And this is how you assign audio channels:

1. In the tool bar click on **Options** and select **Global Options** &endash; **Sound Cards**. Now assign a separate sound card output to every stereo output required. **If you do not have a multi-channel sound card...**

   ...you can assign the same sound card output to all outputs. In this case, the stereo mix of all channels is output. Playback of individual tracks can later be controlled via the Mute or Solo function. See Muting tracks. This way, even multi-language projects can be prepared. For a mix of Surround Sound, on the other hand, you must have a multi-channel sound card.

2. When the project is created, the audio tracks are linked up with outputs, which can be recognized by the figure in brackets at the left top of the track head.

   If you want to configure an existing project for multi-channel output you need to assign an audio output to every track. Right-click a track head (speaker symbol) and select **Properties**. Under **Audio output** enter the required output. You can assign individual names to the tracks under **Name**.

Recording audio files

Audio files can be recorded analog or digitally via sound card or via the "grabbing function" for copying of audio CDs. Detail information as to how to proceed, can be found under Recording sound via sound card and Copying sound from audio CD. Any audio files which may already be available on your hard disk can be dragged into the Media Pool. Sampling rate and resolution, by the way, are irrelevant, as Wings Platinum will automatically convert any deviating audio files online. Of course, this way the quality cannot neither be improved nor changed. The default output setting is 44.1 kHz and 16 bits. See **Options** &endash; **Project Options** &endash; Output**.**

Arranging sound objects

Any recorded audio files are listed under category **Audio** in the Media Pool. Drag the desired audio files into the corresponding audio tracks and arrange your sound track.

- It is also possible to listen to the files contained in the Media Pool. To do so, highlight an audio file and click the Preview window. See also Viewing and listening to media files.
- Once you have placed the sound objects in the timeline you can start and stop playing back a project by pressing the **Esc** key. For a simple project, one sound object on each audio track will do.
- Of course, it is also possible to create more complex sound montages. As you know, all objects can be edited likewise. A little **excursion** on how to edit sound can be found in the handbook in topic **Creating and editing soundtrack**. It refers to samples from the Wings Platinum DVD. They are normally saved to folder **...My Documents\AV Stumpfl\ Media Samples** when installing Wings Platinum.
- If you want to output one channel only or on several outputs you can selectively alter the output for a track. See Output channel for audio tracks.
- If you show consists only of audio objects without any other control commands or data objects, you should set a position marker at the end of the last object. Otherwise the SC Master cannot determine the

length of the show, which may be a problem for displaying and differentiated starting of shows from CF cards. See Setting markers.

- A further variant for signal routing is PlugIn **Panorama**. You can place it on one track and select presets such as **Mono > Left Channel** or **Mono > Right Channel** or **Swap Channels**. See Effect Manager.

Further information can be found in the following Online Help topics:

Editing objects

Dissolving objects

Editing the ramp band

Cutting speech

Adjusting the volume

Editing sound

If you want to control devices via DMX, 0 &endash; 10 V, RS 232 or switches in addition to this, you need to add a device port and register the devices to be controlled. This is explained further in topic **Controlling devices**.

Creating presentation data

Before creating presentation data and copying it onto CF card you need to check the soundtrack peak level. In the main menu, click **Output** &endash; **Audio Peak Search**. Here you can determine the peak level for all outputs at the click of the mouse. ...See topic Peak level for sound track in the Help files.

While **creating the presentation data**, the audio data for every stereo output are mixed and undergo MP3 compression. For details on creating the presentation data, refer to the Help topic **Producing a CF card**.

After copying the presentation data onto the CF Card, playback via the SC Master can start.

Time-shifted multi-channel playback

The SC Master or Event Control multi-channel versions can play several shows in parallel. This allows even several separate stereo players to be used, which may also control other devices additionally. Therefore, it only requires one single SC Master to provide and control the sound for a variety of exhibits.

In our example we would like to use one **SC Master 16** to play eight shows with stereo sound at different times and in different rooms. In every room a show is to be played. Only in room 4 three shows are to be shown, which can be selected by the visitors.

This requires the following steps:

1. Creation of a project with eight timelines for different rooms
2. Creation of presentation data for the CF Card
3. Defining the Remote Properties for the shows
4. Copying the presentation data onto CF Card

Creating the individual timelines

1. Via the Wizard Creation of a new mixed media project create a new project. On pages **Media** place a checkmark next to **Audio** and **Show control**, followed by clicking on **Next**.
2. On page **Show control** add one **SC Master 16** and finish so that the first timeline is displayed.
3. In the Media Pool click on **Timelines**. Right-click some free area and select **Add…** This way you should create altogether eight timelines.
4. Highlight **Timeline 1** and enter **Room 1** as the name. Name the other timelines as follows: **Room 2**, **Room 3**, **Room 4.1**, **Room 4.2**, **Room 4.3**, **Room 5** and **Room 6**.
5. In these timelines, create the program or the soundtrack for the individual rooms. For the purpose of this tutorial it will do to drag one audio file into the empty timeline and possibly a few DMX channels to control the spotlights. See Placing objects and Programming data objects. By the way, double-click the red timeline symbol in the Media Pool to open it.

6. Every show or audio program is to be output at a different SC Master output, so you need to make a corresponding channel assignment. For the first timeline **Room 1** you can leave the default setting of output 1. Open timeline **Room 2**, right-click the audio trackhead (speaker symbol) and select **Properties**. Enter **2** for **Audio output**. If this timeline contains further audio tracks, enter output 2 for these, too.

7. The same way you allocate the audio outputs for the other timelines. The tracks in every timeline output their signals at different audio outputs. At the end of all this, audio outputs should be allocated as follows:

   Room 1 = Output 1

   Room 2 = Output 2

   Room 3 = Output 3

   Room 4.1 = Output 4

   Room 4.2 = Output 5

   Room 4.3 = Output 6

   Room 5 = Output 7

   Room 6 = Output 8

   The figure (in brackets) in the track head of the audio track indicates which output the track is allocated to.

8. To allow audio playback via the computer with stereo sound card, you need to specify the sound card for outputs 1 to 8. In the tool bar click on **Options** and select **Global Options** – **Sound cards**. For **stereo outputs 1** to **8** assign the sound card output you want to use for listening to the soundtrack during the editing process. Finally, you can make a few corrections and additions to your soundtrack or the programs.

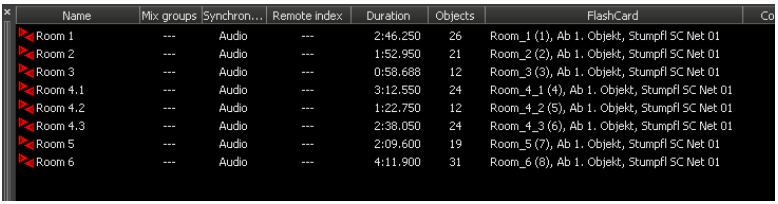
9. Once all soundtracks have been prepared, check the audio level before creating the CF Card data. To do so, highlight all sound objects of one timeline, click one of the objects and select **Special Functions ▶Change volume...**

10. Click on **Peak Search** to find the peak level. It must not be higher than zero, otherwise click on **Normalize** to reduce the peak level to zero. Repeat these steps for every timeline.

Creating presentation data

After you have completed and tested the individual timelines, you can create the presentation data for the CF Card. As this project contains several shows that are prepared in separate timelines, it would be useful to make the settings for CF Card creation in the Timeline Properties. This will allow the data for all timelines to be created by one mouse-click. And this is how it is done:

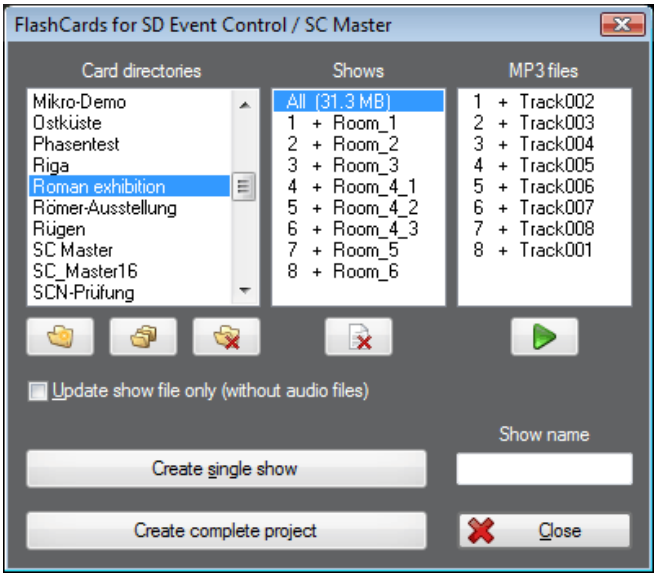
1. In the Media Pool, right-click timeline **Room 1** and select **Properties**. On the right side enter the CF Card settings.
2. Enter **Room_1** in field **Name** (max. number of 8 characters, DOS convention), **Show number** = **1**, **Control data** = **Stumpfl SC Net 01**, select **Complete timeline starting with first object** and click on **OK**.
3. Make the settings for all the other timelines likewise, by entering the corresponding name and increasing the show number by one. The names for **Room 4.1** to **4.3** should be **Room_4_1** to **_4_3** in accordance with DOS convention.
4. In the Media Pool in column **FlashCard** you can see and check all the settings you have made and make any corrections that may be necessary.



Name	Mix groups	Synchron...	Remote index	Duration	Objects	FlashCard	Co
Room 1	---	Audio	---	2:46.250	26	Room_1 (1), Ab 1. Objekt, Stumpfl SC Net 01	
Room 2	---	Audio	---	1:52.950	21	Room_2 (2), Ab 1. Objekt, Stumpfl SC Net 01	
Room 3	---	Audio	---	0:58.688	12	Room_3 (3), Ab 1. Objekt, Stumpfl SC Net 01	
Room 4.1	---	Audio	---	3:12.550	24	Room_4_1 (4), Ab 1. Objekt, Stumpfl SC Net 01	
Room 4.2	---	Audio	---	1:22.750	12	Room_4_2 (5), Ab 1. Objekt, Stumpfl SC Net 01	
Room 4.3	---	Audio	---	2:38.050	24	Room_4_3 (6), Ab 1. Objekt, Stumpfl SC Net 01	
Room 5	---	Audio	---	2:09.600	19	Room_5 (7), Ab 1. Objekt, Stumpfl SC Net 01	
Room 6	---	Audio	---	4:11.900	31	Room_6 (8), Ab 1. Objekt, Stumpfl SC Net 01	

5. Now create the CF card data. In the main menu, click **Output - FlashCard...**
6. Create a new card directory, by clicking . Enter an appropriate name, e.g. **Roman exhibition**.
7. Now click **Create complete project** and select an MP3 encoder (...**Lame DLL** is recommended) as well as the corresponding data rate.

8. Click **OK** to start generating presentation data for all the timelines you have made the corresponding entries for. After completion, the individual shows are visible in the middle window **Shows**.



9. In order to call up the various shows individually and to play them simultaneously via the SC Master, you need to assign the corresponding Remote Properties. Double-click the card directory **Roman exhibition** and the dialog FlashCard Settings will appear.

10. Select mode **Add** for remote inputs 1 to 8 or shows 1 to 8, respectively, for added show start, so that all eight shows can be run simultaneously. To do so, right-click column **Mode** and select **Add**. Repeat this for the remaining shows and close the dialog by clicking on **OK**.

11. Now insert the CF Card into the CF Card drive of your computer. Highlight card directory **Roman exhibition** and click **Copy directory to FlashCard**. Select the letter representing your CF Card drive and click **OK** to copy all the data.

12. After inserting the CF Card into the SC Master, the shows can be started individually via the IR remote control keys 1 to 8. Audio playback can also be recognized from the audio level display.

For an installation also other options would be feasible, such as continuous playback (... via jump markers) or an additional termination show, which terminates all running shows and switches on the light, e.g. for emergency situations. Starting of shows via external keyboards, RS 232 commands or motion detectors is also required quite frequently. Therefore we have prepared a corresponding example. See External show start.

Combining interval music with shows

The background music during the intervals creates the corresponding atmosphere for an installation. By pressing a button the visitors can start a show, while the background music needs to be deactivated and reactivated after the show. This example will show you how to do so by using one **SC Master unit** and creating three CF card shows:

- The background music is controlled via a CF card show in Loop Mode. It is activated automatically upon starting up the system.
- The actual main show is not started directly but by means of a start show. This start show turns down the volume, terminates the loop show, turns up the volume again and starts the main show.
- At the end of the main show the loop show for background music is started again.

All three shows (loop, start and main show) are played back by an SC Master or Event Control unit. The main show can control all sorts of devices, e.g. slide projectors, light, DVD players, video projectors or a **Computer using Wings Platinum** - it all depends on the application.

If the main show is located on the Wings Platinum computer you can start it by means of serial commands supplied by the SC Master (a driver is available; ask for it, if necessary) See also Remote control via Event-Player protocol.

Preparing the shows

Our explanations are based on the fact that the main show containing an SC Net Port as well as an SC Master has already been completed and is read to be used for our example.

1. Open the project containing the main show. In the Media Pool, click on category **Timelines** and rename the timeline, e.g. to **Main Show**, by highlighting the timeline and clicking the name field.
2. Add two more timelines, by right-clicking some free space in the Media Pool and selecting **Add...**
3. Name one timeline **Loop show** and the other one **Start show**. Now a total of three timelines will be available.
4. Double-click the red symbol in front of **Loop show** to display the timeline. Place the corresponding background music in the timeline by dragging an audio file from the Media Pool into the empty space. Arrange the pieces of music on the tracks as desired.
5. Insert a marker track and set two markers. Right-click some free space in the timeline and select **Insert track ▶Marker**. Move the Locator to the beginning of the first sound object and press the **M** key to produce a position marker. Double-click the marker and click **First free remote index** to assign **1**. Click **OK**.
6. Right-click in the marker track behind the sound object and select **Insert jump marker**. Double-click the marker and enter figure **1** next to **To remote index** as the jump destination.
7. You can now test loop playback and correct the marker positions, if necessary.
8. In the Media Pool, in category **Timelines** double-click timeline **Start show** to have it displayed. Click category **Devices**. From the device folder **All devices** drag entry **Special functions** into the timeline and double-click the command marker that has been created.
9. In the pop-up dialog make the following settings: Click **Volume**, select **Master**, **Value** = **0** and **Time** = **3** seconds. Checkmark **Auto comment** at the bottom right corner for a labeling comment to be generated and click **OK**. This marker will cause the background music to be faded out.

10. Move the command marker to the very beginning of the timeline. Scroll to position **0:03.00** seconds and expand the time axis by pressing the **plus** key on the numeric keypad several times.

11. Drag entry **Special functions** three times into the timeline to create three command markers and double-click the left one.

12. In the dialog popping up make the following settings: Enable **Action**, **Show** = **2** and **Mode** = **End**. Under Comment enter **Loop end**, for example, and click on **OK**. This marker terminates the Loop show.

13. Double-click the middle marker and make the following settings: Enable **Volume**, select **Master**, **Value** = **28** and **Time** = **0** seconds. Under Comment enter **Volume 28** and click on **OK**. This marker turns up the volume again for playback of the main show.

14. Double-click the right marker and make the following settings: Enable **Action**, **Show** = **1** and **Mode** = **Add**. Under Comment enter **Start main show** and click on **OK**. This marker starts the main show in mode **Add**, i.e. it is played back simultaneously with the other shows.

15. Arrange the three command markers so that there is a period of about 0.1 to 0.2 seconds between them.

16. In the Media Pool, double-click timeline **Main show** to have it displayed. Press key **End** to get to the end of the show.

17. Drag entry **Special functions** into a marker track or in the timeline and double-click the command marker to make the following settings: Enable **Action**, **Show** = **2** and **Mode** = **Add**. Under Comment enter **Start loop**, for example, and click on **OK**. This marker starts the Loop show. Place the marker closely behind the last object.

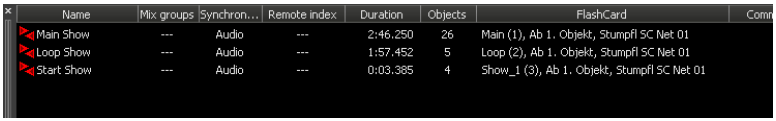
Creating and testing presentation data

We have now prepared the three shows. The next step is to create presentation data. See Producing a CF card. The order of shows on the CF card must be as follows:

1. Main show
2. Loop show
3. Start show

Every CF card show is prepared in a separate timeline, so you can make the settings for CF Card creation the Timeline Properties.

1. In the Media Pool in category **Timelines**, right-click timeline **Main show** and select **Properties**. On the right side enter the CF Card settings.
2. Enter **Main** in field **Name** (max. number of 8 characters), **Show number** = **1**, **Control data** = **Stumpfl SC Net 01**, select **Complete timeline starting with first object** and click on **OK**.
3. The same way open the Properties Dialog of timeline **Loop show** and make the following settings: **Name** = **Loop**, **Show number** = **2**, **Control data** = **Stumpfl SC Net 01**, select **Complete timeline starting with first object** and click on **OK**.
4. The same way open the Properties Dialog of timeline **Start show** and make the following settings: **Name** = **Start_1**, **Show number** = **3**, **Control data** = **Stumpfl SC Net 01**, select **Complete timeline starting with first object** and click on **OK**.
5. In the Media Pool in column **FlashCard** you can see and check all the settings you have made:



Name	Mix groups	Synchron...	Remote index	Duration	Objects	FlashCard	Comm
Main Show	---	Audio	---	2:46.250	26	Main (1), Ab 1. Objekt, Stumpfl SC Net 01	
Loop Show	---	Audio	---	1:57.452	5	Loop (2), Ab 1. Objekt, Stumpfl SC Net 01	
Start Show	---	Audio	---	0:03.385	4	Show_1 (3), Ab 1. Objekt, Stumpfl SC Net 01	

6. Now create the CF card data. In the main menu, click **Output** &endash; **FlashCard&ldots;**
7. Create a new card directory, by clicking . Enter an appropriate name, e.g. **Show with interval**.
8. Now click **Create complete project** and select an MP3 encoder (...**Lame DLL** is recommended) as well as the corresponding data rate.

If no MP3 encoder can be selected

...you need to install an MP3 encoder on your computer first. Click here to find out how this is done.

9. Click **OK** to start generating presentation data for all the timelines you have made the corresponding entries for. After completion, the individual shows are visible in the middle window **Shows**.

10. For the Loop show, **Autostart** must be activated, for it to start automatically upon switching on the SC Master. In the middle window, click show **Loop**, place a checkmark next to **Autostart** and click **OK**.

11. Assign mode **Add** in the Remote Properties to shows Loop (show 2) and Start (show 3), which allows them to be run in parallel with the other shows. In the left window, double-click the card directory **Show with interval**. In line **IR 2** (show 2) right-click column **Mode** and select **Add**. Repeat this for show 3, followed by clicking on **OK**.

12. Now insert a CF Card in the CF card drive of your computer and click **Copy directory to FlashCard**, select the letter representing the CF Card drive and click **OK** to copy all the data.

13. After copying the presentation data onto CF card and inserting the card into the SC Master, the Loop show will start automatically upon start up and run continuously. When the Start show is started, e.g. via key **3** on the IR remote control unit, the background music is turned down and the Main show is started. At the end of the Main show, the background music starts again.

In this tutorial we have shown you how to link up several shows, how to create CF Card data efficiently and how to configure a project consistently in a number of timelines. Below you will find references to further topics.

- Information on how to start shows via keys can be found under Starting shows via keyboards or switches.
- If necessary, you can incorporate a start routine, which checks SC Net communication first during the autostart. See Automatic start from CF Card.

External show start

Shows on CF card frequently need to be started externally, i.e. visitors need to be able to call up information via a keyboard, a show should start upon activation of a motion detector when somebody enters the room, or for very

complex presentations including a variety of systems, a part of a show is to start via a serial command.

This tutorial is based on Time-shifted multi-channel playback, which allows 8 different shows or audio programs to be called up at different times via an **SC Master 16** unit. If you do not have an SC Master 16, you can also perform subtasks with smaller units. It is important that you have prepared several shows for a CF Card which can also run simultaneously.

In this example, we would like to implement the following scenario:

- Show **Room_1** is to be started automatically in the morning when starting up the system and is to run continuously in a loop.
- Show **Room_2** is started by a superordinate control unit via RS 232.
- Show **Room_3** is to start upon activation of a light barrier.
- Shows **Room_4_1**, **Room_4_2** and **Room_4_3** are to be selectable by the visitors via three buttons, with every new choice interrupting the running show. The shows are shown on a screen in a room.

Automatic start and continuous playback

For a reliable automatic start after activation of the system we use an Autostart show in our example which checks whether SC Net communication has been established successfully, followed by the actual show start. When communication fails, an error message can be output. This routine is well suited for systems comprising further SC Net modules.

The routine is implemented by creating two shows and including a conditional show start based on comparison of variables.

1. Open your show control project, which is the tutorial for multi-channel playback in our case and create a new timeline. Name it **Verification SC Net**.
2. Adjust the timeline portion via the zoom buttons or the plus key on the numerical keypad so that more than a second is well visible.
3. From the device folder **All devices** drag entry **Special functions** into the new and empty timeline so that a command marker is created in a track. Double-click it to open the Properties Dialog and click **Decision**.

4. Now enter the following values:

   - Variable ➔**R70** (This variable is set to **1** by the SC Master after successfully establishing SC Net communication.)
   - Condition ➔Equal to value
   - Value ➔1
   - Start Show ➔1 (If variable R70 = 1, show 1 is started.)

   Show 1 in our example is the show to be started automatically after starting up the system. Enter the corresponding designation under **Comment**, e.g. **Start show 1, if SC Net ok**, and click on **OK**.

5. Drag entry **Special functions** once again into the marker track, this time behind the first command marker. Open the Properties Dialog by double-clicking it and select **Variable**. Now enter the following values:

   - Variable ➔**R1** (... by the way variables R1 to R70 are volatile variables, which are no longer available after deactivating the system)
   - Operator ➔**Increment** (add)
   - Value ➔1

   The number of attempts at establishing communication is counted by adding the value 1 to variable R1 every time the program is executed. Enter the designation under **Comment**, e.g. **Loop counter**, and click on **OK**.

6. Drag a further command marker behind the last one and open the Properties Dialog. Click **Decision** and enter the following values:

   - Variable ➔**R1**
   - Condition ➔Equal to value
   - Value ➔10
   - Start Show ➔12 (...this could also be any other available show number)

   If variable R1 = 10, show 12 is started, which is to output an error message. For comment you can also enable the **Auto Comment** function. Now click **OK**.

7. Arrange all the markers to be located within the first second of the show. Press the plus key in the numeric key block several times to expand the timeline. This allows the marker to be positioned more easily. Right-click a location behind the last marker and **Insert jump marker**.
8. Move the jump marker to position **0:01.00** seconds for the loop to take about a second. The first three command markers are now located within the first second, followed by the jump marker at the end.
9. Now enter the information for CF card data generation in the Timeline Properties:
    - Name **Start**
    - Show number **11** (...this could also be any other available show number)
    - Control data Stumpfl SC Net 01
    - Complete timeline from 0.00 seconds
10. Close the dialog by clicking on **OK**. CF card data generation can be done at the end of the entire project. Please remember that this show start needs to receive the attribute **Autostart** after data generation.

The next step is to produce a show for the error message on another timeline in this project.

1. In the Media Pool click on category **Timelines**. Right-click the Media Pool and select **Add...**, to create a new timeline. Name it **Error**.
2. Click category **Devices**, right-click device folder **SC Master 16** (or comparable unit) and select **Add devices**. Select **Serial** and click on **OK** to add a serial port.
3. In the Media Pool, double-click the new port to open the corresponding Properties Dialog. Under Name enter **Display** and **1/2** as address (internal address for the SC Master display) and close the dialog be clicking **OK**.
4. Drag the new device **Display** into the new timeline and a marker track containing a command marker will be created. Double-click the marker and enter the following under **Command/Data**:

    "SC Net BusError" 255

5. The text to be displayed is between quotation marks, followed by a space and **255** for the display time. (...the message remains visible until the next message appears). Please make sure that there two spaces following **Net** for the text wrap in the display to work. Click on **OK**.
6. Now check message output by playing the command marker with the device ports being enabled. By adding further objects on different control channels, for instance, you can also output other error messages, e.g. close a contact which activates a control lamp in the office of the technician in charge.
7. Now enter the information for CF card data generation in the Timeline Properties:
    - Name **Error**
    - Show number **12**
    - Control data Stumpfl SC Net 01
    - Complete timeline starting with first object
8. Close the dialog by clicking on **OK**. The two shows for verifying SC Net communication are finished.
9. For Show **Room 1** to run continuously in a loop, you need to set a jump marker in timeline **Room 1**.
10. In the Media Pool, double-click timeline **Room 1** and set a jump marker at the end of the show. To do so, right-click a marker track and select **Insert jump marker**.
11. This way automatic start after verifying SC Net communication and continuous playback of show **Room_1** have been prepared.

Remote-controlled start via RS 232

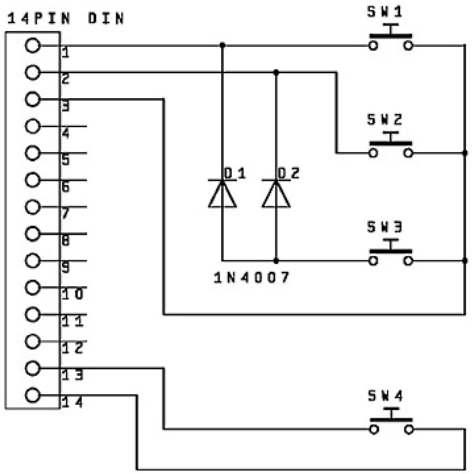
Show **Room_2**, the second show on CF Card is to be started by a superordinated control unit via an RS 232 command. This show is to be run in parallel with other shows.

For this purpose you only need to send the ASCII format sequence of characters **aSA2#** to port **RS 232 IN**. Added show start is included in this command (**A**). For more information about commands and syntax refer to the Help topic **SC Master remote control via serial commands**.

Show Start via contacts

Show start via a light barrier or a motion detector is actually only performed via a contact. For input we choose the REMOTE socket which allows a maximum of 3 shows to be started. The light barrier switch output is to be connected to input **IR1** which corresponds to pin 2 and 3 of the 14-pin socket.

- **IR 1** ...Pin 2 to Pin 3 (SW 2)
- **IR 2** ...Pin 1 to Pin 3 (SW 1)
- **IR 3** ...requires wiring in accordance with the following diagram (SW3):



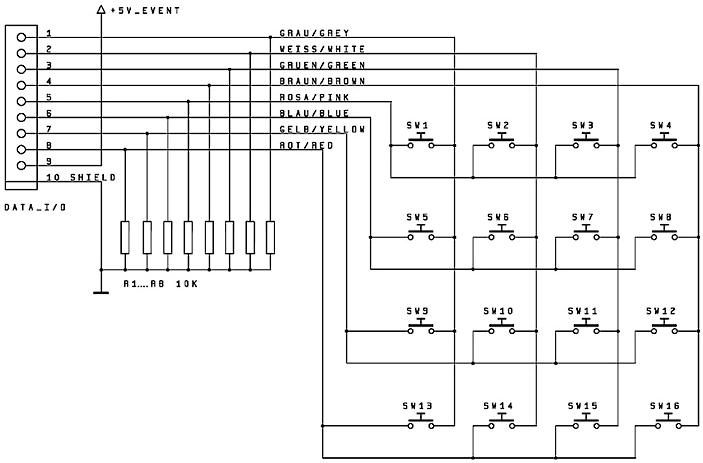
Now you still need to allocate the show to be started, i.e. **Room_3** (show 3 on the CF Card) and the Start Mode **Add** to the remote input **IR 1**. Informa-

tion on how to do so can be found under Remote Properties for Shows. It would have been possible to use remote input **IR3** which is already preset for show 3, but this way we can do without diodes.

Show Start via keypad

Shows **Room_4_1**, **Room_4_2** and **Room_4_3** are shown on a projection screen in one room and are to be selectable by the visitors via three buttons. Upon selecting a new show, the current show should be interrupted.

The switching input used is the DATA IN/OUT socket which can be connected to a keyboard matrix. Use **SW1** to **SW3** for remote inputs **1** to **3**.



Now you need to allocate the shows for room 4 (show 4 to 6 on the CF card) to the remote inputs **1** to **3**. To terminate a running show upon starting a new one, we cannot choose start mode **Interrupt** because this would terminate all running shows, i.e. also the shows for rooms 1 to 3. Choose start mode **Add** instead. Interruption of the shows in room 4 can be programmed by adding markers to the corresponding shows.

1. Open the timeline **Room 4.1**.
2. Drag entry **Special functions** into a marker track and position it at the very beginning of the show.

3. Right-click the marker and select **Properties**.
4. Click on **Action,** enter figure **5** under Show (for Room_4_2) and choose **End** under **Mode** to terminate the show. In field **Comment** you may enter **Termination Room_4_2** to label the marker.
5. Enter another marker for termination of show **Room_4_3** (show 6 on the CF card) likewise.
6. These two markers will cause show **Room_4_2** or **Room_4_3**, that may possibly be running, to be terminated upon calling up show **Room_4_1**. Now add markers to terminate the corresponding other shows as explained above for the two other projects, i.e. for **Room_4_2** and **Room_4_3**. See also Special functions.

Creating and testing presentation data

Now that you have prepared all the timelines you can create or update the presentation data for the CF card as you know from the previous tutorial. See also Generating CF Card data for several timelines. If you have not changed the sound track, you can use option **Update show file (without audio files)**. This accelerates data creation.

After data generation, double-click show 1 **Start** for the Properties Dialog to open up. Place a checkmark next to **Autostart** and close the dialog by clicking on **OK**. This way, show **Start** for verifying SC Net communication is started automatically after starting up the system.

Now copy the data onto CF card. Test the sequence of actions and the start behavior of the shows including all connected devices and keyboards via the SC Master. To provoke an error for SC Net communication and test the error messaging system, remove the SC Net cable from the SC Master and switch on the device again.

Info **Note on mere audio shows:**

If you show consists only of audio objects without any other control commands or data objects, you should set a position marker at the end of the last object. Otherwise the SC Master cannot determine the length of the show, which may be a problem for displaying and differentiated starting of shows from CF cards. See Setting markers.

General

Arranging windows

The functions of this menu allow you to arrange the timeline windows in case you are using several timelines for your project.

- In the main menu, click on **Window** and select the required arrangement.
- When you select **Windows** – **Close all**, all timeline windows are closed. To find out how to reopen the timeline window, click here.

Keeping the Help window topmost

You can choose whether the Help window is to be permanently kept topmost or not. The default setting is **Keep Help Window topmost**.

This is how you can change the setting:

- In the main menu click Help **?** and **Keep Help Window Topmost.** When this item is checked, the function is active and can be deactivated by clicking it once again.

See also

Optimum utilization of the Help topics

Color selection

The dialog box for color selection can be opened by clicking a color field for font formatting, for background color selection and in a number of properties dialogs.

- For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse

and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the **pipette** and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom** color. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

Managing external files

In category **External** you can add and manage any data to do with the project, e.g. the storyboard, any texts, PowerPoint presentations, multi-tier picture collages, records of release meetings, etc. From the Media Pool, these files can be opened in the corresponding editor without you having to search for them. When producing a backup copy in Wings Platinum this external data can optionally be saved, too.

Adding external files

1. In the Project Explorer, select or create a folder for category **External** (.... if necessary, create a new folder by right-clicking **External**).
2. Right-click the Media Pool and select **Add external files**.

3. In the file dialog, select one or several files and click **Open**.

Info External files cannot be added via drag & drop.

Opening external files

- In the Media Pool, right-click the corresponding external file and select **Open**. Following this, the program allocated in Windows is started and the corresponding file opened.

Undo/Redo Function

Needless to say that Wings Platinum also features an Undo/Redo Function to undo or redo virtually any editing step. For this purpose, Wings Platinum automatically saves every editing step up to a total of 99.

- In the tool bar below the main menu click on **Undo** or on **Redo**. Both functions are also available in the main menu under **Edit**. This way you can undo or redo up to 100 steps if necessary.

Manual saving of undo steps

There are certain situations when automatic saving of undo steps tends to take irritatingly long. In such cases you can switch off automatic saving of undo steps and save the steps manually.

1. In the toolbar, click on **Save undo step** and a message will appear warning you that automatic saving will be disabled.
2. When you click **OK** automatic saving of undo steps is disabled you need to save the individual undo steps manually by clicking **Save undo step** or by pressing **Alt** + **S**.
3. If you want to change back to automatic saving of undo steps you can click **Edit** in the main menu followed by **Automatic Undo**.

Info You should only disable automatic saving of undo steps if you have important reasons to do so. Please bear in mind that with the automatic saving feature being disabled, you can only return to those editing steps that you have previously saved manually as undo steps!

Enable/disable all warnings

During normal operation, this function should remain enabled as it is the only way to receive information about critical operations. During a presentation, however, this would only result in interferences. This is why the display of error messages can be suppressed and restricted to the absolutely necessary. Nevertheless all messages will still be recorded in the Log file. See Displaying log information.

- In the toolbar click on **Enable all warnings**.
- As an alternative, you can also click **Extras** followed by selecting **Enable all warnings**.
- For permanent installations, the warning messages can be permanently disabled via **Options** - **Global Options** - **Program start**.

Please note that the warnings are enabled when the symbol is depressed (default setting) and can be disabled by clicking it.

The Project Wizards

The Project Wizards

The Project Wizards will help with the following tasks:

Automatic creation of a digital slide show ...is a very fast method for creating a simple slide show.

Creation of a new AV project ...for digital AV shows or for slide shows. It creates a new project in a folder on your hard disk and configures Wings Platinum for your new digital AV show or slide show.

Creation of a new mixed media project ... is a versatile and efficient wizard which helps you create HDAV and Show Control projects. It creates a new project in a folder on your hard disk, adds SC Net components if applicable and configures Wings Platinum for your new project.

Automatic creation of a digital slide show

This Wizard is the fastest and simplest way to create a slide show with dissolves. Only few steps are required:

1. Adding pictures

1. In the tool bar click **New** and select **Project Wizards** in the left field of the dialog displayed.
2. From the list, select **Automatic creation of a digital slide show** and click **OK**.
3. The next thing is to add the corresponding images. There are three options for this:

- **Select pictures individually** ...after clicking the button a file dialog appears which allows selection of single or groups of pictures which can be added by clicking **OK**.
- **All pictures in a folder** ...after clicking the button a dialog appears which allows selection of a folder. After clicking OK all the pictures and the subfolder contained in this folder are added to the show.
- **Via Drag & Drop** ...this is a particularly easy way of organizing a show. Just open the Windows Explorer or your Image Browser and drag and drop the images in the desired order into the field next to the buttons.

The field below shows the **number of pictures** in the show.

2. Defining slide show properties

You can now make the settings that decide how your slide show is to be presented:

- **Aspect ratio** ...choose **Automatic** for automatic adjustment of the aspect ratio to match your pictures. If you want to select any other aspect ratio, click .
- **Sequence** ...determines the order of pictures in the show. When **Order of insertion** is selected, the pictures are shown in the same order they are added. Alternatively, the order can be changed according to the **File date** (chronological) or to the **File names** (alphabetically, starting with A).
- **Playback** ...influences the way playback is organized and the slide change.
- **Automatic slide change**...causes automatic and continuous playback in accordance with the **Display time** and **Fade time** chosen.
- **Enter key advances to next picture** ...you decide individually when to change the picture. In this case pause markers will be placed before the beginning of every new picture. The **Display time** should, therefore, be kept rather short, e.g. 2 seconds; this is considered the minimum display time.

3. Finish and start playback

1. Now click **Finish**, for all the pictures to be displayed in the timeline as a show. The display data may still need to be completed but this is done automatically in the background.
2. You can start playback by hitting the space bar and the picture fades will be shown in the screen window. Stop playback by pressing the **Esc** key.
3. (Paused) full screen mode at maximal quality is enabled by pressing the **F5** key. Playback is started by pressing the **Enter** key. When your show contains pause markers, playback is paused at these locations. Press **Enter** to continue playback.
4. To stop and terminate full screen mode, press **Esc** twice.

Info

- When Wings Platinum closes, you will be queried if you want to save the project. Confirm this request, if you want to show the slide show again. This requires only little storage capacity as Wings Platinum only saves the information in a describing file format which does not contain any image files.
- If you are using images with different formats or mix landscape with portrait format you should choose **Standard crossfade** to get crossfades without jumps. See **Global Options** - **Objects** - **Pictures.**

See also

Starting and stopping playback

Creation of a new AV project

Creation of a new AV project

This Wizard helps you to create a project for a new digital AV show or a slide show with one image field and, if applicable, also helps you in configuring the device control system for the slide projectors. If, however, you

want to create a panorama or stereo show for playback with one PC and two video projectors, click here to find the necessary information.

This is how it is done:

1. In the main menu click **File** – **New** and select **Project Wizards** in the left field of the dialog displayed.
2. From the list, select **Creation of a new AV project** and click **OK.**

Project name

There is a choice between automatic creation of a project folder or creation of the folder at a particular location.

1. Select **Create new project in automatically created folder**.
2. Enter the required name under **Project Name**. Under **Comment** you can add your remarks.
3. Click on **Next** The Wizard will now create a project folder and a project file in a subfolder of **Documents and Settings**.

As an alternative, you can specify the location where you want to save your project:

1. Select **Create new project in freely selected folder**.
2. Enter the required name under **Project Name**.
3. Click on and select the required project folder. Choose **New Folder** to create a new one.
4. Under **Comment** you can add your remarks
5. Click **Next**. The Wizard will now create a project file in the specified project folder.

Info In the main menu under **Options** – **Global Options** – **General** you can enter your default folder for projects

Screen

The screen window is used for show previews. Several parameters need to be entered:

1. Specify the **Aspect ratio** of the screen you want to use for your show. You can either base the setting on your pictures' aspect ratio or take a more creative approach in your choice. The aspect ratio can still be changed at a later time via the Screen Properties.
2. Under **Screen settings** you define the output quality relative to the resolution:
   - **Adapt to current monitor** ...is the default setting and ensures that the display data quality is adjusted to match the monitor where Wings Platinum is run.
   - **Adapt to monitor/projector with resolution of** ...is the appropriate setting if you want to prepare a show for a monitor that differs from the currently used one. Enter the resolution of the corresponding monitor or video projector. At **Reference size of picture display data** enter the required resolution of display data. Relevant is the long side of a picture.
3. Click **Next**.

Slide projectors

If you are not planning to use slide projectors but digital projections only, click on **Next.**

Using slide projectors

4. Click **Pictures are also to be displayed with slide projectors** to checkmark it.
5. Now select **number** and **type** of slide projectors used. For Rollei Twin projectors please refer to the information under Control units and slide projectors. For more than three slide projectors you need the Advanced License or higher.
6. Under **Device Port** select a control signal (e.g. Stumpfl DLC) or a protocol (e.g. Kodak P-Com) for projectors to be controlled serially by the computer. The first projector addresses are selected

automatically.

7. Select the **serial port** of your computer for controlling your control unit or projectors (e.g. COM 1).
8. Only uncheck **Use brightness correction ramp** in exceptional cases. The correction ramp provides for harmonious dissolves by compensating for characteristic lamp and slide projector properties. The correction ramp can also be adjusted individually to match your projector. ... See also Correction ramp for slide projectors.
9. Click **Next**.

Video

The following options refer to video playback:

- **Display data for HD videos at higher resolution** ...creates additional preview data for HD videos at very high quality. This option requires slightly more storage capacity.
- **Create/use intermediate video data** ...automatically creates intermediate video data for the videos and enables their usage. This options ensures trouble-free operation, especially for some video formats such as AVCHD. However, intermediate video data require additional storage capacity and the rendering time for display data is going to be longer.

Info If you are certain that your original videos run without any problems or if you have edited them in other editors and exported them in performing format you can remove the checkmark next to **Create/use intermediate video data**. If you converted videos only to make them run you should leave the checkmark as Wings Platinum does the conversion automatically and you can save a lot of time and storage capacity.

Pool Template

This dialog allows you to select a project template which is used as a basis for taking over Media Pool components into the new project. This way you can use ramps and effects as templates for a new show.

1. Place a checkmark next to **Add Media Pool components from following project template**.
2. The preselected template **Default Pools** contains a few ramps and control tracks for effects. If you want to import ramps or effects from a different project template, highlight the corresponding template by clicking it.
3. Click **Next**.

Media Pool

1. Select the components you want to import. Without previous selection of a separate template you should leave the default settings for **control tracks** and **ramps**. Import of Media Pool components requires the Advanced License or up.
2. Click **Next**.

Tracks in the timeline

1. Here you can enter the number of audio, image and video tracks you want to use for programming. If you leave the default value, you will still be able to add new tracks at a later time.
2. You can check **Group tracks** to group all the tracks of a particular kind. This is particularly useful when a great number of tracks are being used. In this case groups of tracks can be hidden.
3. Click **Finish** and the slide show is created. The timeline window appears.

You can now start by adding media files to the Media-Pool.

Wizard for Mixed Media Projects

This wizard helps you to create a variety of projects, in which, for example, pictures, videos, audio, stage lighting and any other devices for show control can be used. You will be queried as to what types of media you want to use. Even the screen configuration for multidisplay shows can be done most easily via this Wizard. If, however, you want to create a panorama or stereo show for playback with one PC and two video projectors, click here to find the necessary information.

And this is how it is done:

1. In the main menu click **File** - **New** and select **Project Wizards** in the left field of the dialog displayed.
2. From the list, select **Creation of a mixed media project** and click **OK**.

Project Name

There is a choice between automatic creation of a project folder or creation of the folder at a particular location.

Select **Create new project in automatically created folder**.

Enter the required name under **Project Name**. Under **Comment** you can add any remarks for your project.

Click **Next**. The Wizard will now create a project directory and a project file in a subfolder of **Documents and Settings**.

As an alternative, you can specify the location where you want to save your project:

1. Select **Create new project in freely selected folder**.
2. Enter the required name under **Project Name**.
3. Click on and select the required project folder. Choose **New Folder** to create a new one.
4. Under **Comment** you can add your remarks
5. Click **Next**. The Wizard will now create a project file in the specified project folder.

Info In the main menu under **Options** - **Global Options** - **General** you can enter the default folder for projects.

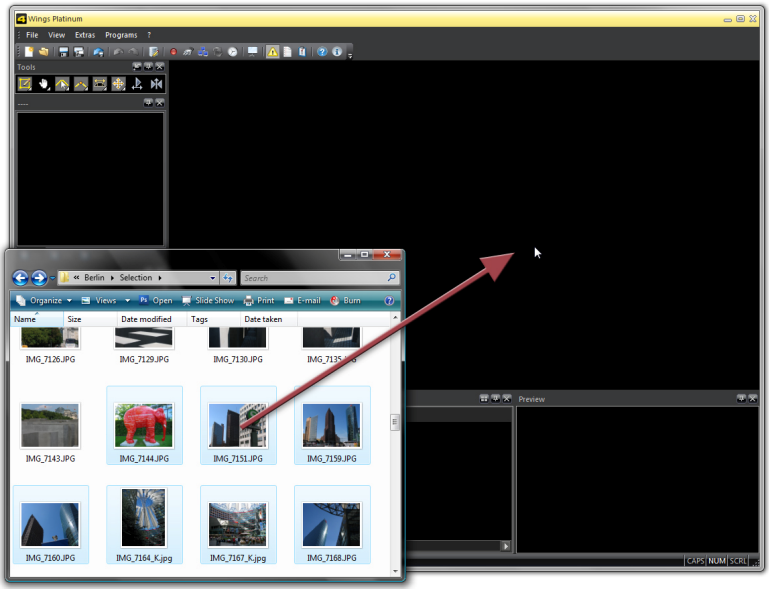
Projects

Quick start via Drag & Drop

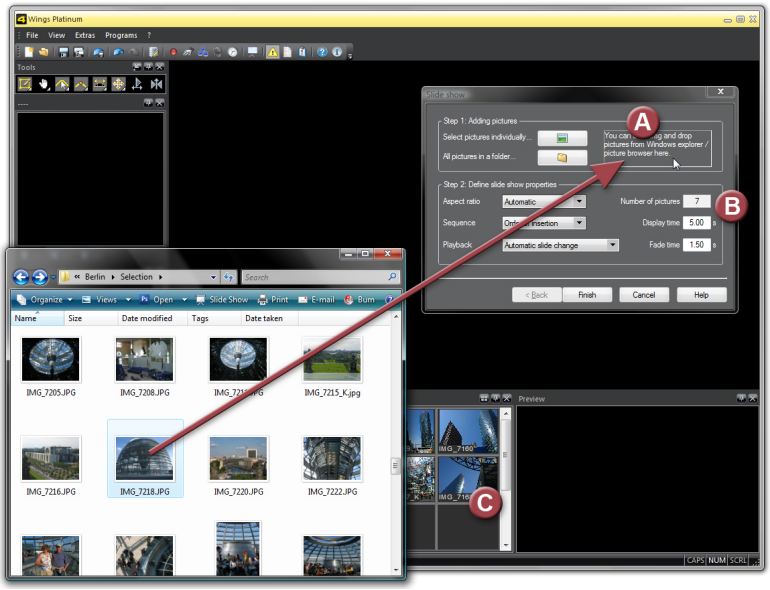
Those who expect to see quick results should try the "quick start". Media, such as Images, music and videos can just be dragged from the Windows Explorer or image browser to be "dropped" into Wings Platinum and immediately be presented there.

We will show you at the example of a simple slide show:

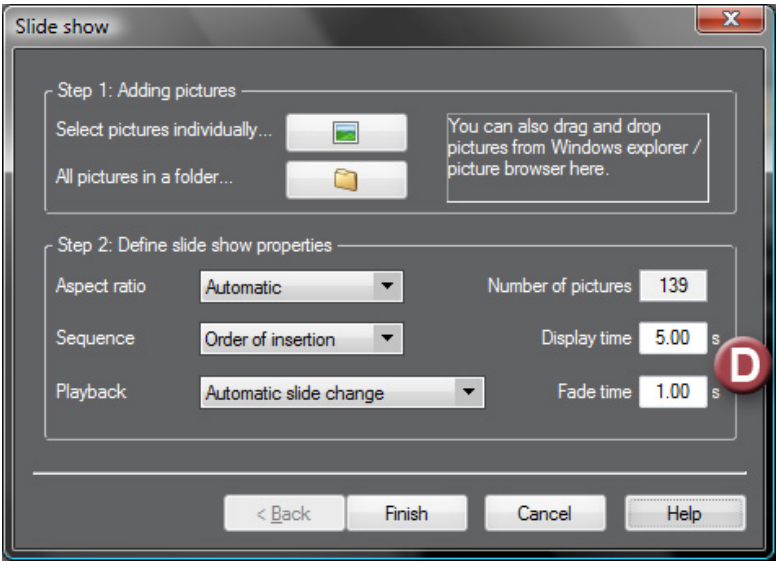
1. Open Wings Platinum (you may have to close any dialog boxes that may possibly appear).
2. Now open the Window Explorer or your image browser and drag the first image into the large empty space showing **Wings Platinum 4**. If your pictures are not displayed in the Explorer, click on button **Views** and select **Thumbnails** (XP) or **Large Icons** .



3. Following this, a dialog box for creation of a slide show will appear. It offers various options for adding pictures. Use the drag & drop method and drag your pictures into the dialog field (A) in the order you want them to appear in the slide show. The Wings Platinum Media Pool will then show the added pictures (C). The **Number of pictures** added can be seen in the dialog box next to **Number of pictures** (B).



4. After adding all the required pictures you can define some other properties for your show. The default settings are suitable for a show that is to run automatically. The preset value for the display time of a picture is 5 seconds, that for the fade time is one second (D). These values can be adjusted in accordance with your requirements.



A tip for later on: For **Playback** you can also choose **Enter key advances to next picture**. This allows you to determine the point of time the slide is to change individually for every slide during the presentation. In this case the Wizard places pause markers at the beginning of every new picture. The **Display time** should be kept rather short, e.g. 2 seconds; this is considered the minimum display time.

5. Now click **Finish**, for all the pictures to be displayed in the timeline as a show (E). If the pictures or picture icons are not yet visible, the display data are just being completed automatically in the background. Click **Lightbox View** (F) to change the Media Pool into a lightbox. This is helpful if you need to sort and search images later on.

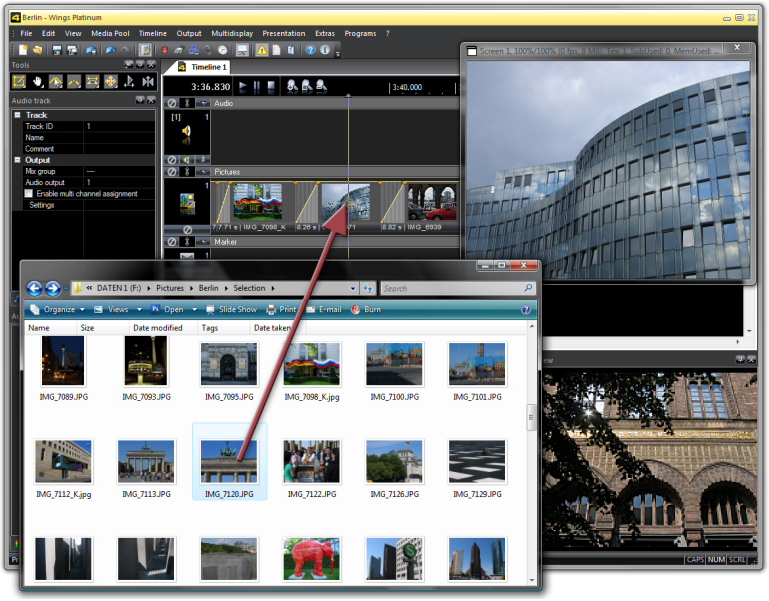
6. When you start playback by pressing the space bar, the Locator (H) starts moving across the picture objects and the fades appear in the screen window (G). Stop playback by pressing the **Esc** key. The Locator stands for the current point of time within a show. In Stop Mode you can grab the Locator and move it. Try grabbing it in the empty track area (H), where there is no object below the mouse pointer.

   Tip: Press key **Home** to make the Locator jump to the first object. If this does not work, click some empty space in the timeline to activate the window.

7. Full screen mode at maximal quality is started by pressing the **F5** key. The picture is displayed in full screen size and Wings Platinum changes to Pause Mode. When you press the **Enter** key, playback is started. Press the **Esc** key once to stop; Fullscreen Mode is maintained. Press **Esc** a second time for the user interface to reappear.

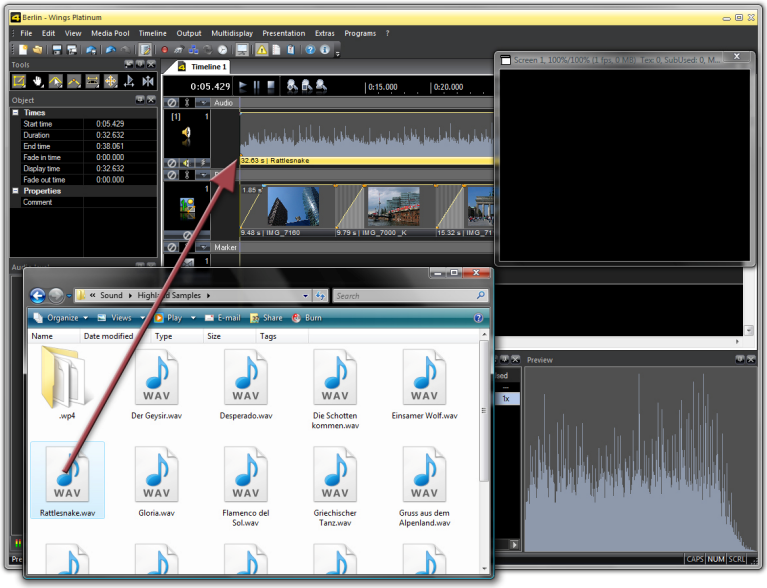
8. Any image you don't like can be replaced by another one. Just drag the new image from the Explorer or Media Pool onto the object in the timeline whose image you want to replace. In the illustration below the cars were replaced by the Brandenburger Tor. **Note:** If the Media

Pool is in List View you need the grab the images at the symbol. Grabbing is easier if you change over to **Lightbox View**.



9. Sound tracking is just as easy. Click some empty space in the timeline for the window to be topmost and press the **Home** key. The Locator will jump back to the beginning.

10. In the Explorer find an audio file in wave or MP3 format and drag and drop it into the timeline below the picture track. Drop it as closely as possible to the Locator so that the music starts when the first image fades in. This way an audio track is created containing some music that can immediately be played.



11. If you place the Locator to a location before the music and start playback picture and music should start at the same time.

12. Don't forget to save your slide show. You will be prompted to do so when exiting Wings Platinum. A Wings Platinum project file requires only little storage space. It does not contain any media files but only the references to them.

Information on how to create new media files, e.g. copy music from an audio CD, edit objects, i.e. change dissolve times or create motion effects can be found in a number of workshops. There you will also be provided with information about the concept of Wings Platinum.

New Project

New projects can be created in Wings Platinum in a number of ways:

- The easiest and fastest way is by using the Project Wizards.
- There are templates in the form of Standard Projects available for a number of applications.
- Complex and recurring projects should be saved in separate templates.
- A project can also be crated manually. See Manual creation of project

Templates for new projects

If you keep using special configurations and device setups for your projects, creating your own templates will help to save you a lot of time. Templates can be used for storing any editing stages of a project. You can use them, for instance, to prepare device setups, timelines or whole media libraries for new projects.

Saving your own templates

1. Prepare a project as desired.
2. Click on tab **Comment** (next to Audio Level) and enter a short description of your template.
3. In the main menu click on **File - Save as Template.** Now save your template under the desired name.

Remark: Use the default template folder for the templates to be available for the Wizards. See also Paths in Wings Platinum.

Opening templates

1. In the function bar below the main menu click on **New...** or in the main menu on **File** and **New...**.

2. On the left, click on **Project Templates** and select the required template by double-clicking it on the right.

3. If you click **Save** later on, the template is not overwritten because it is saved as project and not as template.

Info Only those templates are displayed which are saved in the template folder **...Documents and Programs\User name\Application data\AV Stumplf\Wings Platinum 4\Templates**.

See also

Importing from other projects

Standard projects

Standard projects are predefined by Wings Platinum and contain several tracks in the timeline as well as the screen aspect ratio setting. However, they do not contain any device configurations. These must be added manually. See Configuring the device control.

Manual creation of a project

As a rule, you should create a project using a Wizard or via templates. This way numerous settings will automatically be done for you. In principle, however, it is also possible to create a project manually. This requires the following steps:

1. **Adding a timeline** ... every project requires at least one timeline. See Adding timeline.

2. **Configuring devices** ... is only necessary for a slide show or for show control. See Configuring the device control.

3. **Configuring screens**... only necessary when pictures or videos are used. See Configuring screens.

4. **Specifying parameters for display data** ... only necessary when pictures or videos are used. See Display data.

5. **Creating tracks** ... can be done automatically by dragging a media file into the timeline window. See also Adding or removing tracks.
6. **Specifying the output for track contents** ... this is done via the track properties by allocating screens/screen fields or audio outputs, etc. For show control objects, the output is specified via the object.
7. **Creating a project folder** and **Save project** ... to save media files to the corresponding folder.

See also

Templates for new projects

Project Wizards

Opening a project

1. In the function bar below the main menu click on **Open...** or in the main menu on **File and Open...**.
2. Mark the required file and click on **Open**. If the required file should not be visible, click on **Search in** to select the corresponding folder.
3. If the complete number of media files cannot be found at the corresponding location a dialog will appear offering to search for the missing files. See also Searching for missing files.

Info

- It may not be possible to open a project if it was created with a higher version. If it contains more than two picture tracks, it cannot be opened in a Starter License. This needs to be considered when handing over projects to other people or opening projects created by somebody else.
- In the main menu under **Options** – **Global Options** – **General** you can set your standard folder for projects.
- Any projects saved on CD-ROM should be copied onto the hard disk before opening them. Otherwise the pictures in the objects cannot be not displayed and editing may get very slow. If, upon opening the pro-

ject, not all media files are found, enter the corresponding hard disk in the search dialog and not the CD ROM drive.

- A project that has accidentally been overwritten can be restored by opening the previous version saved as a BAK file. In field **File name** enter *.*, click on **OK** so that the BAK file is displayed and can be opened.
- If your having problems opening older projects (earlier than February 2003), refer to **An old project can't be opened** to find a solution.

See also

Opening old projects containing tracks with "Addition"

Opening one of the last projects used

1. In the function bar below the main menu click on **New...** or in the main menu on **File** and **New...**.
2. On the left, click on **Last Projects** and select the required project on the right by double-clicking it.

Saving projects

When using this function to save the project, the arrangement of your show is saved to the data carrier as a file (***.ptp***), i.e. the order of pictures, samples, videos and so on. Only the links to the media files are saved which means that the project file only requires little storage capacity. For a complete backup of all project copies, use function **Project backup on CD/DVD**.... See

This is how you can save projects:

- Click on in the function bar below the main menu or on **File - Save** in the main menu.
- Save a project under a different name by clicking on in the function bar below the main menu or on **File - Save As** in the main menu.

Info

- First-time saving after loading an older project in a newer Wings Platinum version causes the **Save As** dialog to appear. It allows you to enter a new name in order to prevent the existing project from being overwritten. Once projects are saved in a new version, they can no longer be opened in the old Wings Platinum version.
- You can add comments to your project which are displayed before opening it. Just click on tab **Comment** next to Audio Level and enter a short description.
- In the main menu under **Options** – **Global Options** – **General** you can set your standard folder for projects
- When a project is saved, the previous version is saved as backup file. This way a project that was accidentally overwritten is maintained until the project is saved the next time. See Opening a project.

Save copy as

This function allows you to save a copy of a project while the original project remains loaded (as opposed to "Save as").

1. In the main menu click **File** – **Save copy as...** and enter the corresponding name and file in the dialog box displayed.
2. Finish by clicking on **Save**.

Automatic backup copies

Wings Platinum has an Autosave Function to save the current project at regular intervals. In addition to this, there are also some other functions which protect from data loss while running Wings Platinum.

Attention! The functions explained below exclusively serve data security purposes while using Wings Platinum. They are neither replacement for saving the project nor for creating regular backup copies on a backup medium.

The following functions can be used for restoring projects believed to be lost:

- **Autosave Function** ...saves the current project at regular intervals to the folder **Autosave**. This is the location where the last 10 backup copies named ***Backup_0.ptp*** to ***Backup9.ptp*** are saved. ***Backup_0.ptp*** is always the latest version. Open folder **Autosave** by clicking **Extras** in the main menu followed by **Open folder ▶Autosave**. These files can be opened directly by double-clicking them. The time interval for autosaving can be set under **Options** - **Global Options** - Save at **Backup copies**.
- When a project is saved as usual, Wings Platinum saves the old project version in the same folder under ***Name.ptp.bak***. So if you happen to have accidentally overwritten a project file, the previous version will still be available. To be able to open the file you need to remove the file extension **.bak**.
- If Wings Platinum happens to crash - which it does very rarely - it will attempt to save the current status of the project. The corresponding project file can be found in folder **Report** and is called ***Report.ptp***. Open folder **Report** by clicking **Extras** in the main menu followed by **Open folder ▶ Report**. However, there is no guarantee that the project is not corrupted. It is therefore essential to check the project.

Info Should you fail to find some folders, such as Application Data or Local Settings, these folders may not be displayed in Windows. You can change this in the Windows Explorer options. See Folders are missing or are not displayed.

Password protection

A project can be protected by means of a password against unauthorized editing and saving, as well as closing of the control panel. This is particularly important for permanent installations and presentation mode with touch panels.

Attention! Mishandling and losing your password could mean that your project can no longer be edited and saved. Therefore, you should back up your project (***.ptp***) beforehand and read the entire information given below.

Enabling password protection

1. Click on **Options** in the function bar below the main menu and select **Project Options** &endash; **Password**.
2. In the fields **Password** and **Confirmation** enter the required password and click **Assign password**. Make sure you note down the password so that you retain full access.
3. Confirm the message **Warning! After saving this project** &ldots;. with **OK** and close the Options dialog by clicking **OK** again.
4. Save your project by clicking on **Save**. The project is now password protected. Editing or saving is only possible after entering the password in Wings Platinum.

Info After opening a protected project the following functions are blocked:

- Saving the project and Undo/Redo Function
- Modifying the settings in the Options Dialog
- Export functions for video, EXE presentation, audio CD, video DVD and FlashCard.
- Group tracks cannot be opened or closed.

- Control Panel fullscreen mode can only be terminated by pressing **Shift** + **Esc**, followed by entering the corresponding password.

Legitimization for editing protected project

Before a password protected project can be edited or saved, legitimisation via password entry is required:

Click on **Extras** &endash; **Enter password...**

Enter the corresponding password and click **OK**.

Removing password protection

For permanent password removal for a project, proceed as follows:

1. Click on **Extras** - **Enter password...**
2. Enter the corresponding passoword and click **OK**.
3. Click on **Options** in the function bar below the main menu and select **Project Options** &endash; **Password**.
4. Leave the fields **Password** and **Confirmation** empty and click **Assign password**.
5. Confirm the following message with **OK** and close the Options Dialog with **OK**.
6. Now save your project by clicking on **Save**. Password protection for this project has now been removed.

Opening version 3.x-projects

Due to technological improvements, Version 4 no longer supports all the functions of earlier versions. Therefore, Version 3.0 projects containing certain functions must be edited manually. This refers to the following functions:

- **Recreation of display data** ...is necessary if formats or storage locations have changed. Moreover, output-centric color management is now part of the program. See also **Creating display data for media files.**

  Important: You should only delete display data using the Wings Platinum 4 function after ensuring that the show runs without any problems under Wings Platinum 4. Otherwise you may have to recreate the display data after loading the show in Wings Platinum 3.

- **Compositing Mode Addition** ...was primarily used for simulation of slide projectors and can no longer be selected in the track head. For the solution refer to Opening old projects containing tracks with "addition".

- **Editing in the Media Pool** ...differs somewhat from Wings Platinum 3 and requires some getting used to. See Notes on the Media Pool for Upgraders.

- **Control of slide projectors** ...must be activated. Otherwise, some functions, such as the Slide Tray Editor, are not available. See Enable usage of slide projectors.

- **DirectX-PlugIns** ...are still supported by version 4. However, you need to change the setting from VST to DirectX and cannot use VST PlugIns. See **Options** - **Project Options** - Output.

- **Chroma /Luma Keying** ...is now done via the real time effects in the Properties Table. The former settings are not supported, i.e. you need to activate and adjust Chroma / Luma keying again. The Settings Pool is no longer available either. See Transparent areas through Chroma Keying and Transparent areas through Luma Keying.

- **Output restriction for multidisplay contents** ...is only available for displays. If you load older multidisplay shows which used output restriction to slaves you need to change the setting manually to displays. See Restricting the output of visual contents to certain displays.

- **Warp function** ...has been completely redesigned, i.e. older settings and presets are no longer accepted. You need to adjust warping again. See Using Display Warp.

Opening old projects containing tracks with "Addition"

Wings Platinum 4 offers no tracks for Compositing Mode "Addition", but the tracks always use alpha control, i.e. the object ramp band controls the transparency. If you open older projects that contain tracks with Compositing Mode "Addition" a message will be displayed and you have a number of options to solve the problem:

- **Conversion of the objects concerned** ...should be carried out if you are using slide projectors or if you want to change your show as little as possible. This conversion uses a realtime effect function which is activated automatically in the picture objects under **Picture** - **Special functions** - **Additive Compositing** and which corresponds largely to the former compositing. Other options, such as automatic brightness clipping for title fade ins are no longer available.
- **No conversion of objects** ...is useful if you want to adjust the show for digital projection with alpha control. This requires significant changes in the fades and the location of the picture tracks. However, individual deactivation of **Additive Compositing** in the object properties is not necessary. All tracks set to "Addition" are marked as such in the track head and you can see immediately how the show was organized.

Info

- Since Wings Platinum 4 saves its projects using suffix ***.pt4*** older ***pt3***-projects cannot be overwritten, i.e. they remain unaffected and you can test which approach serves you best.
- For older shows that need to control slide projectors this function must be activated first. See Enable usage of slide projectors.

Importing Wings 4.x shows

Wings shows cannot directly be imported in Wings Platinum. This is only possible by taking the detour via Wings Platinum 2 and Wings Platinum 3. Only shows down to Wings Platinum 3 can be opened by the current version. See also Opening version 3.x-projects.

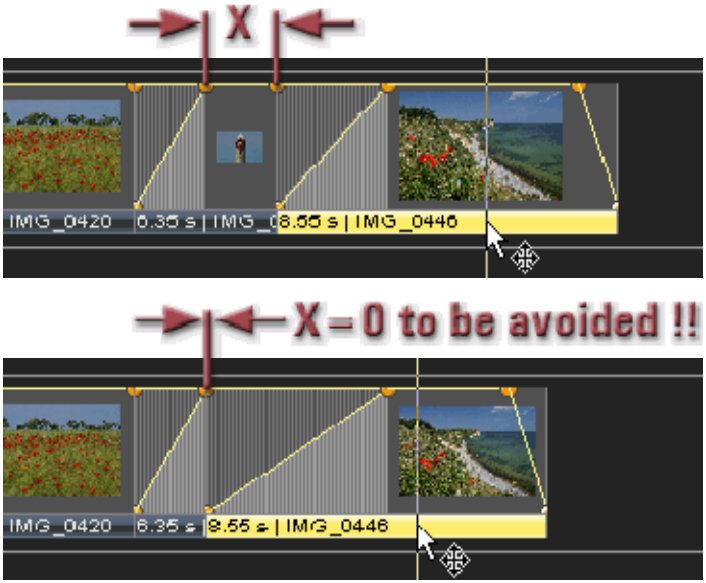
Checking a project

If, during editing and shifting of objects, you find out that objects can no longer be shifted, you should have your project checked for errors.

1. Load the project to be checked and click **Extras** – **Check project**... in the main menu.
2. In the Preview Window a message will be displayed, informing you whether errors were found or not. When an error is detected, the Locator will jump to the position with the defective object. There are two ways to repair your project:
    - Hold the **V** key (vertical shifting) down and drag the marked object onto a suitable free track. If no empty track is available at the moment, add one.
    - Or, as an alternative, you can remove the marked object by right-clicking it and selecting **Remove**. Finally, drag the corresponding media file into the track again to re-create the object. With a Basic License of Wings Platinum, this is the only way.
3. Check the project again. Repeat the procedure described above until no errors can be found.

How to avoid jamming of objects

Jamming of objects may only happen when overlapping objects were shifted towards each other to the maximum possible position, i.e. as far as they will go, or when the display time is zero. Even entry of minimal display times, e.g. **X = 0.01** seconds will do to avoid this problem.



Statistics and Diagnosis

This dialog informs you about the required storage capacity, the type and number of files, tracks and objects for a project. In addition to this, it also offers a number of diagnostic functions, e.g. for Wings Platinum PCs within a network.

1. Click on **Extras - Statistics/Diagnosis...** for a dialog box to open up. As an alternative, you can open the dialog by pressing keys **Ctrl** + **D**.
2. On the left, select the corresponding category **Pool**, **Timeline** or **Network,** for the corresponding dialog to appear. For **Network** there is also the subcategory **Graphic display**. It serves for analyzing the clock rates of multidisplay PC within a network.

See also

Sorting files in the Media Pool

Configuring a presentation network

Advantages and limits of the SmartSync Engine™

Capturing and managing media

What's the purpose of the Media Pool?

The Media Pool accommodates all media files of a project, e.g. picture, audio, video and text files. In addition to this, it helps you to organize any other items that are also important for your projects, such as configurations of screens and timelines or devices and trigger actions for Show Control.

Notes on the Media Pool for Upgraders

If you have used Wings Platinum 3 so far, you may have to get used to the new way of handling the Media Pool. Please note the following:

- If you want to drag & drop media into the Media Pool you need to first highlight the corresponding category in the left Media Pool section.
- If you want to drag & drop images or videos from the Media Pool into the timeline you need to grab them at the symbol at the front.
- Since it is possible to open several Media Pools, changing over from List to Lightbox View is exclusively performed by clicking button .
- When creating or changing folders or screen fields, etc. the old name needs to be deleted before the new one can be entered. This can easily be achieved using the Backspace key.
- The context menu of screens, screen fields, device ports, etc. for opening the Properties dialog or other functions is available after highlighting the next higher level in the left Media Pool section. Following this the corresponding device, screen field, etc. is listed in the right section. In the right Media Pool section you right-click the corresponding entry and the context menu will appear that allows selection of the appropriate function. In short: you click in the left section for the

entry to appear in the right section and open the context menu by right-clicking the entry.

See also

Adding media files

Screens Properties

Screen field properties

Adding a device port

Adding devices

Adding existing media files

Before you can actually use media files, such as pictures, videos or sound for a show, they need to be imported in the Media Pool. If the media files are already available on your hard disk use one of the methods explained below.

1. Via Drag & Drop

1. In the Media Pool, select or create a folder in the corresponding category (.... create a new folder by right-clicking a category)
2. In the Windows Explorer, open the folder on the hard disk which contains your media files.
3. Now drag individual or a number of files into the Media Pool. Alternatively, you can also drag and drop the media directly into the timeline or onto an existing object.

2. Via the File Dialog

1. In the Media Pool, highlight a folder in the corresponding category (....create a new folder by right-clicking a category)
2. Right-click in the right Media Pool section and select **Add**.
3. In the file dialog select one or several files and click **Open**. Following this the selected files will be displayed in the Media Pool.

Note: Due to a Windows bug the number of files that can be added via this method is restricted (...dependent on the path length).

Info

- The pictures can be any size because Wings Platinum automatically creates the appropriate picture size for display in the program, on the screen or for videos.
- Wings Platinum supports a great variety of media formats. More information can be found in topic Supported file formats.
- After adding larger quantities of pictures, all texture data for the screen display should be created in one go. Otherwise, this will be done automatically as soon as the first editing steps are carried out. See Creating display data for media files.
- You can activate Lightbox View for pictures and button bitmaps which displays the pictures at a larger size and allows sorting via the mouse. See Sorting on the lightbox.
- Usually, the display data for display in the program are stored in the same folder as the original media files. For pictures you can specify a central folder to contain the preview pictures of all projects. This comes in handy, for example, if you want to use images directly from the archive but want to prevent the display data from being located in the image archive. See **Options** - **Global Options** - **Save**.
- It is possible to use audio files in wave and MP3 format with different sampling rates within one project. Wings Platinum will convert them online without you even noticing.
- You can create folders in the Project Explorer at a later time and sort media files in accordance with certain topics. This is simply done by dragging the media files into a different folder (... similar to the Windows Explorer).
- Press **Ctrl** and **F** to display or hide the file pathnames in the Media Pool. See also Displaying pathnames.

Attention! The folders in the Project Explorer are not created on your hard disk, but they are only used to provide a system for your files within Wing Platinum! No files are saved in the Media Pool, but only the "locations"

where media files can be found on the hard disk. If such a file was deleted or moved to a different location, Wings Platinum can no longer find it and claims that it is missing.

Importing from other projects

It is possible to import various Media Pool contents from existing projects into other projects.

1. Open an existing project you want to add content to.
2. In the main menu click **File** - **Insert...** for a dialog box to appear.
3. Select the project that contains the component you want to import and click **Open**.
4. Place a checkmark next to the Media Pool components you want to import. **Note:** Import of a complete timeline requires you to select every category that is required for the timeline.
5. If you want to import **timelines** and **screen fields** you need to check the corresponding box. There are various options for importing screen fields determining whether screen fields are to be merged or not:
    - **Don't merge screen fields** ...screen fields are not merged, all imported screen fields are displayed separately.
    - **Merge only screen fields of the same name** ...screen fields with the same properties and names are merged.
    - **Merge all screen fields as possible** ...all screen fields with the same properties are merged.
6. Click **OK** to start the import.

Info

- For the import of timelines and screen fields the screens of both projects should have identical aspect ratios. If this is not the case adjust the screen's aspect ratio of the project to be imported to match the screen in the master project. This helps you to assess the consequences on motion effects which are screen-specific.
- Please note that only the paths are imported when importing media or external files. For the media to be available in the project, you may have to search for the files and update the pathnames. See Finding missing files.

See also

Adding media files

Importing control track effects from a template

Importing control track effects from a template

Normally, prepared effects can already be imported when creating new projects. If you happen to have forgotten to do so, want to edit older projects or want to add additional effects you can do so as follows:

1. In the Media Pool, click category **Control tracks**.
2. Right-click the tab and select **Import from template...** and the file selection dialog for folder **Templates** will be displayed.
3. Select template **Default Pools** and click **OK**. Following this the folder ***Imported** is added.

Info From the file selection dialog you can also select other templates or projects and import the corresponding control track effects.

See also

Importing parts of a project

Using pre-defined keyframe effects

Visual effects

Creating new media files

Using Wings Platinum, you can create media files in a variety of ways, e.g. record sound via a sound card, copy sound from audio CDs, scan pictures or import them via a video camera from the screen or record videos via an analog or a digital video camera.

Copying audio samples from audio CD

This functions allows very fast copying of sound without any quality loss from an audio CD to your hard disk.

Insert CD and call up Record Dialog

1. In Wings Platinum, open the required project or create a new one. See Project Wizards.
2. Insert an audio CD into your CD ROM drive. If the Windows Media Player should start up a little later, terminate it.

   Tip You can prevent the Media Player from starting up by holding the **Shift** key for a few seconds while inserting the CD into the CD ROM drive or by disabling "Autoplay" in Windows. See Software cnfiguration.
3. In the main menu click **Media Pool** and select **Create new files.**
4. In the left field, click on **Audio CD**. If this entry is not visible, click on the plus sign next to **Audio**.
5. In the centre of the pop-up dialog you will find a list of audio tracks of this CD starting with **01**.

Specifying target directory and name

1. If you want to change the target directory for saving your files, click on **Change target directory** and select or create the required folder.
2. You can track the title names from the Internet database. To do so, click on .
3. Or you enter a name for the **Basic file name**, e.g. the abbreviation of a CD title. In combination with the number, the tracks are then clearly defined.

4. To enter individual names for the tracks, highlight a name on the list and click it once more to enter a new name.

Listening to and copying track samples

1. Highlight a title and click to listen to the sample
2. If you click any other titles while playing back, playback changes over to the selected titles.
3. Click on to terminate playback.
4. Highlight the title you want to copy (... one or several titles).
5. Below the Record button click and select whether audio files are to be saved as **Wave** or **MP3** files. Wave format is uncompressed and requires more storage capacity. For further sound editing, however, this format is the better choice.
6. Click on . **Saving as MP3 format requires the following entries...**

MP3 encoder (**Lame DLL** is recommended) and a **data rate**. Usually, 128 kbits/s should be sufficient for CD quality. If you are not satisfied with this quality you may improve the result by choosing a higher data rate.

If no MP3 Encoder can be selected.

...you need to first install an MP3 encoder on your computer. If you want to find out how this is done, click here.

Difference between **Encoder (direct)** and **Encoder (via wave file)**.

The encoders listed under **Encoder (direct)** will generate MP3 files without saving any temporary data on hard disk. **Encoders (via wave file)** will temporarily save the sound track as wave file on the hard disk, use it to pro-

duce MP3 files and finally delete the wave file again. You only need to make sure that the drive used for storage of temporary files has enough memory capacity. If necessary change this folder under **Options** – **Global Options** – **Save**.

7. The dialog allows you to keep track of the copying progress. After copying , the copied titles can be found in the Media Pool.

Copying track portions

1. Mark a title and move the slider in field **Portion** to the beginning of the required portion. Click on .
2. Move the slider to the end of the portion and click on .

   Info These portion markers can also be set while playing back.
3. Use keys and to jump to the beginning or the end of the portion while playing back to check whether the chosen portion is correct.

   Tip Choose a large enough portion which leaves you enough scope for editing the sound object later on.
4. Click on . The dialog allows you to keep track of the progress. The copied titles can be found in the Media Pool.
5. Click to delete the portion markers.

Info

The audio CD can be ejected or the drawer be opened by clicking **Eject CD**. Click this button again while holding the **Ctrl** key to close the drawer again.

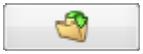
Media files are not saved in the Media Pool, but only the "locations" where media files can be found on the hard disk. So Wings Platinum only remembers where on the hard disk a file is located. If such a file required for a project was deleted from the hard disk or moved to a different location, Wings Platinum can no longer find it and claims that it is missing.

Recording sound via a sound card

According to the type of sound card in your computer you can record signals from analog and/or from digital audio sources.

Connect audio source and call up Record Dialog

1. Connect your audio source to the corresponding sound card input.
2. In Wings Platinum, open the required project or create a new one. See Project Wizards.
3. In the main menu click **Media Pool** and select **Create new files**.
4. In the left field, click **Sound card**. If this entry is not visible, click on the plus sign next to **Audio**.
5. For **Audio input** select the input of the sound card used.

   Info When you use a professional sound card (RME Digi 96/8, etc.) with a variety of inputs, you need to choose the corresponding input in the Settings Dialog for your sound card. Should the message "This format is not supported ..." appear, click here to find a solution.
6. Click on  **Select filename** and enter a name for the new file.

Setting the audio level control

Recording via a digital input does not require any audio level control. Continue at Start recording further below.

1. Recording is preset for CD standard (16 bits, 44.1 kHz, stereo). Only select other settings if necessary (... e.g. "Mono" for speech recordings).
2. If you want to record via an analog input, start by adjusting the audio level first. The controls are available in Windows as follows...

   Windows XP

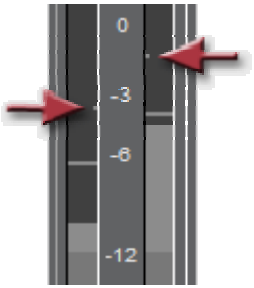
   - Right-click the speaker symbol in the taskbar (bottom right) and select "Display volume control". Alternatively, you can call it up via **Start &endash; Programs &endash; Accessories &endash; Multimedia &endash; Volume control**.
   - In the Windows mixer, click on **Options &endash; Properties**. Under **Control volume for** select **Recording**. In the field below, choose the input you want to control, e.g. "Line In". Confirm with **OK**. Following this, the control of the required input must be ticked (**Selected**). If necessary, click it.

   Windows Vista

   - Right-click the speaker symbol in the taskbar (bottom right) and select **Recording Devices**.
   - Right-click the corresponding input and select **Properties**.
   - Click on category **Level** for the audio level control to appear.
3. Start your audio source and adjust the control in the Windows dialog to an audio level which does not exceed zero dB. You should more or less adjust it to within a range from &endash; 12 dB to &endash; 3 dB.
4. Stop your audio source and return it to its start position

Tips

- The highest audio level achieved can be recognised by the small markers on the dB scale Reset the audio level bars by clicking on them with the mouse.



- In order to avoid unnecessary noise only activate the input in the Windows required for recording.
- Sometimes sound card inputs are not suitable for high levels which means that distortions may be audible although the audio level bars remain clearly below zero dB. If necessary, adjust the audio level via the controllable outputs of your audio source. You can also use the headset output to do so.

Start recording

1. Click on **Record** . The time display will tell you about the length of the recording and the remaining storage capacity on the active drive.

   Tip: Upon activating **Autostart**, Wings Platinum will automatically start recording as soon as the specified level has been reached.

2. Interrupt recording by clicking **Pause** . Terminate recording by clicking **Stop** .
3. Terminate the Record Dialog by clicking **OK**.

Info

- Option **Autostart** only works correctly for recording via digital inputs. When recording is done via analog inputs Autostart does not work.
- Media files are not saved in the Media Pool, but only the "locations" where media files can be found on the hard disk. So Wings Platinum only remembers where on the hard disk a file is located. If such a file required for a project was deleted from the hard disk or moved to a different location, Wings Platinum can no longer find it and claims that it is missing.

Scanning pictures

Info **It is absolutely necessary to consider the following:** Some scanners may not be able to transfer the scanned files to Wings Platinum. This may lead to the scan dialog and Wings Platinum **crashing**!!! This may be due to the import module used by Wings Platinum which, however, is not an AV Stumpfl product.

Solution: Save your project before you start scanning to avoid losing data in case of a crash. If your scanner is not compatible with Wings Platinum you need to use the scan software, followed by importing the images into the Media Pool.

Activating the scanner

1. Make sure that your scanner is switched on and ready for operation.
2. In Wings Platinum, open the required project or create a new one. See Project Wizards.
3. In the main menu click **Media Pool** and select **Create new files.**
4. In the left field, click **Scanner**. If this entry is not visible, click on the plus sign next to **Pictures**.

Preset parameters for picture files

1. The picture size is preset for your application. Should any changes be necessary, enter the required picture size. ...Tips for the picture size.
2. The target directory is your project folder, the preset filename is "Picture 001". You can change these settings by clicking on and selecting folder and filename.

   Tip If you enter the filename "Florida 001", the figure behind the filename is increased by one for consecutive scans, e.g. Florida 001, Florida 002, Florida 003 and so on. You don't need to enter a new name every time.
3. The preset JPEG file format with a low degree of compression (1) should be sufficient. This setting offers high quality and produces a relatively low amount of data. If you have good reasons for changing this, e.g. if you want to scan pictures for the archive and edit them extensively at a later time, click on the arrow to select the required format.

   Info If restricted memory capacity is no major issue, we recommend using TIF format, **Advantages of the TIF format.**

   All in all, TIF format offers the best properties:

   - A **color depth of up to 16 bits per channel** offers extra capacity for editing of tonal values.
   - Lossless LZW compression
   - **Embedded color profiles** can be read and considered by Wings Platinum.
   - **Storage of layers** maintains full editability of pictures created in editing programs, e.g. Photoshop (text, layer effects, etc.).
   - **Alpha channels or transparent backgrounds** can be saved and allow extracting of objects, for example.
   - **Semi-transparent areas** are displayed at high-quality by Wings Platinum without any "gray veil".

Scanning

1. Click on to **Start Scanning**. Before the first scan, a dialog box for scanner selection will pop up. Highlight the required scanner and click **Select** (you only need to do this once).
2. Using your scan software, start scanning your slides... ...Tips for scan software settings. The automatic picture size detection will inform you when major errors were made in the size settings.
3. After scanning your slides, close your scan software. Immediately after scanning, the picture files will be displayed in the Media Pool. Close the Wings Platinum scanner dialog by clicking **OK**.

Info

- Wings Platinum can only process files with a color depth of up to 24 bits.
- Media files are not saved in the Media Pool, but only the "locations" where media files can be found on the hard disk. So Wings Platinum only remembers where on the hard disk a file is located. If such a file required for a project was deleted from the hard disk or moved to a different location, Wings Platinum can no longer find it and claims that it is missing.
- Usually, the display data are stored in the same folder as the original media files. For pictures, however you can specify a central folder to accommodate the preview pictures of all projects. This comes in handy, for example, if you want to use images directly from the archive but want to prevent the display data from being located in the image archive. See **Options** - **Global Options** - **Save**.

Capturing pictures via camera

Cropping and picture optimization

In addition to defining the cropping area you can also activate optimization of the image brightness distribution. Click on **Cropping and Picture optimization** in dialog box **Create New Files** – **Pictures** – **Camera**.

Defining cropping areas

With the camera, adjust the picture area so that the projected picture to be seen in the Preview Window is large and undistorted. ...See also Tips for setting up the camera.

- Grab the pink rectangles along the edge to adjust the required cropping area.
- Grab the centre to move the whole rectangle.
- Double-click the picture to increase the cropping area to full video image size.
- In addition to this, it is also possible to enter the rectangle size numerically.
- Please make sure that the aspect ratio corresponds roughly to the image size settings for your project.

Adjusting and activating picture optimization

Click on and tick **Activate optimization**. Project an empty slide frame and click on **New compensation picture**. Based on this compensation picture, Wings Platinum determines the brightness drop produced by video camera and slide projector. As the compensation picture refers to the current cropping area, you always need to produce a new compensation picture when changing the cropping area.

Tip For producing the compensation picture it may be favorable to use a slide frame containing neutrally gray foil or an evenly gray slide (without any structures).

Scan the first pictures using **standard values** for optimization. If the results are not satisfactory adjust the values to your individual needs. WebCams, in particular, can differ widely, which means that by using individual parameter settings the picture quality can be improved distinctly. The following parameters are available:

- **Smoothing compensation data** ...to smoothen rough structures and to even out the brightness distribution of the compensation picture. A value of 0 deactivates the function.

- **Contrast compensation**... increases contrast in the darker areas in accordance with the compensation picture, i.e. usually towards the edges. The absolute black color is maintained whereas all other shades are changed into brighter ones. This parameter should preferably be used for correction purposes. Use the brightness correction only in combination with contrast compensation when the contrast is too high. The value refers to a percentage; 0 deactivates the function.
- **Brightness correction**... increases brightness in the darker areas in accordance with the compensation picture. The value corresponds to a percentage. A value of 0 deactivates the function, one of 100 results in a full corrections, which, however, often appears to be somewhat exaggerated
- **Reduce brightness** ... reduces the brightness of the whole picture. As contrast and brightness correction adjust the brightness at the edges to the brightness at the centre, the picture may as a whole appear to be too bright . A value of 0 deactivates the function, one of 100 reduces brightness by about two apertures
- **Color correction** ... performs a color correction in accordance with the compensation picture. If a camera has a different shade of color in the centre compared to the edge, this color difference can be reduced. This function only works in combination with the brightness correction.

Automatic picture size detection

The automatic picture size detection monitors size and aspect ratio of the pictures supplied by scanner or video camera. If the pictures are smaller than the settings in Wings Platinum, a warning appears and you should correct the scan software settings. If the pictures are considerably larger, Wings Platinum reduces the pictures to the preset size.

Tip If scanner or video camera cannot supply any better resolution, you can activate **Keep scanner size** or **Keep camera size,** respectively. The pictures will then be accepted as they are and no more warning will appear.

If the picture size detection is deactivated, warnings will still be displayed for deviating picture sizes. After scanning, however, the picture will be scaled in accordance with the settings.

Appropriate picture size

As the size of the pictures in your project can impose a limit to high-quality digital projection, you should rather scan your pictures at a larger size. Digital photographs should be used at their original size. This will give you the every chance to create videos or presentations with smaller pictures at a later time.

The appropriate **minimum size** depends on your applications. Here are a few examples:

Preview pictures for slide programming... 300 ... 500 pixels picture width

Videos up to DVD standard... 800 ... 1500 pixels picture width

Digital projection at highest HDAV quality... 2000 ... 4000 pixels picture width

The picture width you choose depends on the maximum requirement for future applications. This, however, also requires high-quality image capturing devices (video cameras, scanners, digital cameras, etc.). If you are planning to create extensive camera movements, the pictures need to be scanned at a larger size in accordance with the travelling path of the camera or the zoom factor. See also Picture size for camera movements.

Tip: If restricted memory capacity is no major issue, we recommend using TIF format for the pictures, **Advantages of the TIF format**.

All in all, TIF format offers the best properties:

- A **color depth of up to 16 bits per channel** offers extra capacity for editing of tonal values.
- Lossless LZW compression
- **Embedded color profiles** can be read and considered by Wings Platinum.
- **Storage of layers** maintains full editability of pictures created in editing programs, e.g. Photoshop (text, layer effects, etc.).
- **Alpha channels or transparent backgrounds** can be saved

and allow extracting of objects, for example.

- **Semi-transparent areas** are displayed at high-quality by Wings Platinum without any "gray veil".

Creating video files

Wings Platinum cannot be used to transfer video material onto your computer. This requires some other software. We recommend the following capture tools which are available on the Internet as shareware or freeware:

- A most recommendable and inexpensive capture tool for **DV videos** is **Scenalyzer Live**, which automatically detects scenes and copies them onto hard disk as individual files. It offers a certain degree of convenience and a scene preview. By the way, DV video files have the extension ***.avi***. Further information can be found in the Internet at www.scenalyzer.com/d/main.html.
- For **HDV videos** the simple capture tool **HDV split** is a good choice. It also features scene detection and saves the scenes as individual files but does not have a scene preview. HDV videos, imported via HDV SPLIT have the file extension ***.m2t***. Further information can be found on the Internet at http://strony.aster.pl/paviko.

Once the video files are available on your hard disk they can be added to the Media Pool in a variety of ways. See Adding media files.

If, however, you would like to produce a video file for your show, refer to Methods for creating a video for more information.

Display data

The display data concept for images

Wings Platinum features a highly sophisticated display data concept for images, which, on the one hand, allows a flexible approach to large pictures and, on the other, ensures output of various media ranging from a video DVD to a multidisplay show at optimum quality.

If you consider the following items, Wings Platinum makes it easy for you:

- You can directly add images at any size to the Media Pool and use them in Wings Platinum, as display data at the required presentation size are always created for every image. The size is always determined automatically when the project is created or is specified individually by yourself. This value should correspond to the width of the monitor or video projector resolution. The reference is always the longer side of the image, no matter whether it is in portrait or landscape format. If you have already created the project, you can change the setting in the Screen Properties.
- Once you have added pictures to the Media Pool, creation of display data is started and runs in the background. When adding large numbers of pictures, weaker computers may require all display data to created before adding the pictures to the timeline in order to avoid waiting times during scrolling or jerky playback. See Creating display data for media files.
- For multidisplay shows, one additional aspect is highly important, i.e. the differentiation between **Preview** and **Presentation Mode**, as different sizes of display data can be defined for both playback modes. During creation of multisplay projects the Project Wizard usually does this automatically. All this is very important for complex shows with a high number of slaves and a large overall screen, to ensure swift editing. See also Playback modes for screen display via hardware rendering.
- The display data created as described above can be used for your show any way you want. If you modify the pictures by zooming or use portrait format the globally created display data will no longer be optimum size, but at this creative stage this does not matter, provided the computer can cope with them and the pictures do not appear to be completely out of focus after zooming.
- When the display starts being jerky, the pictures are completely out of focus or when the show is finished, it's about time to optimize the display data. By doing so, all objects are provided with display data at the required size. This method brings distinctive advantages in terms of performance and quality. See Optimizing display data for pictures.
- Every time you modify the show, optimize the display data or output you show at a different size a separate version of display data is cre-

ated, which can be recognized by the extension to the file name in the picture directory, e.g. ***Image name.1400***. Existing display data are not automatically deleted as it may be necessary to show different versions of a show and all display data would have to be created anew whenever a different version was loaded.

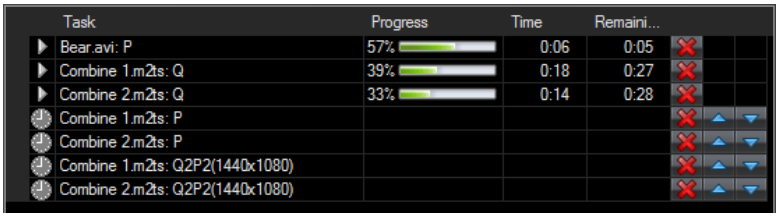
- If you are fed up with the high number of display data in the picture directory or just need more storage space you can delete the display data for the pictures and recreate them at the corresponding resolution. See Deleting display data.

Creating display data for media files

You don't normally have to worry about creating display data for media contents. They are created automatically in the background when a media file is added to the timeline or when the project is loaded.

Here are some facts about display data creation you should be aware of:

- Automatic display data creation is always enabled and is managed dynamically in accordance with priorities. The display data currently required for display are always given preferential treatment, with those pictures required for display on the screen taking top priority.
- Whether display data are currently being created can be seen on tab **Tasks** in the Preview window in the bottom right corner.



This list shows all the tasks of media data to be processed. In the illustration above you can see that display data need to be created for another 216 images and some videos or audio files. Creation of images has top priority. Scrolling in the timeline may increase the number of images as other media become visible. For video and audio files the green bar indicates the progress of the task in question.

The clock symbol signalizes that a task is waiting. The letter behind the video file suffix signifies the type of tasks: **Q** means Quick Preview, **P** means Preview and **Q...P... (.... x ....)** means Intermediate Video Data. They are always processed in accordance with their priority. Click to delete the task. Click to move the task to the top position where it is the first to be processed. Click to move the task to the end of the list. Further functions are available via the context menu. See Task list.

- The number of tasks in the task list to be processed simultaneously depends on the number of available processor cores of your processor. Usually, at least one core will be available for other tasks. However, you can increase the burden on the processor and accelerate processing of tasks by right-clicking the task list and selecting **Maximum performance**. Dual Core and Quad Core processors without hyper-threading make use of all available processor cores, i.e. parallel tasking does no longer make sense. Processors with more than four cores or quad cores with hyper-threading normally use 50 percent of the threads or 75 percent of the threads when **Maximum performance** was chosen, i.e. parallel tasking is still an option in that case.
- The control panel fields for multidisplay PC also show the number of files to be processed, with the indicator appearing in yellow. See also Show status of master and slaves.
- You can have the **display data for a complete show** created by clicking **Create display data** and start display data creation. This provides the button with a gray background . When you click the button again, display data creation is disabled, the button is deselected and display data creation is reduced to the currently displayed media. Any subsequent scrolling in timeline or Media Pool will only cause automatic creation of the currently required display data.
- In the Options you can make settings for display data creation. See **Options** - **Project Options** - Display data.
- The display data size for pictures can be entered during project creation via a Wizard or in the Screen Properties. See Screen Properties.

Info

- If, after display data creation, the media are not displayed in the timeline or on the screen, just scroll briefly in the timeline, e.g. with the mouse wheel.
- The display data are saved to the same folder as the original media files but in a subfolder called **.wp4**. When color profiles are used for the output devices folder **.wp4** may contain further subfolders named in accordance with the color profile, which in turn accommodate these special display data.
- About one pixel along the periphery of the picture display data cannot be displayed on the screen. The effective width is therefore reduced by two pixels, which you might want to consider when creating special test pictures with grid lines, etc. For standard picture representation, this can certainly be neglected.
- Display data for picture sequences are limited in size to 640 pixels (normal) or 1280 pixels in width (if higher quality for HD videos is enabled) to avoid overtaxing the computer with high-resolution images from DSLRs.
- It is also possible to create display data for specific video files. This can be done as follows:
    - **Create/update display data** ... causes the required display data to be checked and only recreated if necessary.
    - **Create display data** ...deletes the old display data and recreates them.
- Both functions are available by right-clicking the video object, selecting **Special functions** or by right-clicking a video in the Media Pool.

Optimizing display data for pictures

The display data for images can be optimized for the corresponding application. If a picture in a show is downsized to 30 %, the display data are too large for the presentation and waste a lot of computer and graphics cards resources. Moreover, the high degree of scaling has an adverse effect on the quality. On the other hand, a zoom-in-effect on the picture may result in the resolution of the display data being insufficient for a crisp display on the screen. All this is automatically considered in the picture size optimization

for the display data. Optimization, therefore, improves quality and performance.

This is how all the display data for a show can be optimized:

1. In the main menu, click **Media Pool** and **Optimize picture sizes** for a dialog to pop up.
    - If you add a checkmark next to **All pictures**, even those picture objects are considered for which the optimization of picture size is disabled in the Object Properties.
    - If you select **All timelines** instead of the currently used timeline, the picture objects of all timelines are considered.
2. Now click on **Start** to create the optimized display data. This is done in the background and usually takes distinctly longer than video creation.

Info If you want to continue and present immediately afterwards, you should wait for display data creation to be completed to avoid display data creation during the presentation. This is particularly important in combination with complex shows. See Creating display data for media files.

Differentiated creation of display data for videos and picture sequences

Usually, display data are generated when videos or sequences of images are added to video tracks. However, you can also influence creation of display data. This may be useful in the following cases:

- **Exempting certain videos from display data creation** ...may be useful for presentation videos (mixdown of the entire show) as they usually need not be edited any more, i.e. display data are not necessary. Therefore you can exempt display data creation for certain video files.
- Create display data for individual videos ...may be useful if you want to use display data for presentation (instead of the original data) or if display data are to be used for rendering new video files.

Exempting certain videos from display data creation...

- In the Media Pool in category **Video**, right-click the corresponding video file and select **Properties**.
- Remove the checkmark next to **Create display data automatically** and click **OK**.

This way, this particular video is exempted from automatic or global display data generation. If you find out that you need display data for this particular file at a later time, you can remove the checkmark again.

Info Under **Project Options** - **Display data** you can choose wether the display data are to be created automatically or not.

Create display data for individual videos

If you want to recreate display data for individual videos or picture sequences do as follows:

- In the timeline, right-click the corresponding video object and select **Special Functions** ▶**Recreate display data**. Following this the old display data will be deleted and new ones created.
- Alternatively, you can also choose option **Create/update display data**, following which the required display data will be checked and only recreated if necessary.

Info

- If you want to recreate display data for all video files, you need to delete the older display data versions followed by selecting the main menu item **Media Pool - Create display data**. See also Deleting display data and Creating display data for media files.
- The display data are saved to the same folder as the original media files but in a subfolder called **.wp4**. When color profiles are used for the output devices folder **.WP4** may contain further subfolders named in

accordance with the color profile, which in turn accommodate these special display data.

Deleting display data

Based on the large original picture files Wings Platinum will create smaller picture files and higher resolution display data for screen display. Experimenting with various display data resolutions or optimizating display data following a number of modifications results in numerous picture versions being stored on the hard disk, which may take up a lot of storage capacity. Here is a method which allows you to quickly and simply delete display or texture data:

1. In the main menu under **Media Pool** click on **Delete all display data** and select the media type for deleting display data.
2. Following this, the corresponding display data of the currently loaded project are deleted and a message appears in the preview window providing information about the number and volume of files deleted.

Info

- Wings Platinum deletes the display data currently used in this project. If you enabled a special ICC color profile in the color management options and option **Create color-converted display data**, only those display data will be deleted. Display data for other color profiles or output devices will be kept. By choosing the color profile in the options you can therefore control deletion of display data for certain color space. See also **Options** - **Global Options** - **Color management.**
- Wings Platinum automatically recreates any display data required, e.g. when loading a project or, at the latest, when a media file is to be displayed . However, it is also possible to have the display data created separately. See Creating display data for media files.

File management

Displaying pathnames in the Media Pool

You can cause the complete media file path names to be displayed in the Media Pool.

- Change over to list view by clicking on , provided the lightbox view is enabled.
- In the main menu Media Pool, click on Display full pathnames.
- Or press keys **Ctrl** and **F**.

The same way the pathnames can also be hidden.

See also

Sorting contents

Displaying media files in the Windows Explorer

Displaying media files in the Windows Explorer

It is now possible to have the folders containing the files in the Media Pool displayed in the Windows Explorer.

- In the Media Pool, right-click the corresponding file and select **Explorer**. Following this, the Windows Explorer opens up displaying the folder on the hard disk containing the corresponding file.

See also

Displaying pathnames

Updating Media File Properties

This function, essentially, checks and corrects the following two things:

- The **file checksum** is determined and updated. This may be necessary if Wings Platinum asks for missing files although the file is available along the specified path. The reason for this may be a faulty checksum caused by changing the files outside Wings Platinum without using function Edit with...
- **Playability of videos** is verified and corrected upon answering message "Correct invalid video playback settings?" in the **positive**. If you answer

No, those videos in the Media Pool that are not playable will be provided with the prohibition sign.

You should answer **No** if the playback configuration should not be changed because you are opening the project on a computer which differs from your presentation computer and which does not have all codecs available.

This is how you proceed:

- In the main menu, click **Media Pool** - **Update File Properties** and, if applicable, answer question "Correct invalid video playback settings?" for a correction of the video settings. Following this, Wings Platinum will check the properties of all the files in the Media Pool and update them, if applicable.

Attention! Audio and video files should not be modified externally in their length (not shortened, in particular) if they are already being used as objects in the timeline. This might result in incalculable faults when playing these objects.

Finding missing files

If files for a particular project are missing, Wings Platinum automatically detects this problem and starts searching for them. In that case, the paths saved with Wings Platinum no longer correspond with the actual storage location of the files and must be updated. This is what function **Find missing files** is for. If, however, a few project files are could not be found and are still missing, the corresponding file lines in the Media Pool are provided with a red cross at their beginnings. On demand, you can have a list of missing files written into a text file.

Info The project file (*.***pt3**) does not contain any media files but only the paths leading to the corresponding locations on the hard disk! Therefore, the media must be available on your computer hard disks.

This is how you can search for the missing files:

1. In the main menu, click **Media Pool** and **Find missing files**...for a dialog box offering three options to appear:

- **Include unused files** ...searches for files which are not required in the timeline.
- **Include external files** ...searches also for files located in the Media Pool under **External** (any documents, PowerPoint presentations, etc.)
- **Include also existing files** ...searches for files already available in the program which would not normally not be searched for. This option is very valuable if you want to change the path for files. However, this means that the search needs to be limited to the folder containing the file copies. This is possible in the next dialog box.

Select the corresponding options, followed by clicking on **OK**.

2. Specify how to link up with the necessary files or where to search for them:

   - **Replace directory specification first** ...works like the Find/Replace function in a word processing program and replaces the old path with the new one. This allows for a very quick update if only the path has changed but not the structure of the project within the project folder.

     Info If you want to change only the drive name within the path name, you can enter **D:** for the former drive and **H:** for the new one, for example. If you entered **D** and **H** only, all letters D in the path would be changed to H, which would certainly not lead to the desired result. If possible, specify longer and unambiguous parts of the path name.

   - **Search in the following directory afterwards** ...causes a specific directory or subdirectory to be searched, which can considerably reduce search time.
   - **Search on following drives afterwards** ...performs a complete search of the specified drive.

   It is possible to combine all three search functions. If Wings Platinum is not able to locate the files using the first method it will continue searching based on the next method.

3. Click on **Select file name** and enter a name and a location for saving the list of missing files. The list will tell you which files are missing. At a later time you can double-click to open it and print it, if necessary.
4. Click **OK** to start searching.

Info

- The files that are still missing after the search are marked by a red cross in the list of files in the Media Pool. Repeatedly press the key combination **Ctrl** and **F** to display one missing file after the other in the Media Pool.
- Wings Platinum, first of all, searches for the **unmodified** original file. If this particular file cannot be found in the specified drive or folder, another file with the same file name is accepted. Thus Wings Platinum does not automatically accept the first file with the same file name it comes across.
- Files can only be found when the file names have not been changed.
- A modification of the contents in an external editor is also recognized by Wings Platinum and new display data are created automatically.
- The prompt "Media Pool files are missing. Should Wings Platinum try to find the missing files?" now only appears when the warnings are enabled. When the warnings are disabled, no message appears and the files are not searched for. See Enabling/disabling all warnings.

Select next missing file

Missing project files can be identified by a red cross in the Media Pool. This requires activation of the list view. Searching for the red crosses in large projects can be very tiresome, therefore this process can be simplified as follows:

- In the main menu click **Media Pool** and select **Select next missing file** for the next missing file to be displayed.
- Missing files can be displayed more efficiently by simultaneously pressing keys **Ctrl** and **F** a number of times.

Prior to the manual search in the Media Pool, however, it may be useful to have Wings Platinum perform an automatic search. See Finding missing files.

Replacing file extensions

This is a useful function if you want to replace media files in the Media Pool by new ones in a different format, e.g. image files ***Name.jpg*** by ***Name.tif***. The names must be identical, only the file extension specifying the file type are replaced in the Media Pool.

And this is how it is done:

1. Copy the new media files into the folder where the old files used in the Media Pool are also located.
2. In the main menu, click **Media Pool** and **Change filename extensions...**
3. In the dialog box under **Old** enter the file extension for the currently used files and under **New** the new file extensions.
4. For **File type** you can choose **Audio**, **Pictures** or **Video**. This accelerates the process due to the restriction to one particular media type.
5. If you place a checkmark next to **Change extension even if new file does not exist** all file extensions are replaced, no matter whether a new file is available or not. In the Media Pool, the missing files will be provided with a **?** question mark in column Picture. In such cases, the new pictures can then be copied into the folder.

Removing media files

There are various ways of removing media files from the Media Pool. But please bear in mind, that they can only be removed when they are no longer used by objects within a project.

Removing individual or a number of media files

- Right-click the corresponding media file and select **Remove**.
- It may be necessary to remove objects from the timeline that use this file before the media file can actually be removed. To do so right-click

the media file and choose **Select timeline objects.** The objects can now be removed by right-clicking them and selecting **Remove**.

- Several media files can only be removed in one go after selecting them. This is done just like in the Windows Explorer. In addition to this, you will find some other selection functions in the context menu, which appears after right-clicking a media file.

Removing all unused media files

- In the main menu, click on **Media Pool** and select **Remove unused files**. Following this, all files which are not used by objects are removed and a message is displayed in the preview window, providing information about the number of files removed.

Info Both methods cause the media files to be removed from the project only; they are not deleted. The files remain on the hard disk and can be used for other projects again.

Removing unused files

After completing an AV show, the Media Pool usually contains a huge number of files which are not needed for the show in their entirety. This function allows you to remove all unused files from the project. The files are not deleted but remain on the hard disk.

1. In the main menu click **Media Pool** and select **Remove unused files...** following which a dialog asks the user if the display data of these media files should be deleted as well:
    - **Yes** ...deletes all display data for the media files removed from the project.
    - **No** ...should be chosen if the display data for the removed media files are still required for other projects.
2. After this, the status display in the bottom right corner of the program window shows the number of removed files.

Info Files from the External Pool are not removed via this function.

See also

Moving unused files

Moving unused files

After completing an AV show, the Media Pool usually contains a huge number of files which are not needed for the show in their entirety. This function allows you to shift unused files into different folders and separate them from the files that are absolutely necessary for your project. Later on, you can save and/or delete these files as you wish.

Attention! Please bear in mind that by using this function, media files are moved from their original folders into different folders, and that the original order can only be resumed via the file ***Backup.map***. Before deleting the files, make sure that you positively don't need them anymore. Wings Platinum is not able to check whether a file may be required for yet another project.

1. Click on **Media Pool** in the main menu and select **Move unused files**. Following this, Wings Platinum will check the Media Pool and a warning message be displayed, saying that the action cannot be undone. Click **Yes**, if you want to proceed anyway.

2. Click on **Select folder** and specify the corresponding folder or create a new one. It is important to have sufficient memory space on the drive. The dialog will provide information about the memory space on the target drive and on the memory space required for this action.

   Info If you create a folder on the drive where your project including all media files is located, there will certainly be enough memory space available because the unused files are already located on it and physical copying won't be necessary. In this special case you can ignore a warning message specifying a lack of memory space.

3. **Keep directory structure** should normally be provided with a checkmark. If your files are saved to a directory structure which you do not want to maintain you can remove the checkmark for Wings Platinum to create its own directory.
4. For **Maximum size of subfolder** you define portioning of the files in the subfolders. This is an important and practical feature if you want to save the files on a data carrier of a certain size at a later time, e.g. CD or DVD.
5. Click on **Start**. The status dialog will appear and inform you about the progress. Now all unused media files are removed from the Media Pool and shifted, and the corresponding display data that were required for display in the program deleted. Confirm the message about completion of the shifting process with **OK**.

Info

- Picture sequences, e.g. from 3D programs or fast motion recordings from DigiCams, located in the Video Pool currently cannot be considered for this process!
- Via this function, files from the External Pool are neither removed nor shifted.

Removing empty folders

This function allows you to remove all empty folders from the Media Pool. This is very useful if you have removed superfluous files from the project and end up with empty folders.

- Click on **Media Pool** in the main menu and select **Remove empty folders**.

See also

Moving unused files

Supported file formats

Wings Platinum supports numerous file formats of different types of media, which are automatically recognized when they are added to the Media Pool.

Picture files

Wings Platinum supports all commonly used pixel-oriented image formats except Corel PhotoPaint files (*.cpt). The color depth must not exceed 24 bits, except for TIF files which may also have 48 bits. Any color profiles that may be available are considered for TIF and JPEG format. See also Color management. Vector-based formats are not supported; they need to be converted into a pixel format.

Tip: If restricted memory capacity is no major issue, you should use TIF format for the pictures, **Advantages of the TIF format**.

All in all, TIF format offers the best properties:

- A **color depth of up to 16 bits per channel** offers extra capacity for editing of tonal values.
- Lossless LZW compression
- **Embedded color profiles** can be read and considered by Wings Platinum.
- **Storage of layers** maintains full editability of pictures created in editing programs, e.g. Photoshop (text, layer effects, etc.).
- **Alpha channels or transparent backgrounds** can be saved and allow extracting of objects, for example.
- **Semi-transparent areas** are displayed at high-quality by Wings Platinum without any "gray veil".

Audio files

- All uncompressed **wave** and **MP3** formats are supported. Within one project files with different resolution and sampling rates can be used. Wings Platinum will convert them online without you even noticing.

Video files

- **AVI** and **WMV**; This, however, requires the corresponding codecs in the operating system. DV videos need to be of type 2 (recorded with Adobe Premiere or Scenalyzer Live, for example), type 1 is not supported.
- MPEG Codecs by MainConcept are part of Wings Platinum, so that **MPEG-1** and **MPEG 2,** as well as **H264** format can also be played. (**.mpg*, **.m2t*). Since HDV videos are MPEG-2 compressed videos they can also be processed. In principle, this applies also to **VOB** files from video DVDs. For more information refer to Processing VOB files.
- Playback and editing of **MPEG-4** compressed videos, e.g. also **AVCHD** is now supported as well. However, these files require a very powerful computer and we recommend creating and using intermediate video data for them.
- **QuickTime** videos (***.mov***): Requires installation of QuickTime Player version 7.01 and up. Any videos playable in QuickTime Player on the presentation computer can also be played in Wings Platinum. The QuickTime Player installation file can be found on the Wings Platinum DVD in folder **Software** or on the Internet at ***www.apple.com***. Also the formats of the paid Quicktime Pro Player are suppported.
- Please note that the Basic License only supports standard resolutions of up to 768 x 576 pixels. HD videos require the Starter License as a minimum.

Comments for media files

You can enter remarks/comments for every media file in the Media Pool.

- Just move the scroll bar at the bottom of the Media Pool to the very right and click column **Comment** for the corresponding file. The remarks can be any length.

Info These comments can be printed out in the tray lists.

Managing external files

In category **External** you can add and manage any data to do with the project, e.g. the storyboard, any texts, PowerPoint presentations, multi-tier

picture collages, records of release meetings, etc. From the Media Pool, these files can be opened in the corresponding editor without you having to search for them. When producing a backup copy in Wings Platinum this external data can optionally be saved, too.

Adding external files

1. In the Project Explorer, select or create a folder for category **External** (.... if necessary, create a new folder by right-clicking **External**).
2. Right-click the Media Pool and select **Add external files**.
3. In the file dialog, select one or several files and click **Open**.

Info External files cannot be added via drag & drop.

Opening external files

- In the Media Pool, right-click the corresponding external file and select **Open**. Following this, the program allocated in Windows is started and the corresponding file opened.

Media file Properties

Changing the properties of several Media Pool files

The properties of several files in the Media Pool can be changed simultaneously if they are the same type of files, e.g. videos, images or audio.

Note: Currently this function is only available for video files and sequences of pictures!

1. In the Media Pool highlight the files whose properties you want changed.

2. Right-click a highlighted file and select **Properties**, following which a modified properties dialog will be displayed.
3. In column **Apply** check the box for the parameter you want to modify and enter the new properties as desired. The tile bar shows the number of files this modification has been applied to.
4. Click **OK**, and the modifications will take effect on the highlighted files.

Info

- If one of the highlighted videos or sequences of pictures has already been used as an object in the timeline the frame rate can no longer be changed.
- A change of the aspect ratio can only be applied to videos and not to sequences of pictures, as the latter do not require any format changes.

See also

Video Properties

Picture Properties

In the Media Pool, click on category **Pictures**. When list view is active (click if applicable) the line displayed provides a lot of information about the corresponding file. The actual properties dialog can be opened by right-clicking the picture file and selecting **Properties**.

Here you can specify the properties to take effect on all picture objects in the timeline linked up with it:

- **Alpha channel** lets you define which information is to be used for transparency control:
  - **Alpha channel** ...uses the first alpha channel in a picture (default setting).
  - **Red channel** ...uses the red components of an image.
  - **Green channel** ...uses the green components of an image.
  - **Blue channel** ...uses the blue components of an image.

Info This setting is irrelevant if you need the mask directly for a video object. In such a case the transparency information is selected in the video object properties. See Video Object Properties.

- Images with alpha channel allow you to define whether the alpha channel information is to be used for display data generation or not (either premultiplied with white or black or not premultiplied). Normally you can leave the default setting **Automatic**. If transparency is displayed incorrectly for a particular image, i.e. with a milky veil or with white or black edges for objects separated from the background, you can choose any other option.

Info

  - **Important:** For the changes to become visible on the screenb you need to close the screen and reopen it again.
  - Automatic consideration of the alpha channel happens only during display data creation. After loading older project you need to delete the display data to allow consideration and correction of the transparency information. See Deleting display data.

- You can define a **Custom thumbnail size** which only takes effect on the display in the Media Pool and in the timeline.
- Under **Compression for EXE presentation** you can define whether a picture is always to be used uncompressed, i.e. even when you set JPG compression during creation of the EXE presentation. This setting is only appropriate for pictures with a critical progression, as JPG compression may cause steps in the progression to become visible.
- For **File update** you can have a picture file checked for modifications even during a presentation. This is only appropriate for special applications where dynamically modified picture contents need to be considered during the presentation. See Checking picture files during a presentation.

Info Function **File update** causes a certain overhead and should only be activated when absolutely necessary. For external modification of picture files Wings Platinum offers different ways to update display data. See External editing of media files. Moreover, all picture files are usually che-

cked when a project is opened and the display data are updated automatically.

Audio Properties

In the Media Pool click on category **Audio**. The list and the correspondingly named columns provide information about the corresponding audio files.

See also

Viewing and listening to media files

Sorting contents

Video Properties

In the Media Pool click category **Videos**. The list displayed provides a lot of information about the corresponding files. The actual properties dialog can be opened by right-clicking the video file and selecting **Properties**.

Here you can define the properties to take effect on all video objects in the timeline linked up with it:

General

- **Aspect ratio** ...determines the aspect ratio for the video to be displayed. Manual entry is only required in exceptional cases as the aspect ratio of standard formats is usually determined automatically. However, it is also possible to disable this automatic setting.
- **Frames/s** ...the frame rate cannot be changed here. However, you can change the speed via **Pitch**. See also Stretching or compressing an object.
- **Deinterlace** ...is required for videos based on interlaced pictures and is usually set correctly by default. If a video is not displayed correctly in the screen you can make the following manual settings:
    - **Off (progressive)** ...no deinterlacing is applied
    - **Top field first** ...deinterlacing is applied starting with the top field first (standard setting for deinterlacing).

- **Bottom field first** ...deinterlacing is applied starting with the bottom field.

The point of time when deinterlacing is applied, i.e. during playback in realtime or during rendering, depends on the codec used. See also Deinterlacing of videos.

- **Color standard** ...affects the color interpretation of the video image and is normally adjusted correctly automatically. If a video is not displayed with its correct colors in the screen you can make the following manual settings:
  - **BT.601** ...is the color standard for SD videos up to 768 x 576 pixels, i.e. also for videos on DVDs.
  - **BT.709** ...is the color standard for HD videos from 1280 x 720 pixels and up.
  - **SMPTE 240M** ...is the color standard for analog HD videos and is only appropriate in special cases.

Info For old HD videos created using Wings Platinum up to V4.11 you should use **BT.601** as Wings Platinum used this color space for creation of videos up to version V4.11.

- **Create display and intermediate data automatically** ...is enabled by default and ensures that display data are created automatically. If this function is disabled, no display data will be created and a green cross will appear in front of the corresponding file in the Media Pool. The green cross does not appear if display data are already available. See also Differentiated creation of display data for videos.

Intermediate video data

- **Use intermediate video data** ...causes intermediate video data to be created automatically and used during presentation. This ensures problem-free operation and good performance. Deinterlacing is always applied simultaneously.
- **Quality** ... defines the quality of video images. The better the quality, the lower the compression and the larger will the files be. The following options are available:
  - **Best (Q1)** ... compression is very low and quality very high.

  - **High (Q2)** ... compression is low and quality high.
  - **Normal (Q3)** ... compression and quality are well-balanced.
  - **Low (Q4)** ... compression is high and quality low.
- **Seeking** ... defines the speed at which a position within a video can be found. This setting affects the keyframe interval, i.e. the distance between keyframes with the entire image information. Fast seeking of the locator requires large files, slow seeking allows smaller files.
  - **Fast (P1)** ... uses a keyframe interval of 10 and allows very fast positioning of the Locator.
  - **Medium (P2)** ... uses a keyframe interval of 20 and allows still quite fast positioning of the Locator.
  - **Slow (P3)** ...uses a keyframe interval of 300 and positioning of the Locator requires some time.
- Instead of **Original size** you can also enter a lower image size for the intermediate video data. When you choose **Width** or **Height** you only need to enter the selected parameter. The second will be adjusted automatically in accordance with the aspect ratio chosen.

Further information can be found in topic Changing the properties of intermediate video data.

Info Media Pool column **Intermediate video data** shows the properties of the intermediate video data. The first letter stands for the quality, the second for seeking and other parameters refer to the resolution. In example **Q3P2 (1280 x 720)** refers to a quality of "normal", seeking of "medium" and a video image size of 1280 x 720 pixels.

Playback configuration

Here you can see the codec used for decoding the original video. If a number of suitable codecs are available on your computer you can click and select an other one. However, you should have important reasons to do so because Wings Platinum automatically selects the most suitable one.

Info Please bear in mind that the codec at the top of the dropdown list is the most suitable and the one at the bottom the least suitable alternative.

Viewing and listening to media files

Picture, sound and video files can easily be selected and watched or listened to in the Media Pool.

- In the Media Pool, mark the corresponding media file. Immediately afterwards, the picture, the sound wave display or some pictures of the video are displayed in the Preview Window. Using the Expand/compress function, pictures can be viewed at a large size in the timeline window. See Sorting on the lightbox.

  Info Crosses on top of the icon at the beginning of a file line on the left have the following meaning:

  - **Blue crosses** ...signalize that no current display data for audio and video files are available for display in the program window. A blue cross will also appear for picture files if the properties of the current file differ from the properties of the file originally used for the project, e.g. when a picture was edited externally. Information on how to update the status of externally edited pictures can be found out under External editing of media files and Updating media file properties.
  - **Yellow crosses** ...appear for videos or picture sequences for which usage of intermediate video date is enabled, but which have not been completed yet.
  - **Green crosses** ...appear only for video files for which no display data are available and for which automatic creation of display data is disabled. See Differentiated creation of display data for videos.
  - **Red crosses** ...mean that the corresponding media files are missing. In this case you should have the program search for it. See Searching for missing files.

- **Prohibition signs** ...indicate that the video cannot be played. This may be due to the fact that creation of intermediate video data has been initiated but they have not been completed yet or that no suitable codec has been selected. In such a case check in the video properties whether a different codec can be selected. See Video Properties.

- For pictures you can activate Lightbox View. Just click on the button **Activate lightbox view**. See also Sorting on the lightbox.
- Audio files can be played back by clicking the **Play** button in the Media Pool or the wave display in the Preview Window.
- When clicking the wave display, playback starts at exactly the position in time where you clicked. Click again to stop playback. By double-clicking a new position in the wave display, playback can be continued at that location even while playing back the file. Just try it out.
- Marking a different audio file in the Media Pool while playing back, causes playback to change over immediately to the other audio file.

Sorting contents

Similar to the Windows Explorer, you can also sort the contents of the Media Pool according to certain parameters, e.g. names, file formats, picture sizes, sampling rates and so on.

- In the Media Pool, click the parameter in the title bar according to which you want sorting. Click a second time to reverse sorting, i.e. ascending or descending order. There are three statuses:

  unsorted

  sorted in ascending order

  sorted in descending order

- You can sort in accordance with a number of criteria. If you sort according to format and file size, for example, all JPG files are listed one after the other, while sorting within the JPG files is according to size. The same applies to any other format.

Info

- If the desired sorting order cannot be achieved, disable the sorting criteria for all columns and enable only those criteria that you really need.
- You can alter the order of columns by dragging the column headings to the required location.
- For pictures and bitmaps (Control Panel graphics) you can **Activate lightbox view** which allows you to sort pictures according to your own criteria. ...See Sorting on the lightbox.

See also

Displaying pathnames

Opening a category or a folder in a new window

Sorting on the lightbox

Lightbox view in the Media Pool allows you to sort your pictures at random, just like on a real lightbox. Moreover, it also allows you to find out whether pairs of pictures are suitable for dissolves.

1. In the Media Pool, click category **Pictures**.
2. Click button **Lightbox view** in the top right Media Pool corner.
3. You can now drag the pictures to any position and arrange them as you like. These are the options:
    - In order to have enough space for sorting, right-click the lightbox and select **Insert empty field** or **Insert empty row**.
    - Images can be dragged and dropped freely on the lightbox. If you drag one or several images on top of another image, these im-

ages are inserted and the other images moved further towards the end.

- If you drag one individual picture on top of another one while pressing the **Alt** key, they swap places.
- The **Expand / Compress View** function is particularly useful for digital pictures if you want to select the best from among a number of similar motifs. Right-click the picture, hold the mouse key down and move the mouse pointer slightly on that picture to make it appear in the timeline window.
- The **Dissolve test function** helps you to quickly find pictures for good dissolves. With the right mouse button, drag a picture onto another picture and it will be dissolved in the timeline window as long as the right mouse button is kept pressed. By pressing a number key while doing so, the dissolve time is altered. **1** = 0.5 s, **2** = 1 s, **3** = 1.5 s, **4** = 2 s, **5** = 2.5 s, **6** = 3.5 s, **7** = 5 s, **8** = 7 s, **9** = 10 s and **0** = 0 s.
- In order to close a gap between two pictures, click on an empty field and select **Close gap**
- If you want to remove all empty fields, go the main menu and select **Media Pool** - **Close lightbox gaps**.
- You can also shift and remove several highlighted pictures in one go. Highlighting several files works just like in the Windows Explorer. Hold the Ctrl key to highlight one individual picture after the other, use the **Shift** key to highlight several pictures following each other.
- If you want to add new images at a certain location, right-click a picture or an empty field and select **Add...** After selecting the new pictures and clicking on **Open**, they are added to the corresponding location and the existing pictures are moved to the end.

After determining the order of the pictures, you can highlight these pictures and drag them into a picture track or an empty space in the timeline. This way a complete dissolve sequence is created.

Tip You can open a second lightbox or an additional Media Pool window by right-clicking a folder or a category and selecting **Open in new window**.

Sorting according to certain criteria

In the List view, the pictures in the Media Pool can be sorted in accordance with certain criteria, such as **Name**, **Used**, **Size**, etc. And this sorting can also be transferred to the Lightbox View.

1. Click button **Lightbox view** in the top right Media Pool corner to display the pictures in list form.
2. Click the parameter in the title bar according to which you want sorting. Click a second time to reverse sorting, i.e. ascending or descending order.
3. In the main menu, click **Media Pool** &endash; **Current Sort Sequence -> Lightbox** to display the pictures in the lightbox in accordance with their sorting order in the list.

Info

- If you want to maintain the sorted order of images when changing over to lightbox view click button **Lightbox view** while holding down the **Ctrl** key.
- Those pictures that are already used in the show as objects are marked in the lightbox by a pink dot in the top left picture corner.
- Pictures contained picture objects can also be exchanged in the timeline. See Shifting object contents.

Selecting timeline objects

The objects linked with Pool objects, i.e. media files, devices or screens, etc. can be displayed or highlighted in the timeline. This is a useful feature when media files are to be removed from the Media Pool.

- In the Media Pool, right-click the corresponding Pool object and **Select timeline objects**. Upon doing this all linked objects are highlighted and the Locator jumps to the first of these objects.
- By pressing keys **Shift** + **Cursor** (right/left) the Locator jumps to the beginning of the next highlighted object. This way you can search for highlighted objects and then edit or remove them, for example.

Info

- This function is available for all Pool objects: screens, image fields, text fields, device ports, devices, device folders and any kind of media files. If this function is not available in the context menu, it is not available for this type of Pool object.
- Function **Select timeline objects** may also result in objects being highlighted, which are part of a group. In this case, if you use **Remove** for the highlighted objects, these objects are removed from the groups.

External editing of media files

You can also use external programs for editing or viewing the media files in your project. For this purpose, Wings Platinum can be linked with external editors or players, e.g. Photoshop for editing of pictures or the Windows MediaPlayer for watching videos, etc. In a context menu, the files can then be opened with the corresponding program and, after editing, Wings Platinum will update the file properties and the display data for presentation.

Linking programs

First of all, you need to link up the corresponding programs with the media files.

1. Click on **Options** in the function bar below the main menu or in the main menu on **Extras** and **Options** in the main menu. On the left, under **Global Options** mark **Media Editors**. If this entry is not visible, click on the plus sign next to Global Options.

2. On the right, you can specify two external programs each for editing audio, picture and video files. To do so, click on **Select program** and enter the corresponding software.
3. If a program is not capable of editing, but only of playing back or showing files, you can remove the checkmark next to **Editor**.

Info In the context menu, the Editors are displayed with the appendix **Edit with**... If the checkmark in front of the Editor is removed, the context menu will display **Open with**... In this case, Wings Platinum will not check whether files were edited.

Opening media files with external programs

If you want to playback or edit media files, i.e. sound, picture and video files, using external programs, proceed as follows:

In the Media Pool, right-click the corresponding media file and select the program, i.e. **Edit with ...** or **Open with ...**

- Alternatively, you can right-click the object in the timeline and select **Edit Pool Object**. If the media file is used in several objects a warning message appears saying that the modifications to the file will affect all the objects linked up with it.

Attention! Audio and video files should not be modified externally in their length (not shortened, in particular) if they are already being used as objects in the timeline. This might result in incalculable faults when playing these objects.

Info

- You can also cause the media file of an object to be displayed by right-clicking the object and selecting **Display pool object**. Column **Used** in the Media Pool will tell you how often this file is used for other objects. Any modifications of this file affect all objects that use this file.
- To create a picture variant, it may be useful to create a duplicate in the Media Pool first and then edit it. See Duplicating picture files.

- If restricted memory capacity is no major issue, you should use TIF format for the pictures, **Advantages of the TIF format**.

  All in all, TIF format offers the best properties:

  - A **color depth of up to 16 bits per channel** offers extra capacity for editing of tonal values.
  - Lossless LZW compression
  - **Embedded color profiles** can be read and considered by Wings Platinum.
  - **Storage of layers** maintains full editability of pictures created in editing programs, e.g. Photoshop (text, layer effects, etc.).
  - **Alpha channels or transparent backgrounds** can be saved and allow extracting of objects, for example.
  - **Semi-transparent areas** are displayed at high-quality by Wings Platinum without any "gray veil".

- After modifying one or several files outside Wings Platinum without using the functions explained above (e.g. for batch editing of a number of files) you should update the File Properties next time you call up the project in Wings Platinum and have new display data created. See Updating Media File Properties and Creating display data for media files.
- As soon as the external program has a checkmark in front of **Editor** in **Global Options** – **Media Editors**, a dialog will appear which, after editing and saving the media files, can be confirmed with OK. Following this, Wings Platinum will update the display data of the modified files.
- Should no external programs be selectable in the context menu, you first of all need to link up external programs with media files.
- If you have altered media files using external programs, the project needs to be saved even if nothing else was changed. If this is not done, Wings Platinum will regard the display data as missing when calling up the project the next time.

Duplicating picture files

When a picture is to be provided with a variety of picture effects, a slide to be used as a duplicate or an image variant to be created in your external image editing program, it may be helpful to produce a duplicate.

1. In the Media Pool, right-click the corresponding picture and select **Duplicate file**...
2. In the following file dialog click on **Save**, to save the file. To distinguish it from the other one, a "**_2**" is automatically added to its file name. Following this, the duplicate appears next to the original image in the light box or, when the images are displayed in a list, at the end of the list. In the list you can quickly find it by sorting the images according to file name and insert date. See Sorting contents.

Converting pictures to JPG format

All pictures within a project or individual pictures can be converted to compressed JPG format, thus reducing the required memory space. Only those pictures without alpha channel are converted that are available in image formats different from JPG.

1. In the main menu click **Media Pool** – Convert pictures to JPG format and the corresponding option:
   - **All pictures** ...considers all pictures contained in the Media Pool.
   - **Only used pictures** ...considers all pictures that have already been used in the timeline.

   Info If you want to convert individual files, right-click a picture file in the Media Pool and select **Convert file to JPG format**. **If this item does not appear in the context menu...**

   ....there is already a JPG file with the same name in the Media Pool which means that conversion is not possible.
2. For **JPG compression** choose the degree of image compression. A low value stands for high quality and low compression, while a high value

stands for inferior quality and causes a corresponding compression resulting in a correspondingly smaller file size. For a good quality we recommend values between **1** and **5**.

3. Pictures are saved under the same name but with a different file extension. A picture named ***Example.tif*** is saved as ***Example.jpg*** after conversion. If, however, a file named ***Example.jpg*** already exists in the same folder you can choose one of the following options:

    - **Skip conversion of original file...** the original file is not converted but is continued to be used.
    - **Accept this JPG file...** the original file is not converted and the existing JPG file is linked up with the picture objects.
    - **Replace this JPG file...** the original file is converted and replaces the existing JPG file. The links with the picture objects are adjusted. However, this is only done when the existing JPG file is not located in the Media Pool.

Click **OK** to start conversion.

Info

- Please bear in mind that JPG compression always causes a loss of image quality. Therefore, you should test the various compression steps and the resulting loss before you actually start converting large numbers of images.
- During conversion the original files remain unchanged and continue to be available on your hard disk.
- Images with a color depth of 48 bits (tif format) are reduced to a color depth of 24 bits during conversion to JPG format.
- Pictures provided with a transparency or an alpha channel (to be recognized by the 32 bit resolution) cannot be converted. JPG format does not support transparency.

Preview windows

Essentially, the Preview Window has the following functions:

- Enlarged display of pictures.

- Viewing and listening to audio files.
- Displaying individual video images during cutting.
- Display of messages and info, e.g. when transports for a dissolve sequence collide.

This is how you open a Preview window:

- To display the Preview Window, click on **View ▶Toolbars** and **Preview**.
- The same way the Preview Window can be made to disappear.

Info

- Just like in Windows, the **Preview Window** can also **be increased in size**. With the mouse, grab it at the raised double line (left margin below the cross) and drag it towards the screen centre. Now you can adjust it in size as desired. By double-clicking the title bar (top margin) or the raised double line you can switch over between the small and the large Preview Window.
- The Preview Window, however, is also used **for displaying messages**. You should therefore leave it open. Otherwise these messages appear in a separate dialog which must always be confirmed with **OK**. And that's a nuisance, don't you agree?

Opening a category or a folder in a new window

Media Pool categories or folders can be opened in an extra window and their contents displayed simultaneously. This is helpful for sorting or selecting media.

- Right-click the corresponding category or folder and select **Open in new window**.

- A new Media Pool showing the selected category or folder will appear. This window allows you also to display and select the contents of other categories or folders.

Displaying/hiding the Media Pool

- To display the Media Pool, click on **View** ▸ **Toolbar** in the main menu and select **Media Pool**.
- The same way the Media Pool can be made to disappear.

Project Explorer

Displaying slide trays

This tab is only relevant for usage of slide projectors.

This tab allows you to take an influence on sorting the slides to the slide trays.

- In the Project Explorer, click on tab **Slide trays**.
- This display shows which pictures go to which trays. See also Assigning slide tray positions.

Info What type of projector P1, P2, P3 stands for, can be seen in category **Devices** in the Media Pool. If the projectors are not displayed, click on the plus sign next to and select the corresponding device port. ...See also Control units and slide projectors.

Audio level display

- In the Project Explorer, click on tab **Audio level,** to find the chosen level display, i.e. Peak Level or K-System with RMS level. See also The K-System - Checking volume and dynamics.
- While playing back, the current level is displayed in the form of bars. Peak levels are marked by peak indicators. The highest possible level is permanently indicated by small markers on the dB scale. Reset the audio level bars by clicking on them with the mouse. The peak level must be no means exceed zero dB.
- When the K-System is activated the wide colored bars indicate the RMS level while the narrow gray ones indicate the peak level.

- You can adjust the master volume control by grabbing one of the little triangles with the mouse.

Comment field

- In the Project Explorer click on tab **Comment**. Here you can enter remarks about your projects. They will be visible before opening a project. E.g. see **Create new project** &endash; **Last projects.**

The Control Panel can be used for direct and timeline-independent operation of devices and for direct start of trigger actions. Moreover, it also allows control of all sorts of devices via serial driver commands. The Control Panel offers status displays for control channels, switching states, incoming timecode and SC Master variables. The override functions makes it highly suitable for live applications which require direct intervention in programmed sequences or for calling up pre-programmed sequences by means of the corresponding trigger actions. All this is done via control panel fields arranged on the Control Panel. The Control Panel pages – up to 999 are possible – can even be called up via timeline control. Fullscreen mode and the option of individual, graphic design make the Control Panel a perfect fit for operation via touch panel.

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

The Timeline

The timeline is a window displaying the timeline from left to right (...explaining the Program Window). It contains various tracks for placing and editing a variety of media objects for a show. When playing the show, the Locator moves from the left to the right across the objects.

Starting and stopping playback

In order to start, stop or pause timeline playback, you can choose from a number of different options. Playback is in **Preview** Mode, details about which can be found further below.

- **Start playback** in Preview Mode → **Space bar** (...press again to change to Pause Mode).
- **Start playback with the mouse** (Preview Mode). → Click the gray area of a track, hold the left mouse key and right-click in addition to this. This method is most suitable after positioning the Locator.
- Stop playback → Esc key, press Esc again to terminate full screen mode, **Further keys compatible with PowerPoint**

  ...simultaneous pressing of **Ctrl** and **Pause**.
- **Stop with a mouse-click** → one click in the timeline will do
- Activate Pause Mode → PageUp key or space bar (when playback is running), **Futher keys compatible with PowerPoint**

  ...keys **Page Up**, **Cursor left** and the **Backspace key**.
- Resume paused playback → Enter key or space bar, **Further keys compatible with PowerPoint**

  ...keys **Page Down**, **Cursor right** or **Cursor down**.
- A show can be paused at a specific point and setting pause markers in the timeline. See Markers.

- Alternatives: At the top of the timeline you can find buttons for **Play**, **Pause** and **Stop**.

Playback modes

Display on the screen is hardware-rendered via a 3D graphics card, which allows for very high quality. Basically, Wings Platinum distinguishes between Preview and Presentation Mode.

Playback in Preview Mode

Preview Mode works at somewhat reduced display quality to ensure swift editing. This is particularly important for complex projects and multidisplay shows. In these cases, editing at full quality would only put unnecessary strain on the system.

Media are displayed as follows:

- **Pictures** ...are displayed on the basis of low-resolution display data defined in the Screen Properties by a certain percentage of the higher-resolution display data for presentation. If a value of 100% has been entered, preview and presentation quality are identical; this could be a standard setting for simple shows.
- **Videos** ...are also based on display data and played at very high Preview quality. Since the frame rate is not reduced frame-accurate cutting is also possible in Preview Mode.

Info For Multidisplay Mode, display at full presentation quality can be enabled for the slaves by placing a checkmark in the Screen Properties under **Preview** next to **Slaves always use presentation quality**. See also Screen Properties.

This is how you start playback in Preview Mode:

- **Screen window** ...press the large space bar or click the mouse-button as explained above.
- **Fullscreen mode** ...double-click the screen window and press the space bar.

Stop playback by pressing the **Esc** key or via the remote control unit. Following this you either press **Esc** or double-click the screen again to reduce it to window size, or close it altogether by pressing the **F10** key.

Playback in Presentation Mode

Presentation Mode uses high-resolution pictures and video files for display, although this can be varied depending on the application. Moreover, this mode offers optimized performance (...compared to Preview Mode with the same display data resolution).

- **Pictures** ...are always displayed on the basis of high-resolution display data produced from the original picture files. The settings can be made in the Screen Properties.
- **Videos** ...are displayed on the basis of original or intermediate video files. In particular situations, video tracks can be changed to preview quality. In this case, the button in the track head looks as follows .

This is how you start playback in Presentation Mode:

- **Fullscreen mode** ...press the **F5** key for the fullscreen image to appear and Pause Mode to be activated. Following this you press the space bar to start playback.
- **Screen window** ...press **Ctrl** and **F5**, followed by the space bar.
- **Terminate fullscreen mode** ...press **Esc** twice or, alternatively, **Shift** and **Esc**.

Stop playback by pressing the **Esc** key. Following this you either press **Esc** or double-click the screen to reduce it to window size. If the screen is located on a second monitor, full screen mode remains and can be reduced in size by pressing **Shift** and **Esc**. Close the window altogether by pressing the **F10** key.

Info

- When there is a video track in Exclusive Mode in the project, pressing **F5** causes the presentation video to be started in fullscreen mode.
- No editing is possible in Pause Mode. Stop playback by clicking in the timeline or by pressing **Esc**.
- The Screen Option **Reset pan / zoom** gives you the chance to decide whether the Pan/Zoom settings are to be automatically reset during the Presentation (**F 5**) or not. See Screen Properties.
- From the Pause Mode, the show is continued without any delay because not status information needs to be transferred.
- If you press the space bar immediately upon stopping via the **Esc** key, playback is resumed at the location where it was started last. A sort of loop playback is created.
- Playback stops automatically 10 seconds after the last active object. The Autostop period can be changed in the Timeline Properties. See Timeline Properties.

In Playback or Pause Mode you can jump to any other location within the current timeline. After right-clicking the screen a **Navigation Bar** appears which represents the current Locator position. Clicking the corresponding area in the bar makes the Locator jump to that location. Clicking the screen above the bar makes it disappear (at the next slide change at the latest).

- Presentation of a show can be started from a position marker. But it is also possible to jump to the previous or next marker. See Playback from position marker.
- When playback is started, the order of pictures in the virtual slide trays is automatically updated.
- The presentation of a picture sequence (...video consisting of many individual image files) is always based on Intermediate Video Data as a standard PC would definitely be unable to load and display, for instance, 30 images per second at full resolution.

Continue paused playback

In paused playback, i.e. when the Locator is waiting at a pause marker, playback can be resumed as follows:

- By pressing **Enter**, **Return** or any other PowerPoint-compatible keys. See Starting and stopping playback
- Via the trigger action **Continue** and associated function keys. See Trigger functions.
- Via remote control units or serial commands. See Remotely controlling Wings Platinum.

Playback from position marker&ldots;

These functions are only available with an Advanced License or up. See Licenses and functions.

You can use position markers to control playback or locate within a timeline, i.e. jump to certain locations. Jumping relative to the Locator, to the previous or next marker is also possible. To do so you set position markers and create triggers performing the corresponding actions.

1. Now right-click a marker track and select **Insert position marker**. As an alternative, you can also press the **M** key. Unless you have already created a marker track in your project, do so now. See Inserting tracks.
2. Double-click the position marker and select a free remote index, e.g. by clicking on **First free remote index**. Add further position markers at the corresponding locations.
3. Now create a trigger. In the Media Pool click category **Trigger**. Right-click some free space in the right Media Pool section and select **Add trigger**.
4. In category **Timeline** select one of the following actions:
    - **Start presentation** ...starts the presentation in fullscreen mode.
    - Start presentation (Pause) ...as before, but changes to pause mode immediately.
    - Play ...starts playback of the specified timeline.

- To position ...causes the Locator to jump to the specified position marker.

5. At **Parameter** you can optionally enter a timeline (remote index). At a value of zero the trigger action always refers to the current timeline. Moreover, you also need to define the corresponding **Marker Mode**:
   - **Specified marker** ...jumps to the position marker with the specified remote index. This is an absolute position.
   - Previous marker ...takes the next position marker to the left of the Locator. This is a relative position.
   - Next marker ...takes the next position marker to the right of the Locator. This, too, is a relative position.
6. If you want to start the trigger action by pressing a function key, you can assign a function key to the trigger. Finish by clicking on **OK**.
7. To start the trigger action, right-click the trigger in the Media Pool and select **Execute now**. There are some more ways of starting triggers, e.g. via control panel fields. See Executing a trigger.

Info

- To allow jumping to relative positions, the Expand/Compress setting must be zero. Just press the **X** key on the numeric keypad (multiplication).
- Any pause markers contained in a presentation to pause playback may be used as jump destination. See Jumping to pause markers.

In Playback or Pause Mode you can jump to any other location within the current timeline. After right-clicking the screen a **Navigation Bar** appears which represents the current Locator position. Clicking the corresponding area in the bar makes the Locator jump to that location. Clicking the screen above the bar makes it disappear (at the next slide change at the latest).

-

Asynchronous playback and loop

For Video and Audio there is an option which allows asynchronous playback independently of the other timeline contents. This function enables a video to be run in a loop in the background even after the Locator has stopped at a pause marker. Asynchronous audio playback also allows loop playback of music or some other sound during Speaker Support while the presenter is talking.

Asynchronous playback is somewhat different for Video and Audio. This is why will find further information in separate topics.

Loop playback

For loop i.e. "continuous" playback Wings Platinum offers a variety of different options:

- Loop playback for video and audio objects can be enabled in the Object Properties. **This is how it is done:**

  8. Right-click the object and select **Properties.**
  9. Under Render properties place a checkmark next to **Loop** and click **OK**.
  10. An object with loop properties can now be extended arbitrarily independent of the media file.

  Info

  - Please note that always the entire media file is looped. If necessary, create a shorter, loopable file by cutting and exporting. See Creating a loop file. For Multidisplay shows, in particular, the Loop files should be rather longer than shorter as looping may increasingly cause the video to get out of sync.
  - During Loop Playback the playing speed (Pitch) cannot be changed.

- For playback of a **timeline portion** in a loop place a position marker with a remote index at the beginning of the planned loop and a jump

marker with the position marker as destination at the end of such a loop. See Markers.

- A similar effect can be achieved via triggers positioned as markers in the timeline. The advantage compared to looping via jump markers is the extended functional range due to the various trigger actions. Playback, for example, can cover **several timelines**. Depending on project and media, jumps to other timelines, however, are not always seamless, i.e. it is all question of how the transition is organized. This variant, however, requires the Show Control Module to be installed. See Trigger functions.

Asynchronous playback of video loop

This function requires the Pro License or a Multidisplay License. See Licenses and functions.

Asynchronous loop playback allows a video to be continued even if the Locator stops at a pause marker. This way it is possible to realize moving backgrounds or permanently animated logos.

And this is how it is done:

1. Right-click the video object to be looped and select **Properties**.
2. Under **Render properties** place a checkmark next to **Loop** and **Asynchronous**.
3. Close the dialog by clicking **OK**. You can now extend the video as desired, as Loop Mode is enabled.
4. Start playback and the video starts playing as usual. When you press the space bar and put Wings Platinum into Pause Mode, the video continues playing independently of the Locator. You can then continue playback and pause it again as desired. The video is played as long as the Locator is located on the looped video object.

Info

- Paused playback can also be achieved by setting pause markers. When the Locator stops at a pause marker, playback of all tracks is paused except for the sound in the asynchronous track.

- Please note that always the entire media file is looped. If necessary, create a loopable file by cutting and exporting. See Creating a loop file. An object with loop properties can be extended arbitrarily independently of the media file.
- The transparency is defined by the ramp band at the Locator position, i.e. it can be controlled in sync and allows harmonious transitions to the other media.

Asynchronous audio playback

This function requires the Pro License or higher. See Licenses and functions.

Asynchronous loop playback allows audio to be continued even if the Locator stops at a pause marker. This way some music or other sounds can be continued in Speaker Support Mode while the presenter is speaking. Asynchronous sound can also run in a loop, i.e. it starts from the beginning again and again. This very convenient if you do not know exactly how long the break will be.

Info Asynchronous audio playback requires a sound card with "multi-client" capability and WDM drivers (...ASIO drivers cannot be used). While the normal, up-to-date stereo sound cards usually have "multi-client capability", whereas professional sound cards and interfaces usually don't.. If you want to use a professional multi-channel sound card, you need to use a separate stereo output for asynchronous playback. This allows synced soundtrack and asynchronous interval sound to be mixed externally.

And this is how it is done:

1. For asynchronous playback you need an audio track to be output asynchronously. Right-click the track head of an empty audio track and select **Properties**. Add a new audio track if no empty track is available. See Adding tracks.
2. Add a checkmark next to **Asynchronous mode for presentation** and close the dialog by clicking **OK**. The symbol in track head will change as an indication for asynchronous mode.

3. Drag an audio file from the Medial Pool into the asynchronous mode track. Please note that a track in asynchronous mode does not allow any crossfades by shifting the objects on top of each other.
4. You can now start playback for the audio to be played back as usual. When you press the space bar and put Wings Platinum into Pause Mode, the audio on the asynchronous mode track continues playing. You can now start and pause playback as desired; the audio in the asynchronous mode track is continued until the end of the audio file.
5. Paused playback can also be achieved by setting pause markers. When the Locator stops at a pause marker, playback of all tracks is paused except for the sound on the asynchronous track.

Info

- It is possible to **Enable loop mode** for audio objects to ensure that asynchronous interval music continues to be played even during longer breaks. For this purpose, right-click the object, select **Properties** and place a checkmark next to **Loop**. Please note that always the entire media file is looped. If necessary, create a short, loopable file by cutting and exporting. See Creating a loop file. An object with Loop properties can be extended arbitrarily independently of the media file.
- The ramp band for the volume is also considered in asynchronous mode. If playback of an object is started on an asynchronous mode track, the volume is controlled in accordance with the visible ramp band. When the Locator stops (Pause Mode), the ramp band further along the object is considered. I.e. the **audio object** is **run entirely asynchronously**, independent of the current Locator position.
- If **Loop mode** is enabled, the **volume is controlled in sync** with the ramp band, while the sound is run asynchronously in a loop. This is a very practical method for Speaker Support as it allows the volume to be adjusted to the corresponding situation via the ramp band. This allows a smooth transition between synchronized soundtrack and interval music.
- Please bear in mind that audio objects on asynchronous tracks cannot be considered for level display. Also master level verification via "Peak Search" is not possible. The level of asynchronous audio objects can only be verified via the Properties Dialog. See Sound Object Properties.

- The volume of asynchronous audio cannot be changed using the level display controls. You can only do so via the Object Properties Dialog or by changing the ramp band.
- Currently, **ASIO** drivers cannot be used for asynchronous audio playback. The sound card must have multi-client capability and use a WDM driver. See also **Options** - **Global Options** - Sound cards WDM.

Control of asynchronous playback via triggers

During asynchronous playback objects in **Auto Mute Mode** are not immediately played. However, they are on "playback standby" and can be started via a trigger. The objects defines the limits, i.e. the time frame for playback and control transparency. This way it is possible to influence the show contents externally and interactively via keypads, motion detectors or light barriers.

Info Currently, this function is **only available for video objects**! At present, video sound cannot be played back.

It takes three steps to accomplish this aim:

Preparing video objects for asynchronous execution

Creating triggers for controlling the auto mute videos

Starting and playing auto mute objects

Preparing video objects for asynchronous execution

1. In the Media Pool, enable usage of **intermediate video data** for the video in question (right-click - Properties) and drag & drop the video into the timeline.
2. Highlight the video object so that the Properties Table and its parameters are displayed and select tab **Video**.

3. Under **Output** place a checkmark next to **Loop**, **Asynchronous** and **Auto-Mute**. The following options affect video playback:

    - **Group** ...is used for grouping auto mute objects to be controlled jointly via a trigger. The number of groups can vary from **1** to **250**. **0** does not effect assignment to a group and the objects will always react to all trigger actions, no matter which group is addressed by the trigger.
    - **Start always at beginning of video** ...causes video playback to start always at its beginning. If this box is not checked, the Locator position in the object defines the location where video playback is to start.
    - **Pause at start and after every ... cycles** ...defines how often the video is to run in a loop. With a setting of **zero** the video is continuously repeated until the end of the object is reached.

4. After you have finished setting the parameters you can continue to create the triggers.

Creating triggers for controlling the auto mute videos

Playback of **auto mute** videos can be controlled by means of different trigger actions. Please note that auto mute videos can only be played in Presentation Mode. They are played during show playback but also when the show is paused, e.g. when the Locator stops at a pause marker.

1. Click category **Trigger** on the left side of the Media Pool.
2. Right-click some free space in the right Media Pool portion and select **Add trigger** for the Properties Dialog to appear.
3. Now select category **Timeline**. The following actions are available for controlling the videos:

    - **Run auto mute objects** ...ensures that the objects are played and displayed, provided that the Locator is positioned on the corresponding object.
    - **Pause auto mute objects** ...**pauses** and **mutes** playback of objects (...but not timeline playback).

- **Reset auto mute objects** ...stops playback of auto mute objects. Any possible pause positions are cancelled; during renewed playback the objects behave as programmed.

4. Under **Parameter** enter the **group** this trigger is to control. With a setting of **0** all auto mute objects are controlled.
5. If you want to execute the trigger later by pressing a function key, you can assign keys **F1** to **F12** next to **F key**.
6. If you want to start the trigger via a serial command, e.g. by means of a higher media control system, enter a remote index of **1** or higher.
7. Close the dialog by clicking **OK**.
8. The same way, create further triggers for controlling auto mute objects.

After creating all the necessary triggers, you may want to drag and drop the triggers into the Control Panel, which offers a convenient way of executing the triggers (requires the Pro / Multidisplay License or the Show Control Module). However, there are also other options for trigger execution. See Executing triggers.

Starting and playing auto mute objects

You can now start the presentation and start playback of auto mute objects via triggers. Please note the following:

- Start playback in Presentation Mode by pressing the **F5** key and the space bar. If you start playback in Preview Mode, on the other hand, the videos are played on the basis of display data in accordance with the object and control via trigger and auto mute is not possible.
- After starting playback in Presentation Mode, the auto mute objects will only be displayed after they were started via the corresponding trigger action. The trigger can already be started after pressing the **F5** key, when the presentation is still in Pause Mode. As soon as the Locator encounters the auto mute objects, the object is displayed in accordance with the ramp band.
- An auto mute object defines the possible playback length and controls the video transparency. The video, however, only becomes visible af-

ter being started via a trigger. Playback can be shorter than the object if the number of loops is limited so that the video finishes earlier.

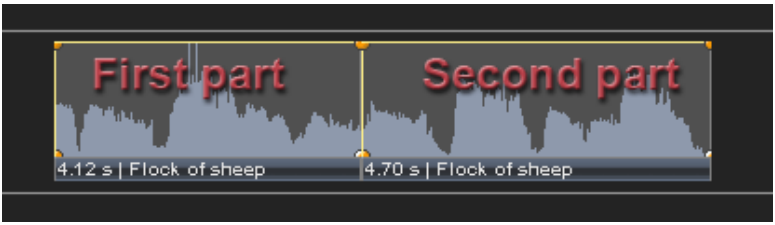
- Apart from triggers, auto mute objects can also be controlled directly via serial commands. See Remote control via EventPlayer protocol.
- Playback of auto mute videos is not possible for multidisplay shows.

Creating a loop file

If you want to play a video or audio in a loop, the file needs to have identical beginnings and endings or consecutive frames. Such loopable files are available as music or video loops. But it is also possible to create your own loopable file. It is only important to avoid a disturbing interruptions when the audio or video is repeated. This is easily achieved via a crossfade.

We are going to show you this at the example of the sound file ***Flock of sheep.wav*** (...a bleating flock of sheep) which you can find in folder **...\Wings Platinum\Media Samples\Sound\Samples**.

1. Drag the above mentioned audio file from the Medial Pool into an audio track. This audio file cannot be played properly in a loop because the beginning and the ending do not match. You can make them match by resorting to the following trick.
2. Right-click roughly the middle of the object and select **Divide**.



3. Now right-click the left part of the object and select **Cut**.
4. Right-click to the right of the remaining object part and select **Paste clipboard**.
5. Now drag one of the objects at the info line and move it slightly on top of the other for a small crossfade to be created.

The two edges created by dividing the object into two, are now located at the outside so that the beginning and ending match perfectly.

6. Now you only need to highlight both parts and export them as a file. See Exporting sound objects.

The audio file created such can be played perfectly in a loop. In principle, this method can also be used for videos. For video file generation choose a format which can be played back from the timeline using as little computer performance as possible, e.g. DV, MPEG-2 or WMV. For Multidisplay shows, in particular, the Loop files should be rather longer than shorter as looping may increasingly cause the video to get out of sync.

Compositing methods

Wings Platinum offers various methods for image and video compositing. Among experts the different ways of blending pictures are called **Compositing Modes**, a term we have chosen to use as well. After having arranged images and videos in the timeline tracks, the display in the screen window largely depends on the Compositing Modes and the location of the tracks or objects with reference to each other. Wings Platinum offers two Compositing Modes:

- **Alpha Control** ...varies the transparency of an image, which covers up other contents at full opacity.
- **Addition** ...adds two or more images, which corresponds more or less to a slide dissolve.

Alpha Control

Alpha Control changes the transparency of a picture or a video. Relevant for the transparency is the alpha value which can be varied across the Ramp band. 100 % equals to an alpha value of 1, which means that the picture has full opacity. 0 % equals to an alpha value of zero, which means that the picture is completely transparent. For picture tracks you can either activate Picture Addition or Alpha Control. For video tracks, however, Alpha Control is used all the time. A picture with a transparency level of 100% is opaque and covers picture and video objects located in the tracks below. The location of the tracks with reference to each other considerably affects compositing.

For an image blend via alpha control the title was provided with a transparent background instead of a black one. In the image blend, the structure of the façade no longer shines through, i.e. the text is actually located on top of the background picture.

Wings Platinum is also able to detect transparent areas in a picture file. For this purpose, it evaluates the first alpha channel of image files, i.e. TIF, PNG, TGA and Photoshop format. If you have stored, for example, a title slide on a transparent background as a Photoshop file, you can fade in other pictures without the details on the basic picture becoming visible. You can even fade in dark elements into bright areas of an image. This is not possible with Addition. In the Alpha channel up to 256 transparency levels can be stored, so that even semi-transparent areas and progressions can be displayed. Further information on the alpha channel is available in the documentation of your image editing program.

Alpha Control is therefore used for superimposed fading-in and fading-out of pictures and allows for completely new possibilities in the design of digital media. Unfortunately, those effects achieved by Alpha Control cannot be displayed during normal slide projection.Further examples of title fade ins

Image addition

Mere image addition causes the brightness levels and colors of the pictures to be added in accordance with the Ramp band and displayed on the screen. Fading a relatively light image into another one very often results in very light colors. Compared to a real slide dissolve, brightness values exceeding 100 % cannot be displayed on a "digital screen" which means that in extreme cases blooming white areas develop. In order to avoid this, Wings Platinum evaluates the master brightness for picture addition. If the image blend shows a brightness exceeding 100% the overall brightness is reduced to 100% maximum brightness.

Example: The two small pictures were composited via addition. The picture in the center is without brightness clipping, that on the right has been blended with brightness clipping. Mode **Addition** is particularly important for slide dissolves. For digital AV shows, on the other hand, it is only appropriate in exceptional cases.

See

Selecting Additive Compositing for picture objects

Snapping Locator to objects

When this function is enabled, the Locator turns magnetic while it is being moved. It snaps to the following:

- Beginning and end of objects
- Nodes
- Markers
- Markers in control tracks

This function allows exact alignment by grabbing and locking the corresponding object in place.

This is how you enable/disable function **Snap to objects**:

- In the function bar click **Snap to objects**. The function is enabled when this button shows a blue background.
- It can very quickly be enabled and disabled by pressing the **L** key.
- Or, as another alternative, you click **Timeline** - **Snap to objects i**n the main menu.
- Function Snap to objects can be restricted to certain tracks by highlighting them. If no track is highlighted the objects of all tracks are considered.

Info The magnetic effect can be adjusted via the Snap Radius. See **Options** – **Global Options** – General.

Moving timeline contents from Locator position

Instead of shifting marked objects you can also move the entire contents of a timeline from the Locator position, i.e. the portion to the right of the Locator, by a certain period of time.

1. Move the Locator to the position from where you would like move the timeline contents.
2. In the main menu click on **Timeline** – **Move from Locator**.
3. Enter the period in seconds by which the timeline contents are to be moved. If you want to move them to the left you need to enter a minus sign before the time.
4. If the objects at the Locator position are to be moved along, place a checkmark next to **Move objects at locator position**. Otherwise only those objects are moved whose beginning is to the right of the Locator position.
5. Click on **OK** to start moving the timeline contents.

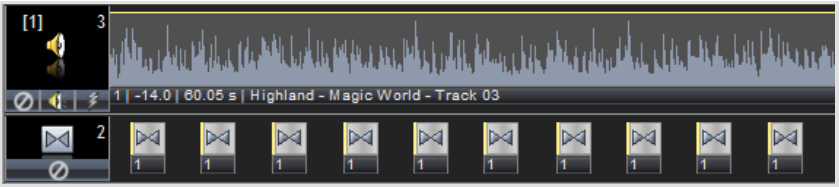
Info

- Please note that this function moves **all** objects to the right of the Locator position, i.e. even fixed and grouped objects.
- As an alternative, you can call up the dialog **Move from Locator** by pressing keys **Ctrl** and **L**.

Timing pattern for synchronization

Music is mathematics – at least when it comes to the sequence of beats. By setting markers, a timing pattern can be produced for every type music

which allows the dissolves to be synchronized with the beat of the music. **Show example**.



In the first part, the beat cannot be recognized from the graphic display of the audio but only from the position markers set according to the heard sound.

This is how you proceed:

1. Unless you have already included a marker track in your project, do so now. Right-click a track head, select **Insert track** and **Marker**.
2. Start playback, listen to the music and press the **M key** in time with the beat of the music.
3. Should you be dissatisfied with the result, have another go on a new marker track. The markers produced by pressing the **M key** are always created in the marked marker track. You can adjust individual markers by grabbing them at the red edge and dragging them with the mouse.
4. Once you are happy with your timing pattern, you should group the music object with the markers, so that the markers are linked with the music when shifting the object. ...See also Grouping objects.

Info

- When synchronizing pictures, of course you don't need to create a slide change at every marker. You can also skip one or two beats.
- Position markers to be used as timing pattern should always be set on a separate marker track and be deactivated before creating the presentation data for the CF card. Otherwise the high number of position markers will make it impossible for you to navigate properly on the CF card via the skip keys.

- It is also possible to delete a position marker by pressing the **M** key. Start by clicking the left red line for the Locator to move to this location, followed by pressing **M**.

Enabling device ports

Any connected devices can be run in sync during playback and editing after enabling the device ports. Enabling the device control is a precondition for all ports configured in **Media Pool** - **Devices** to work properly.

- In the tool bar below the main menu click on **Enable device ports**. The devices will follow every Locator movement. Click on the button again to disable the device ports again.
- As an alternative to pressing button **Enable device ports**, you can also press the **F8 key**.

Info

- When starting the synchronization process it may take a few seconds for the devices to respond.
- When a message is displayed in the preview window saying that the firmware (operating software) of the control unit is not up-to-date, you should update it. Otherwise proper function cannot be guaranteed. To find out about the corresponding firmware version for your unit, refer to topic Documentation Status.
- As a sign for active communication between the control unit and the computer, button is depressed and displayed in color. In addition to this, PC LEDs will light up at the Stumpfl control units. When an SC Net Port is used, the PC LED at the control unit goes out while SC Net commands are being transmitted and the SC Net LEDs light up.
- If the projectors do not respond, despite the fact that the device control is activated, perform a systematic check of devices or slide projectors.
- Individual devices or a number of devices in the Media Pool can be activated or deactivated. ..See Enabling/disabling devices.

- Via a control panel field, devices can also be directly or, optionally, override controlled. See Control Panel for direct operation.

Moving devices to their zero positions

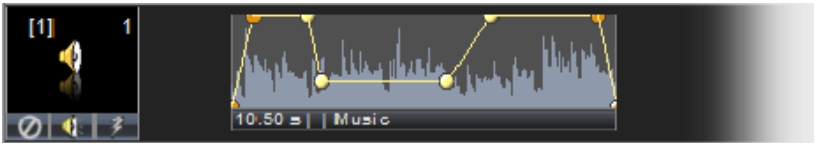
All devices can be moved to their zero positions, e.g. for a tray change.

In the main menu click **Output** and select **Devices** → **Zero position**.

Track types

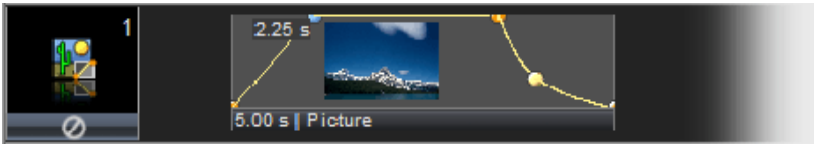
Various types of tracks for various types of tasks can be added to the timeline. Depending on the Wings Platinum version, the following tracks are available:

Audio tracks

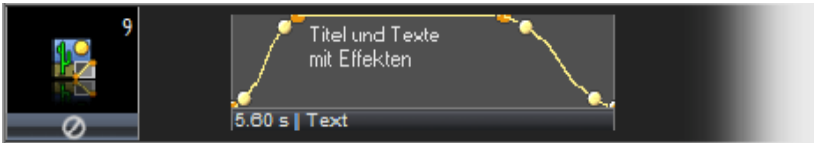


Audio tracks and Sound object properties

Picture tracks

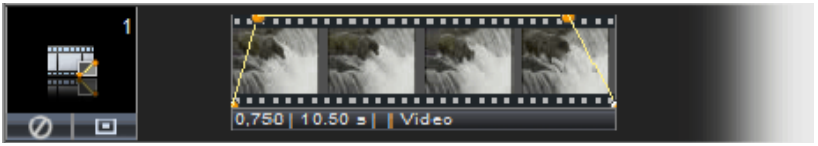


Picture tracks and Picture Object Properties



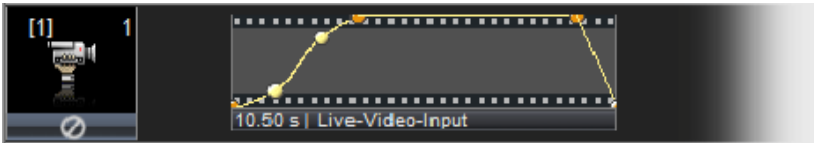
Text Object Properties

Video tracks



Video tracks and Video object properties

Live Video/TV tracks

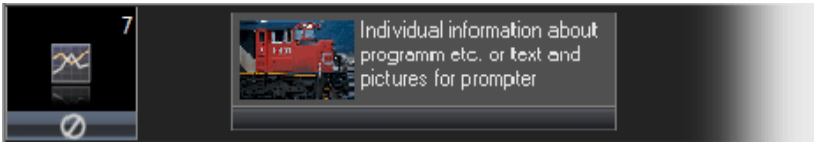


Live-Video/TV tracks and Live video/TV object properties (available from the Pro License and up)

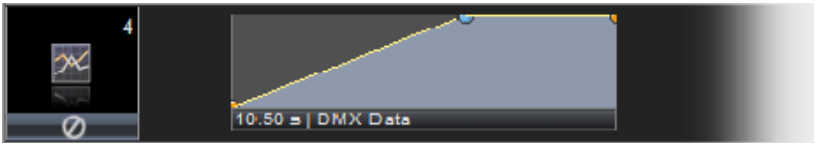
Ticker tracks

Ticker tracks and Ticker object properties (available from the Advanced License and up)

Universal tracks



Universal tracks and Notes object properties (available from the Advanced License and up)



Universal tracks and Data object properties (available from the Advanced License and up)

Universal tracks and Switch object properties (available from the Advanced License and up)

Marker tracks

Marker tracks and Marker properties, Value marker, Command marker (available from the Advanced License and up)

Group tracks are used for grouping and/or hiding other tracks.

Audio tracks

Use the audio tracks to arrange any number of sound objects for your soundtrack. While playing back, the contents of an audio track are output to a sound card stereo output. For an ordinary show with stereo sound, **audio output 1** is preset.

The properties of audio tracks can be edited in the dialog box or in the table:

Dialog

Right-click the track head (speaker symbol) and select **Properties**. You will then be able to enter the following parameters:

- Asynchronous Mode can be enabled for a track by checking the box next to **Asynchronous mode for presentation**. This way, the objects on this track are also played back in Pause Mode, e.g. when the Locator is waiting at a pause marker. See also Asynchronous audio playback.
- **Track ID** is used for identifying audio tracks within Wings Platinum.
- **Mix group** lets you select a mix group for a track. Mix groups allow live crossfades of complex contents of several tracks. See also Presenting with mix groups.
- Under **Audio output** you enter the stereo output ID. To find out which sound card is addressed, go to **Options** - **Global Options** - **Sound Cards**. The selected output is specified in the track head by a figure in square brackets. You can assign several audio outputs to an audio track if you click **Enable multi-channel assignment** and select these audio tracks by clicking on . See also Output channels for audio tracks.
- Moreover, you can also specify a **Name** (... to be visible in the track head) or enter some **Comment**.

Table

Click the track head of a picture track and the parameters are displayed in the Properties Table.

Track

- **Track ID** ...is used for identifying audio tracks within Wings Platinum.
- **Name** ...for entering a name to be displayed in the track head.
- **Comment** ...here you can enter any comments.

Output

- **Mix group** ...lets you select a mix group for a track. Mix groups allow live crossfades of complex contents for several tracks. See also

Presenting with mix groups.

- **Audio output** ...for entering the stereo output ID. To find out which sound card is addressed, go to **Options** - **Global Options** - **Sound cards**. The selected output is specified in the track head by a figure in brackets.
- **Enable multi-channel assignment** ... allows using several audio outputs. With this option you can select the audio outputs of a multi-channel sound card by clicking . See also *Output channels for audio tracks*.
- Asynchronous mode for presentation ??
-
- Asynchronous Mode can be enabled for a track by placing a checkmark next to **Asynchronous mode for presentation**. This way, the objects on this track are also played back in Pause Mode, e.g. when the Locator is waiting at a pause marker. See also Asynchronous audio playback.

Picture tracks

Picture tracks are used for arranging any number of picture objects for dissolve sequences. While playing back, the contents of a picture track are displayed on one screen field. For a standard show, **Screen 1** and screen field **Standard** are preset.

The properties of picture tracks can be edited in the dialog box or in the table:

Dialog

Right-click the track head (film symbol) and select **Properties**. The following dialog allows you to enter the following parameters:

- **Track ID** is used for identifying picture tracks within Wings Platinum.
- **Mix group** lets you select a mix group for a track. Mix groups allow live crossfades of complex contents of several tracks. See also Pre-

senting with mix groups.

- Under **Crossfade** you can choose between two types of crossfades:
  - **Standard crossfade** ...fades out the first object while simultaneously fading in the next object.
  - **Unilateral crossfade** ...fades in the second object while maintaining full opacity or brightness of the first object. The second object covers up the first object, so to say. This setting is usually the correct choice for tracks with alpha control. However, there are also some exceptions, e.g. when pictures with differing aspect ratios are dissolved.
- Under **Screen** and **Field** you specify the location where the pictures are to be output. Screen and Screen fields must be configured beforehand. Click on to call up the corresponding Properties Dialogs. ...See Configuring screens.
- Next to **Objects** you can make an entry saying that the object keyframes are to refer to the screen field and not to the screen. In this case place a checkmark next to **Keyframes relative to screen field**. If you move the screen field or change its size, all keyframe-controlled objects output to this screen field are also modified in terms of their size and position.
- At **Target PC** you can restrict output of the track for multidisplay shows to a particular presentation PC. Only those computers can be selected that were previously specified in the project. See also Restricting the output of visual contents to one PC.
- Moreover, you can also specify a **Name** (... to be visible in the track head) and enter some **Comments**.

Table

Click the track head of a picture track and the parameters are displayed in the Properties Table.

Track

- **Track ID** ...is used for identifying picture tracks within Wings Platinum.
- **Name** ...for entering a name to be displayed in the track head. To

make an entry click the field and, on the right, on **...**

- **Comment** ...for additional information. To make an entry click the field and, on the right, on **...**

Output

- **Mix group** ...lets you select a mix group for a track. Mix groups allow live crossfades of complex contents for several tracks. See also *Presenting with mix groups*.
- **Crossfade** ...here you can choose two types of crossfades between two objects on a track:
  - **Standard** ...fades out the first object while simultaneously fading in the next object.
  - **Unilateral** ...fades in the second object while maintaining full opacity or brightness of the first object. The second object covers up the first object, so to say. This setting is usually the correct choice for tracks with alpha control. However, there are also some exceptions, e.g. when pictures with differing aspect ratios are dissolved.
- **Field** ...defines the location where the images are output. Screens and screen fields must previously be set up in the Media Pool. Dragging a screen field from the Media Pool and dropping it onto the track head allows changing the screen field. See *Configuring screens*.
- **Keyframes relative to screen field** ...if you check this box, the object keyframes do not refer to the screen but to the screen field. When the image is changed in terms of position and size all keyframe-controlled objects output to this screen field are also changed in their position and size.
- **Target PC** ...allows output of the track for multidisplay shows to be restricted to a particular presentation PC. Simply drag and drop a PC from the Media Pool into the field. See also *Restricting the output of visual contents to one PC*.

Routing / Masking

- **Target (direct)** ...defines the location to which the tracks are initially output:

- **Screen output** ...the track contents are directly output to the screen.
- **Picture stack** ...the track contents are first output to a picture stack. Select this setting for tracks that are to be masked.
- **Mask stack** ...the track contents are first output to a mask track (... available with a Pro License and up). Choose this setting for tracks that are to accommodate mask objects.
- **Mask + Render** ...is only available for the Advanced License. Select this mode for a track that is to accommodate mask objects. This track masks the picture track and outputs on the screen.

See Dynamic transparency masks.

Screen output ...appears only after selecting mask stack before. The following options are available:

- **No rendering** ...for a mask track without render function.
- **Render stack** ...renders the mask stack and outputs the entire set of composite images on the screen.
- **Render stack inverted** ...results in inverted, i.e. negative rendering of the mask track and output of the masked set of composite images on the screen.

Video tracks

Use the video tracks to arrange any number of video objects into sequences. While playing back, the contents of a video track are displayed on one screen field. In doing so, the transparency of the video is changed in accordance with the ramp band. Alpha Control is used for superimposed fading-in and fading-out of videos and pictures. For a standard project, output to **Screen 1** and screen field **Standard** is preset.

The properties of video tracks can be edited in the dialog box or in the properties table:

Dialog

Right-click the track head (film symbol) and select **Properties**. You will then be able to enter the following parameters:

- When **Exclusive mode for presentation** is enabled, this video track, during playback in Presentation Mode, takes priority over any other tracks with visual contents (...except for live video/TV tracks). During playback in Preview Mode and during scrolling this track remains unconsidered for the image mix. See also Presenting videos.
- **Track ID** is used for identifying video tracks within Wings Platinum.
- **Mix group** lets you select a mix group for a track. Mix groups allow live crossfades of complex contents of several tracks. See also Presenting with mix groups.
- Under **Crossfade** you can choose between two types of crossfades:
  - **Standard crossfade** ...fades out the first object while simultaneously fading in the next object.
  - **Unilateral crossfade** ...fades in the second object while maintaining full opacity or brightness of the first object. The second object covers up the first object, so to say. This setting is usually the correct choice for tracks with alpha control. However, there are also some exceptions, e.g. when pictures with differing aspect ratios are dissolved.
- Under **Screen** and **Field** you specify the location where the pictures are to be output. Screens and Fields must be configured beforehand. Click on to call up the corresponding Properties Dialogs. ...See Configuring screens.
- Next to **Objects** you can make an entry saying that the object keyframes are to refer to the screen field and not to the screen. In this case place a checkmark next to **Keyframes relative to screen field**. If you move the screen field or change its size, all keyframe-controlled objects output to this screen field are also modified in terms of their size and position.
- At **Target PC** you can restrict output of the track for multidisplay shows to a particular presentation PC. Only those computers can be selected that were previously specified in the project. See also

Restricting the output of visual contents to one PC.

- Moreover, you can also specify a **Name** (... to be visible in the track head) or enter some **Comment**.

Table

Click the track head of a video track so that the parameters are displayed in the Properties Table.

Track

- **Track ID** ...is used for identifying picture tracks within Wings Platinum and cannot be changed.
- **Name** ...for entering a name to be displayed in the track head. To make an entry click the field and, on the right, on **...**
- **Comment** ...for additional information. To make an entry click the field and, on the right, on **...**

Output

- **Mix group** ...lets you select a mix group for a track. Mix groups allow live crossfades of complex contents for several tracks. See also *Presenting with mix groups*.
- **Crossfade** ...here you can choose two types of crossfades between two objects on a track:
  - **Standard** ...fades out the first object while simultaneously fading in the next object.
  - **Unilateral** ...fades in the second object while maintaining full opacity or brightness of the first object. The second object covers up the first object, so to say. This setting is usually the correct choice for tracks with alpha control. However, there are also some exceptions, e.g. when pictures with differing aspect ratios are dissolved.
- **Field** ...defines the location where the images are output. Screens and screen fields must previously be set up in the Media Pool. Dragging a screen field from the Media Pool and dropping it onto the track head allows changing the screen field. See *Configuring screens*.
- **Keyframes relative to screen field** ...if you check this box, the

object keyframes do not refer to the screen but to the screen field. When the image is changed in terms of position and size all keyframe-controlled objects output to this screen field are also changed in their position and size.

- **Target PC** ...allows output of the track for multidisplay shows to be restricted to a particular presentation PC. Simply drag and drop a PC from the Media Pool into the field. See also *Restricting the output of visual contents to one PC*.

Routing / Masking

- **Target (direct)** ...defines the location to which the tracks are initially output:
  - **Screen output** ...the track contents are directly output to the screen.
  - **Picture stack** ...the track contents are first output to a picture stack. Select this setting for tracks that are to be masked.
  - **Mask stack** ...the track contents are first output to a mask track. Choose this setting for tracks that are to accommodate mask objects.
  - **Mask + Render** ...is only available for the Advanced License. Select this mode for a track that is to accommodate mask objects. This track masks the picture track and outputs on the screen.

  See Dynamic transparency masks.

Screen output ...appears only after selecting mask stack before. The following options are available:

- **No rendering** ...for a mask track without render function.
- **Render stack** ...renders the mask stack and outputs the entire set of composite images on the screen.
- **Render stack inverted** ...results in inverted, i.e. negative rendering of the mask track and output of the masked set of composite images on the screen.

Live video / TV tracks

Live video / TV tracks enable you to place and edit live video / TV objects. During playback, the contents of live video / TV tracks are output to a screen field of the screen. In doing so, the transparency of the video image is changed in accordance with the ramp band. For a standard project, output to **Screen 1** and field **Standard** is the default setting. Use the Live video / TV **Properties** to define output and some other parameters.

Right-click the track head (camera symbol) and select **Properties**. You will be able to make the following settings:

- **Track ID** is used for identifying live video / TV tracks within Wings Platinum.
- **Mix group** lets you select a mix group for a track. Mix groups allow live crossfades of complex contents of several tracks. See also Presenting with mix groups.
- At **Video input** enter the live/TV input you want to play. It needs to be enabled in the Options. See also Global Options - Video input.
- Under **Screen** and **Field** you specify the location for output of the video image. Screens and screen fields must be configured beforehand. Click on to call up the corresponding Properties Dialogs. ...See Configuring screens.
- Next to **Objects** you can make an entry saying that the object keyframes are to refer to the screen field and not to the screen. In this case place a checkmark next to **Keyframes relative to screen field**. If you move the screen field or change its size, all keyframe-controlled objects output to this screen field are also modified in terms of their size and position.
- Moreover, you can also specify a **Name** (... to be visible in the track head) or enter some **Comment**.

Ticker tracks

Ticker tracks can be used for accommodating ticker objects, whose texts are to be displayed in a show.

Right-click the track head (abc symbol) and select **Properties**. You will be able to make the following settings:

- **Track ID** is used for identifying picture tracks within Wings Platinum.
- **Mix group** lets you select a mix group for a track. Mix groups allow live crossfades of complex contents of several tracks. See also Presenting with mix groups.
- Under **Screen** and **Ticker field** you specify the location for text output. Screens and Text Fields must be configured beforehand. Click on to call up the corresponding Properties Dialogs. See also Configuring screens.
- Next to **Objects** you can make an entry saying that the object keyframes are to refer to the screen field and not to the screen. In this case place a checkmark next to **Keyframes relative to ticker field**. If you move the ticker field or change its size, all keyframe-controlled objects output to this ticker field are also modified in terms of their size and position.
- At **Target PC** you can restrict output of the track for multidisplay shows to a particular presentation PC. Only those computers can be selected that were previously specified in the project. See also Restricting the output of visual contents to one PC.
- Moreover, you can also specify a **Name** (... to be visible in the track head) or enter some **Comment**.

Universal tracks

Universal tracks are currently only used for StoringText Objects. At a later time, these tracks will be used for accommodating control objects for peripheral devices. Via the Universal Track **Properties** Dialog, currently only few parameters can be entered:

Right-click the track head (Wings symbol) and select **Properties**. You will then be able to enter the following parameters:

- **Track ID** is used for identifying universal tracks within Wings Platinum.
- Moreover, you can also specify a **Name** (... to be visible in the track head) or enter some **Comment**.

Marker tracks

Marker tracks are used for positioning Markers for control and navigation tasks. Via the Marker Track **Properties** Dialog a few other parameters can be entered as well:

Right-click the track head (double-arrow symbol) and select **Properties**. You will then be able to enter the following parameters:

- **Track ID** is used for identifying universal tracks within Wings Platinum.
- Moreover, you can also specify a **Name** (... to be visible in the track head) or enter some **Comment**.

Group tracks

Group tracks are used for grouping any number and types of tracks. One group is made up of all tracks located below the group track down to the next group track. The following functions are available:

- All tracks of a group can be displayed or hidden. Click on to hide or on to display the tracks. Pressing the **Shift** key additionally, causes all tracks to be displayed or hidden simultaneously.
- Use button to deactivate or activate all tracks in a group. This works even when the tracks in a group are hidden.
- The area with the double arrow can be used to grab and shift group tracks. The tracks in a group are also shifted when they are hidden.

Properties Dialog

To open this dialog, right-click the double arrow and select **Properties**.

- Under **Colors** you can select track and text color by clicking the corresponding fields next to **Track** and **Text**.
- Moreover, you can also specify a **Name** (... to be visible in the track head) or enter some **Comment**.

Marking tracks

There are various ways of highlighting tracks depending on the situation:

- Simply click the track head of a track. Marked tracks can be recognized by a yellow bar in the track head.
- To highlight several tracks, right-click a track head and choose **Selection** and the corresponding range for selection or highlighting. Following this, the open tracks are highlighted. Any grouped tracks are not highlighted.
- In order to **mark additional tracks**, click the track heads of other tracks while pressing and holding the **Ctrl key**.
- Press and hold the **Shift key** while clicking one particular track head to **mark all tracks of a particular track type**.
- If you want to **mark all tracks**, press **Ctrl** + **Shift** while clicking one track head.
- If you want a track to be unmarked, click the track head while holding the **Ctrl** key. Unmark or deselect several tracks simultaneously by holding **Ctrl** + **Shift** keys while clicking a marked track head. As an alternative, you can also click the dark gray area below the last track head. This causes all marked tracks to be deselected.

Info Please bear in mind that only visible tracks can be marked or selected. Tracks that were hidden by creating a group track, can therefore not be marked. See also Grouping tracks.

Adjusting the track height

The height of tracks can be adjusted. This is particularly helpful when it comes to accurate editing of sound cuts or dissolves.

- Grab the lower edge of the track head and drag it to the desired height.
- The default height can be resumed by right-clicking the track head and choosing **Default size**.

- You can mark several tracks to jointly alter the height of all these tracks . .... See also Marking tracks.

Info Group tracks can only be adjusted in height individually.

Inserting or removing tracks

all types of tracks can be added to and removed from the timeline likewise.

Inserting tracks

- Right-click a track head or the empty timeline and select **Insert track** and the required type of track. Following this the track is displayed and marked.
- If you want to add several tracks in one go, right-click a track head and select **Insert tracks...** Specify the number and type of required tracks and click **OK**. If you want the tracks to be grouped, check **Group tracks**.
- Tracks can be created automatically by simply dragging the media files into the empty, blue space in the timeline.
- In addition to all this, it is also possible to create a new track by dragging & dropping a screen or ticker field into the empty space below the timeline tracks. The track created thus is then linked up with the screen or ticker field and dragged and dropped into the timeline.

Removing tracks

- Right-click a track head or the empty timeline and select **Remove track** in order to remove one track and all objects in it along with the track. But you can also mark several tracks and remove them in one go.
- If you want to remove all empty tracks, click **Timeline** - **Remove empty tracks** in the main menu, followed by selecting **In current timeline** or **In all timelines**.
- When a group track with hidden tracks is deleted via **Remove track group**, the hidden tracks of this group track are also deleted.

Attention! By removing a track all objects on the track are deleted as well. The media files, however, remain. But you will lose the objects and the various editing steps.

Duplicating tracks

You can duplicate a complete track including contents. This may be useful for producing a variant of a sound montage or a sequence of pictures, to directly compare it with the original version.

- Right-click the track head of the corresponding track and select **Duplicate track**.

Muting tracks

Tracks can be muted during playback. This is a very useful feature if you want to analyze or compare certain passages, for example. Wings Platinum offers two modes:

- **Mute Mode** .... to mute playback of one or several tracks.
- **Solo Mode** .... to mute all other tracks and play one only.

Info As opposed to deactivating, muting of audio tracks does not save computer capacity. It only prevents the audio data from being played back ... See also Deactivating tracks.

Mute Function

The Mute function in the track head can be enabled via the loudspeaker symbol which also provides information about the current status.

- Click button in the track head to mute playback of an audio track. Status "Mute" is displayed in the button: . Muting is possible at any time for any other tracks as well and can also be enabled during playback.

- If you want to mute several tracks with one mouse-click, you need to mark the corresponding tracks before you can do so. ... See also Marking tracks.
- Once a track is muted you can reactivate playback by clicking button again. Following this, button stands for status "Playback". If several muted tracks are highlighted, they are reactivated as well.

Solo Function

The Solo function in the track head can be enabled by clicking the right button (up to the Advanced License) and by clicking the middle button (Pro License and higher). Whether Solo Mode is enabled can be recognized by the "Give way" symbol .

- To mute playback of all other tracks, click button in the track head of the corresponding track while holding the **Ctrl** key. Solo Mode is now active
- Playback of other tracks can be added to a track in Solo Mode by clicking
  button of these tracks while holding the **Ctrl** key.
- Terminate Solo Mode by clicking on .The Mute state prevailing before activating the Solo Mode will be resumed.

Activating/deactivating tracks

If tracks and their contents are not to be played back, they can be deactivated.

- In the trackhead, click on to exclude the track from playing back.
- Click on to reactivate playback of the track.

Info

- You can activate/deactivate several tracks at the same time after marking the required tracks.
- Activation and deactivation currently do not work during playback.

Shifting tracks

You can arrange the tracks in any order you like.

- Grab the track at its track head and move it to the desired position. Should the tracks be locked, they must be unlocked first.

Locking tracks

All tracks in the timeline can be protected against accidental shifting.

- In the main menu click on **Timeline** and select **Tracks vertically locked**. The same way tracks can be unlocked.

Grouping tracks

Tracks in the timeline can be grouped in a variety of ways, as well as hidden, deactivated, etc. The options are as follows:

- Group tracks can be used to group any types of tracks. These groups of tracks can jointly enabled/disabled and displayed/hidden. See Adding group tracks.
- Similar to objects, you can also create track groups. Clicking one track in a group causes all tracks in this group to be marked, allowing you, for example, to adjust the track height for all tracks or muting all tracks in one go. See Grouping via track groups.

Group tracks

Adding group tracks

1. Right-click a track head and select **Insert track** - **Group**.
2. Grab the double arrow in the group track head and move the group track until it is located above the tracks to be grouped.
3. If necessary you can add further group tracks likewise. One group is made up of all the tracks located below the group track down to the next group track.

Group track functions

- All tracks of a group can be displayed or hidden. Click on to hide or on to display the tracks. If you press the **Shift** key additionally, all tracks can be displayed or hidden in one go.
- Use button to deactivate or activate all tracks in a group. This works even when the tracks in a group are hidden.
- The area with the double arrow can be used to grab and shift group tracks. The tracks in a group are also shifted when they are hidden.

Info

- Hidden tracks cannot be marked or selected.
- The contents of hidden tracks are also played back.

Grouping with group tracks

Similar to objects, you can also create track groups. Clicking one track in a group causes all tracks in this group to be highlighted, allowing you, for example, to adjust the track height for all tracks or mute all tracks in one go.

Creating a new group of tracks

1. Mark or select the required tracks ... See Marking tracks.

2. Right-click the track head of one of these tracks and select **Grouping ▶Create new group**. In the track head, the group index is displayed to the right of the track number, e.g. 3/1.

Adding tracks to an existing group of tracks

1. Mark or select the tracks to be added to a group.
2. Right-click the track head of a marked track and select **Grouping ▶Assign group**.
3. Under **New** enter the index of the group the selected tracks should be added to, followed by clicking **OK**.

Changing groupings

1. Mark the tracks of the group to be added to another group.
2. Right-click the selected track and choose **Grouping ▶Change group**.
3. Under **New** enter the index of the group the selected group should be added to, followed by clicking **OK**.

Remove grouping of a group of tracks

1. Click the track head of one of the tracks in the group
2. Right-click one of these objects and select **Grouping ▶Remove grouping**

Removing objects from a group

1. Right-click the track head of a track which is not part of the group in question. This deselects all tracks of this group.
2. Right-click the track head of the track to be removed from the group and select **Grouping ▶Remove grouping**.

Stretching/compressing tracks

The function allows marker and universal tracks including the objects on them to be stretched or compressed.

1. Highlight all marker and universal tracks you want to stretch or compress. See also Highlighting tracks.
2. If you want to edit a certain portion only, highlight it in the timeline. See Highlighting a portion.
3. In the main menu, click **Timeline** - **Stretch tracks**, for a dialog to pop up.
4. Define the tracks/areas you want to stretch or compress:
    - **Stretch the following selected tracks** ...click the tracks you want to edit.
    - **Portion and factor** ...allows you to enter the change in length as a **Factor** or the point of time that defines the **New end** of the portion. The point of time for the new end can also be taken over from the Locator by clicking **Locator**. The times in the fields **Begin** and **End** define the portion to be edited.
    - **Timeline portion** **...**select the portion you want to edit. Stretch selected portion of timeline only can only be selected when the timeline is highlighted accordingly. If the following objects are to be shifted along, place a checkmark next to **Shift following portion**. This option can only be selected if **Stretch selected portion of timeline only...** is enabled and if the selected factor allows this.
5. Click **OK** to stretch/compress the track.

Attention! When stretching a selected portion, only those objects are considered that are located as a whole within this area. For track compression, however, all those objects are considered that are located partly within this area.

See also

Moving timeline contents from Locator position

Stretching or compressing an object

Changing the screen field for a particular track

If the objects of a track are to be output to a different screen field, the allocation to the screen field can be changed quite easily:

- In the Media Pool click on the plus sign in front of category **Screens** and select the corresponding screen following which the screen fields will appear on the right.
- Drag & drop the appropriate screen field onto the track head of the corresponding track it needs to be linked up with.
- Alternatively, you can also open the Track Properties by double-clicking the track head and selecting the corresponding screen field. See Properties of Picture tracks, Text tracks, Video tracks and Live Video/TV tracks.

See also

Adding a screen field

Screen field properties

Screen field position

Track Properties

Right-click the track head and select **Properties**. In accordance with the type of track, the parameters to be set may vary.

- The **track ID** can be set for all track types. It is required for identifying the track within Wings Platinum.
- Most important is the setting for the **output** of the object. For picture tracks either a screen or a field needs to be defined whereas for audio tracks it's the stereo output of a sound card.
- A **name** can be specified for all tracks (... to be visible in the track head) as well as a **comment**.

Scrolling with the mouse wheel

By moving the mouse wheel, the timeline is scrolled along the time axis, i.e. towards the right or the left. By pressing the **Shift** key in addition to this, the tracks are scrolled from top to bottom or vice versa. This comes in very handy for projects with a high number of tracks.

Info

- If the mouse wheel does not work as explained, a wrong setting for the mouse driver may be the reasons. See Mouse wheel does not scroll as expected....
- Tool **Pan** allows shifting of the timeline content and zooming via the mouse wheel. See Toolbar.

Expanding/compressing the time axis

The timeline display can be increased or stretched and reduced or compressed, respectively.

For this purpose you can use one of the following three buttons in the timeline.

...stretches the time axis.

...restores the default setting.

...compresses the time axis.

Tip: Tool **Pan** also allows zooming of the timeline. Hold key **P** pressed and turn the mouse wheel.

Fast **zooming via keys** is also possible:

- As an alternative, you can also press the keys + / - of the numeric keypad. The default display is resumed by pressing the **X** key (multiply).
- You can change over between largest and smallest display by pressing the Ctrl key and clicking + or -.

Info

- In order to get an idea of the time dimensions, you should use normal view for your normal editing process.
- The time display and the timeline resolution can be matched with the frame rate of the videos to be edited in order to simplify video cuts. See Changing time display and timeline resolution.
- By increasing and reducing the track height, objects can be changed in their size, too. See Adjusting the track height.

Changing time display and timeline resolution

For some particular tasks, e.g. video cuts, it may be useful to match the time indication and the timeline resolution with the video frame rate. Both parameters can be adjusted individually for every timeline:

1. In the Media Pool click category **Timelines**.
2. Right-click the corresponding timeline and select **Properties**.
    - For **Locator display** you can choose the frame rate at which the fractions of a second are to be displayed. With a default setting of **0**, the fractional digits are also displayed as a decimal value.
    - At **Default timeline** you should adjust the default timeline resolution so that a pixel corresponds exactly to one frame. This can be achieved by entering the frame rate in field **seconds per pixel**, e.g. **25** for PAL videos.

3. Close the dialog by clicking **OK** so that time indication and timeline resolution are adjusted accordingly.

Info

- The default timeline resolution is most quickly enabled by pressing the **X** key (multiplication) on the numerical keypad. See also Expanding the time axis.
- The default timeline resolution can be adjusted within a range from 1/100 to 1 second per pixel. The maximum expansion is 1/1000 seconds/pixel and the minimum one is 10 seconds/pixels. These limits are independent of the specified default resolution.
- The Locator position can be displayed on the screen as timecode, with the format of the time display (frames or decimal) corresponding to the setting at Locator display. This is done via text objects. See Displaying date, time or timecode on the screen.

Marking a portion

Certain tasks require a portion in the timeline to be marked. This function may be used for exact placement of several objects within a certain portion or for selecting the portion for audio CD or video production. A portion can be marked in various ways:

- Hold the **Ctrl** key down, click the separating line between the tracks and draw up a marker with the mouse key pressed. Holding down the **Ctrl** key also allows you to adjust beginning and end of the marking with the mouse or to move the marker altogether.
- Or you can right-click the separating line and select **Set left marker** or **Set right marker** to define the required area.
- To remove the marker area, right-click the marker and select **Remove marker**.
- You can protect the track marker from unintentional editing by right-clicking it and selecting **Lock marker**. The same way locking can also be made undone.
- **Tip:** If you want to highlight several portions in a way which can be reproduced, set a a position marker at beginning and end of the portion.

Using tool **Snap to objects** you can adjust the marker most accurately. See also Toolbar and Using markers.

Displaying a Pool object

The associated Pool objects (media file, device, port, trigger, etc.) for an object in the timeline (pictures, sound, video, markers, data objects, etc.) can be displayed in the Media Pool. This is a useful function if you want to edit the picture file of an object, for example. Or, if you want to check the properties of a trigger associated with a trigger marker.

- Right-click an object in the timeline or in the Control Panel and select **Display Pool Object**. Following this the highlighted Pool object is displayed in the Media Pool.

See also

Selecting timeline objects

Markers

Markers can serve various purposes, e.g. for marking a position within a show, for navigation purposes, as pause marker for controlling playback of a Speaker Support show or even for programming Show Control functions. Information on the various marker types can be found further below.

Setting markers

With a few exceptions, markers are set as follows:

1. Unless you have already included a marker track in your project, do so now. Right-click a track head, select **Insert track** and **Marker**.
2. Now right-click the marker track and select the required marker type. See Marker types below.

Info It is possible to simultaneously place pause markers in front of several objects, which is a useful feature for Speaker Support shows. See Adding pause markers for highlighted objects.

Setting file markers

1. Add a document or a file to be executed (***.exe***) to the Media Pool by clicking category **External** in the Media Pool. Right-click some free space in the right Media Pool section and select **Add external files**.
2. Now one of the added files from the Media Pool into a marker track.

During playback the files are executed or opened. See also File Marker Properties and Incorporating PowerPoint presentations.

Info EXE presentations should not be started via file markers since this causes two instances of Wings Platinum to be running that use up each other graphics resources such as the full screen. This will only be successful if you do without the screen in Wings Platinum.

Setting position markers during playback

1. Unless you have already included a marker track in your project, do so now. Right-click a track head, select **Insert track** and **Marker**.
2. Start playback and press the **M key** at the corresponding location to set the position marker. This allows you to create a timing pattern for music. See Timing pattern for synchronization.

Info

- If there are several marker tracks, the position markers will be created in the first marker track, or, when tracks are marked, in the first marked marker track.
- It is also possible to delete a position marker by pressing the **M** key. Start by clicking the left red line for the Locator to move to this location, followed by pressing **M**.

Editing markers

Markers can be shifted in time, but cannot be edited like other objects as they have no extension in time.

- The left red edge is the **marker time reference**. Grab the red edge with the mouse and move it to the very time position required.
- If you want to **label a marker**, right-click it and select **Properties**. In the field **Comment** you can enter any designation or information to become visible in the marker info line.

Marker types

The following markers are available, which are nearly all set the same way. See Setting markers above. Please note that the Starter License only supports pause markers.

Positions Markers ... serve for marking any time positions in the timeline. In Wings Platinum you can jump from one position marker to the other by pressing and holding the **Ctrl** key while pressing the left or right **Cursor** (arrow) key**.** This allows elegant navigation within your project (Starter License and up).

In the Properties Dialog position markers can be assigned a remote index (…right-click the marker), which allows specific locations to be accessed, e.g. via number keys during playback of an EXE presentation, via trigger or serial commands.

Moreover, triggers allow playback to be started from a position marker. See Playback from position marker.

When presenting a show from CF Card using Event or SC Master series units, you can press the skip keys on the IR remote control to jump from marker to marker.

- **Pause Markers** ... pause playback, i.e. playback is in Pause Mode and can be continued again. This applies also to playback from CF Card for all types of Event Control/SC Master series models likewise (Starter License and up).

Info It is possible to simultaneously place pause markers in front of several objects, which is a useful feature for Speaker Support shows. See Adding pause markers for highlighted objects.

- **Stop Markers** ... terminate playback. When presenting with an Event Control or SC Master series unit, stop markers terminate show playback (Advanced License and up). Do not use this marker if you just want to briefly stop the show and continue it again. In this case all the images must be reloaded again when the show is continued.
- **Reset-Marker** ...also terminate playback. For video or EXE presentations, however, a possible background image is also removed and full-screen mode terminated (Advanced License and up).
- **Jump Markers** ...cause the Locator to jump to the position marker with the corresponding remote index. If the remote index is zero, the Locator jumps to 0:00 seconds. This allows continuous loop playback of a show, for example. Jump markers only allow jumping within a timeline. Jumping within several timelines is possible via triggers and position markers. See Playback from position marker (Advanced License and up).

  Info For **CF card shows** to be played via SC Master or Event Control units, a jump marker always causes jumping to 0:00 seconds, i.e. to the very beginning. Whenever position markers are specified as jump destinations, they will be ignored.
- **PowerPoint Markers** ...control playback of PowerPoint presentations. The functions can be selected in the Properties Dialog under **Action** (...as of the Pro License). See also Incorporating PowerPoint presentations (Pro License and up).
- **File Markers** ...used for starting any sort of program or files. They are not placed in a marker track by right-clicking the track but by dragging a file into a marker track (...as of the Pro License). See also Incorporating PowerPoint presentations.
- **Show Control Markers** ...can be various and require the Advanced License or up or the Show Control Module. See License and functions. They are used for output of various control commands, for executing triggers or for interaction with Iseo. They are not placed in a marker

track by right-clicking the track but by dragging a control channel into a marker track.

Adding pause markers to highlighted objects

here is a simple way that allows a pause marker to be added to every highlighted object. This is a very convenient feature if you want the next image to be started manually and have a large number of images you want to do this for. This function saves time by eliminating the tedious task of setting the pause markers individually.

This is how you proceed:

1. Highlight the objects you want to provide with pause markers. By right-clicking some empty space within a track you are offered a number of different options, e.g. highlighting one image after the other with the **Ctrl** key held down. See also Highlighting objects.
2. Unless you have already created a marker track in your project, do so now. Right-click a track head, select **Insert track ▶Marker**.
3. Now right-click the marker track and select **Add pause marker for selected objects.** Following this all the selected objects will be provided with a pause marker.

See also

Using markers

Starting and stopping playback

Jumping to pause markers

This function requires the Advanced License or up. See Versions and Functions.

Any pause markers contained in a presentation to pause playback may be used as jump destination. This may turn out to be useful if you want to jump back to an image you have shown before. This is done via Trigger actions to execute the jump function.

1. Start by creating the corresponding pause marker. To do so, right-click a marker track and select **Insert pause marker**. If no marker track is available yet, add one by right-clicking a track head, selecting **Insert track ▶Marker**.

   Info Alternatively, you can simultaneously place pause markers in front of several objects. See Adding pause markers for highlighted objects.

2. Now create the two triggers for the jump function. In the Media Pool click category **Trigger**, click some free space in the right Media Pool section and select **Add trigger**.

3. At the top of the dialog box enter **Forward** as **Name**.

4. Now select category **Timeline** and Action **To next pause marker**.

5. At the bottom, next to **F key** enter the function key to trigger the jump forward, e.g. **4** and click **OK**.

6. The same way create another trigger with the following properties:

   - Category = Timeline
   - Action = To previous pause marker
   - F key = 3

7. After starting the presentation via the **F5** key, you can use keys **F3** and **F4** to jump forward or back. After a jump playback is paused.

8. There are some more ways of executing triggers, e.g. via Control Panel fields or via remote control units. See Executing a trigger.

Jumping to specific locations

Wings Platinum offers various tools that allow jumping within a project:

- **Home key** ...can be used for jumping to the beginning of the first object in a timeline or to the beginning of the track marker (...see Marking a portion). If necessary, you may have to press it several times to jump to the corresponding position.
- **End key** ...can be used for jumping to the end of the last object in a timeline or to the end of the track marker. If necessary, you may have to press it several times to jump to the corresponding position.
- **Go to...** ...if you choose **Timeline** - **Go to**... in the main menu, a dialog appears which lets you enter some time or a position marker as a destination. After clicking OK the Locator will jump directly to this location. This function can also be executed by pressing keys **Ctrl** and **G**. It refers to the current timeline and is not available during playback.
- **Marked/ highlighted objects** ...you can jump to the next highlighted object by pressing and holding the **Shift** key while pressing the **left** or **right** cursor key.
- **Position markers** ...are used for defining time positions in a timeline. You can jump from position marker to position marker by pressing the cursor keys **right** or **left** while holding the **Ctrl** key. See also Using markers.
- **Function keys** ...can be used for jumping to certain position markers by means of triggers. An example for jumping to particular chapters can be found in topic Optimum show presentation.
- **Jump Markers** ...are used to jump to a position marker during playback. However, this only allows jumping within a timeline. A Jump Marker, therefore, also allows loop playback. Please bear in mind, that jumps during playback can only be seamless in combination with still images. See Using markers.
- **Triggers** ...are extremely versatile and allow jumping to other timelines, too. Such a jump can be performed during playback or even while editing a show. Please bear in mind, that jumps during playback

can only be seamless in combination with still images. See Trigger functions. An example for jumping to certain chapters within a number of shows or timelines can be found in topic Optimum show presentation.

Opening/closing the timeline

If the required timeline including the arranged tracks is not visible, you can open it as follows:

1. In the Media Pool click on category **Timelines** and open the corresponding folder, if necessary.
2. In the line of the corresponding timeline click **Display** and the timeline in the active timeline group is opened while the previously opened one is closed. If the new timeline is to be added to the active group as a separate tab you need to press **Ctrl** additionally when clicking **Display**. Please bear in mind that a number of opened timelines requires more performance.

Info

- When a high number of timeline tabs is open, some tabs will not be visible, which can be recognized by the symbol in the top right-hand corner. If you click you will see a list of all timeline tabs of this group and you can open the required timeline by clicking on the tab.
- Close a timeline tab by activating it and clicking the symbol in the top right corner of the tab. Any possible playback is stopped.
- You can close all opened timeline tabs at once by clicking **Timeline** in the main menu, followed by clicking - **Close all timelines**.
- Moreover, tabs can also be moved into an additional group. In such a case an additional timeline group is created and the contents of several timelines can be displayed simultaneously. Right-click the corresponding tab and click **New horizontal group** or **New vertical group**.
- Optionally, timeline tabs can be displayed in different colors. See Options - Global Options - User interface.

- For projects with a number of timelines, only one timeline must contain projectors which are linked up with screen fields. Active projectors in any other timelines may cause malfunctions.

Adding/removing timelines

Usually, timelines are opened when creating a project, or are contained in project templates, respectively. Upon starting a project manually or if you want to use several timelines you can add timelines.

Add

1. In the Media Pool click category **Timelines,** unless it's visible anyway.
2. Right-click this window and select **Add Timeline**.
3. Click the name field (twice, if necessary), and enter the corresponding name.

Remove

1. In the Media Pool click category **Timelines**, unless it is visible anyway.
2. In the Media Pool, right-click the timeline you want to remove and select **Remove timeline**. Following this the timeline with all its tracks and objects will be deleted.

Info

- Double-click the corresponding timeline to open the corresponding timeline window.
- Additional timelines are a good place for temporary storage of show parts.
- For projects with a number of timelines, only one timeline must contain projectors which are linked up with screen fields. Active projectors in any other timelines may cause malfunctions.

Duplicating a timeline

You can duplicate a complete timeline including its contents. This is a very convenient feature and allows different versions of a show to be created and compared them with each other.

1. In the Media Pool click on category **Timelines**.
2. Right-click the corresponding timeline and select **Duplicate timeline**.

Copying a timeline

Unfortunately it is not possible to copy a timeline and paste it into a different object. But it is possible to copy all objects of a timeline and paste them to an empty timeline of a different project. This, however, may require some screen fields or devices to be manually configured and allocated.

1. Highlight all tracks by pressing **Ctrl** + **Shift** while clicking a track head.
2. Right-click some free space on a track and choose **Select all objects**.
3. Right-click an object and select **Copy** which means that the objects are copied to the clipboard.
4. Open the new project and add an empty timeline. To do so, click category **Timelines** in the Media Pool.
5. Right-click a free area and select **Add...**
6. Right-click some free space in the timeline and select **Paste clipboard to new tracks**.
7. Check whether the objects are output correctly. In the Media Pool, create the necessary screen fields, devices, etc. and link them with the tracks and objects, etc.

Timeline Properties

Click category **Timelines** in the Media Pool to open the Properties dialog. Right-click the corresponding Timeline and select **Properties**.

In the dialog popping you can adjust a few settings for synchronization and remote control.

General items

- For **Name** you can enter the corresponding name.
- For **Synchronization** choose the reference for synchronization:

  Audio ...is the default setting and uses the sound card as a reference

  PC clock ...uses the internal PC clock as a reference. This is a very useful setting if the PC does not have a functional sound card.

  Device port ...is used for timecode synchronization.
- For **Sync port** enter the device port used for reading timecode. This setting is only available when you have previously chosen **Device port**.
- For **Remote Index** enter the corresponding index (higher than **1**) to make the timeline addressable or remote-controllable.

  Info Every function or every type of object, respectively has its own remote indexes. Thus it is possible that there are remote indexes with the same number for timelines, position markers, triggers, mix groups, etc.
- For **Autostop** you can enter a period of time and define how long playback is to be continued after the last object.
- For **Locator Display** you can choose the frames per second at which the fractions of a second are to be displayed, e.g. **25** for 25 frames per second. With a setting of **0**, the fractional digits are displayed as a decimal value.
- At **Default timeline** you can enter the default magnification of the timeline to be applied, e.g. by pressing the multiply key on the numerical keypad. Entry is in seconds per pixel. The standard magnification ranges from 1/100 to 1 second per pixel. See also Changing time display and timeline resolution.

- In field **Comment** you can enter any remarks to be are displayed in the Media Pool in the corresponding column.

Automated output to FlashCard

For projects containing several timelines all presentation data for storage on CF Card can be created in one go. The entries for the individual CF Card shows are made here. Further information on this topic can be found under Generating CF Card data for several timelines.

Mix groups

Here you define which mix groups should be the first to be visible during timeline playback.

Under Playback grouping, add a checkmark next to **Activate** and enter the mix group &endash; or groups - for normal playback start in the field.

By adding a checkmark next to **Autorestore at beginning of playback/output...** the specified group is always used when playback is restarted. Unless this option is enabled, playback starts with the mix preset that was active last.

Stumpfl Iseo

When you place a checkmark next to **Display timeline** you can send some timeline information, e.g. the current Locator position to the Iseo. **Important:** The timeline must be provided with a remote index so that it can be addressed in Iseo.

Printing the sequence of pictures

All pictures in the timeline can be printed in their chronological order. This is a useful feature if you want to compose text to go with the pictures, for example, or if you want to send someone the sequence of pictures on paper.

1. In the main menu click on **Timeline** – **Print sequence of pictures** and a dialog box will appear.

2. Select the range of pictures for print-out. The following options are available:

    - Complete timeline
    - From current Locator position

Only selected portion of timeline

The latter is only available when a portion is marked .... marking a portion.

3. Now click Start and the printer dialog will appear.
4. If necessary make any modifications for printer or number of copies and click **OK**: The list of pictures will then be printed.

Tip If you want to print all pictures left-aligned, so as to add your notes on the right side of the sheet, you specify value **1** for **Pictures per row** under **Options** – **Global Options** – **Print**. Here you can also specify what additional information (file name or comments in the picture objects) is to be printed as well.

Undo/Redo Function

Needless to say that Wings Platinum also features an Undo/Redo Function to undo or redo virtually any editing step. For this purpose, Wings Platinum automatically saves every editing step up to a total of 99.

- In the tool bar below the main menu click on **Undo** or on **Redo**. Both functions are also available in the main menu under **Edit**. This way you can undo or redo up to 100 steps if necessary.

Manual saving of undo steps

There are certain situations when automatic saving of undo steps tends to take irritatingly long. In such cases you can switch off automatic saving of undo steps and save the steps manually.

1. In the toolbar, click on **Save undo step** and a message will appear warning you that automatic saving will be disabled.

2. When you click **OK** automatic saving of undo steps is disabled you need to save the individual undo steps manually by clicking **Save undo step** or by pressing **Alt** + **S**.
3. If you want to change back to automatic saving of undo steps you can click **Edit** in the main menu followed by **Automatic Undo**.

Info You should only disable automatic saving of undo steps if you have important reasons to do so. Please bear in mind that with the automatic saving feature being disabled, you can only return to those editing steps that you have previously saved manually as undo steps!

What are objects?

What are objects?

Every element you place in the Timeline is an object. These may be pictures, sound, videos, texts, picture and sound effects, light control and remote control commands and similar. Editing is based on a uniform concept, which makes it largely identical for all objects. It should facilitate working with Wings Platinum.

Placing objects

As soon as your Media Pool is filled with media files, you can place them as objects into the Timeline. This is how it is done:

Click on a Media Pool category, e.g. **Pictures, Audio** or **Video**. Highlight one or several files by clicking it (.... this is identical to highlighting files in the Windows Explorer). **Tip:** Media files can also be dragged from the Explorer or your image browser and dropped directly into the timeline. See also Quick start via Drag & Drop.

Move the mouse across one marked file name. As soon as the mouse pointer turns into a hand, you can grab the files and move them into the desired Timeline track, e.g. an audio file into an audio track or a picture into a picture track.

> If the corresponding track is not available yet or if media files are to be placed in a new track, you can simply drag the media files into the empty timeline space below the last track, and a new track is created automatically .

Info

- When an audio file or a video file is placed in the timeline as an object for the first time, Wings Platinum first of all calculates the graphic data for the display.

- Usually, the display data are stored in the same folder as the original media files. For pictures you can specify a central folder to contain the display data of all projects. This comes in handy, for example, if you want to use images directly from the archive but want to prevent the display data from being located in the image archive. See **Options** - **Global Options** - **Save**.
- Usually, you need to drag a video file both into an audio and a video track and align it. The simpler way of doing this is by dragging the video file into the empty timeline space. This way it is automatically placed synchronously into audio and video track. This way it is also possible to drag several highlighted video files into the timeline.
- It is possible to use audio files in wave and MP3 format with different sampling rates within one project. Wings Platinum will convert them online without you even noticing.
- When placing images and videos into tracks they can automatically be zoomed to original size by pressing the **Alt** key when releasing the mouse button. The reference size is the currently set screen output size. See Screen Properties.

1. The resulting object can be grabbed with the mouse at the bottom edge in the info line and be moved along the timeline or onto other tracks suitable for this object.
2. Finally, you can Edit the objects.

Tips

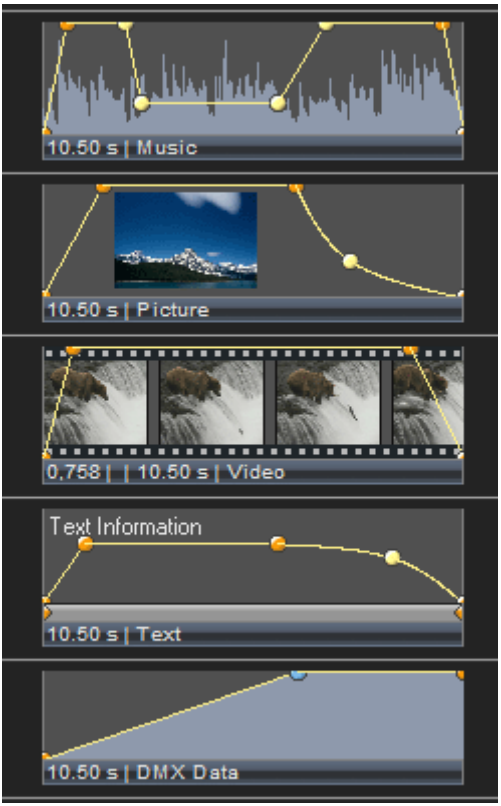
- By marking several picture files in the Media Pool and moving of them into one track in one go, you can produce a dissolve sequence. Place a track marker before you do so to limit the length of the new sequence. .... See also Marking a portion.
- For picture objects you can define default values for dissolve time, change time and ramp shape... see **Options - Global Options - Objects**– **Pictures** and Allocating ramp shapes.
- When placing images and videos in the timeline they can **automatically be zoomed to original size** by pressing the **Alt** key when releas-

ing the mouse button. The reference size is the currently set screen output size. See Screen Properties.

- For a more effective display of pictures in the Media Pool you can activate Lightbox View. See also Sorting on the lightbox.
- You can also drag any number of videos or audio files in one go from the Media Pool into the timeline. This is a very useful feature when looking at video footing. Dragging all video files into some free space in the timeline causes one video and one audio track to be created for all the videos and for the extracted sound.

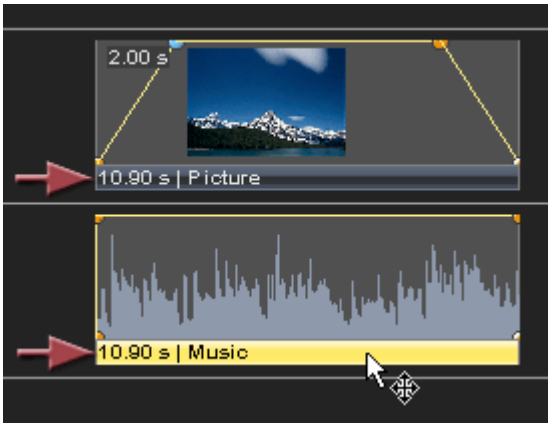
Editing objects - an overview

All objects are edited in accordance with a uniform concept. All objects look similar and can be edited likewise, be it picture, sound, video or text objects.Data and switch objects are similar but show a few peculiarities, which are explained under Show Control Functions.

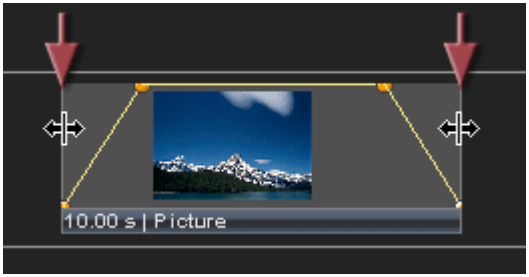


Below you will find an overview of the most important items:

- Objects can be grabbed at the **info line** and **moved**. This info line also serves for highlighting objects, which means that the info line is displayed in yellow. When you grab the edge of the info line with the mouse, the mouse pointer jumps to the exact beginning or end. This feature may be useful for aligning a number of objects. When grabbing an object at the front or end, holding the mouse button and pressing one of the **Cursor** keys (left/right), the object is moved pixel by pixel. ...See also Shifting several objects.



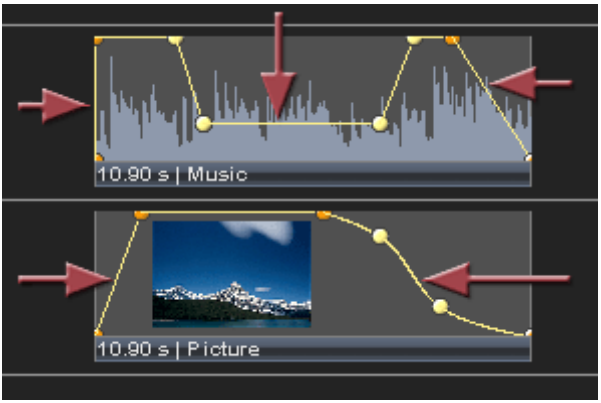
- An object can be **changed in its length.** For this purpose tool **Move fades** must be enabled (shortcut via key **A**). Grab the beginning or the end of the objects and drag it.Show procedure As an alternative you can change the length of an object by changing the duration. See also dividing or cutting and frame-accurate cutting.



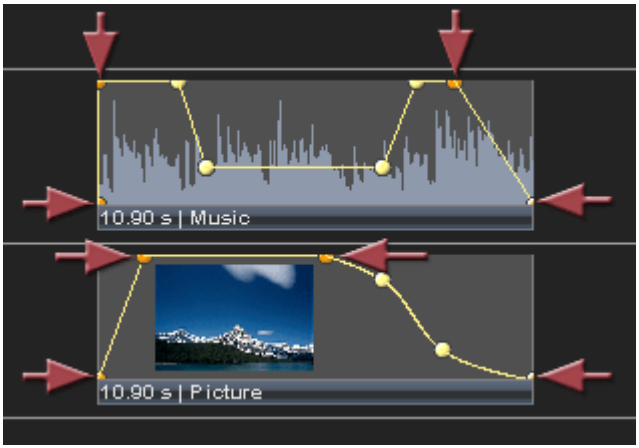
- An object is covered by a **ramp band** from the first to the last node. According to the type of media, the ramp band can be used to control the following:
  - **Picture objects** ... brightness or transparency
  - **Sound objects** ... the volume
  - **Video objects** ...the transparency

- Text objects ...transparency
- **Data objects** ... according to the control channel, e.g. voltages, DMX values, position data, etc.

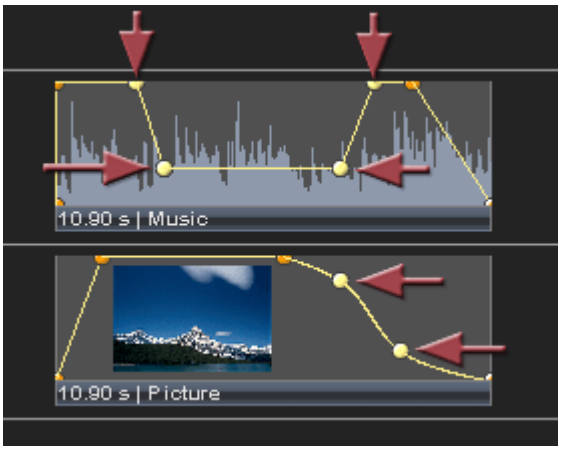
An exception are **data** and **parameter objects** with two statuses only: open and closed. Below you can see the ramp band for an audio and a video object.



- Every object has four **standard nodes** which are very useful for **simple fading in** and **out**, as well as for **dissolves**. You can move them with the mouse, but cannot delete them. Data objects, for example, are an exception, because they only have two standard nodes.



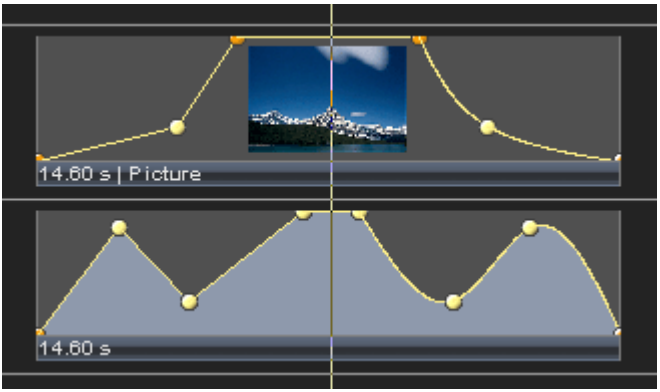
- **Additional nodes** are used for **shaping ramps**. Double-click in the object to set a node which can be moved with the mouse. Double-click the node to delete it.



- For additional nodes you can choose between two **types of ramp shapes.** Choose the corresponding type of tools:

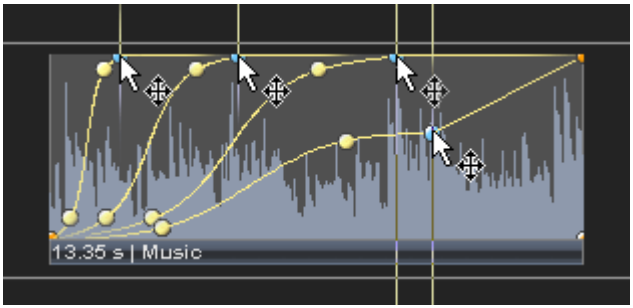
- **Linear Keyframes** (shortcut via key **I**)... produces nodes connected by a straight ramp band, like a tightened thread. They are ideal for straight section, e.g. for volume reductions or, in general, when the value is to remain constant over a certain period. These nodes are set by double-clicking an object while pressing the **I** key.

- **Spline Keyframes** (shortcut via key **O**) ...produces nodes connected by a curved ramp band, like a bent piece of wire. They are ideal for curved shapes, but not for straight progressions. They are set by double-clicking an object while pressing the **O** key.



Linear on the left, ...**Spline** on the right

- When shifting an inner standard node, any other additional nodes located at the beginning or the end between these standard nodes also change their position proportionally. A ramp shape will thus maintain its properties..



Dissolving objects

In Wings Platinum, two objects can be dissolved in an extremely simple way:

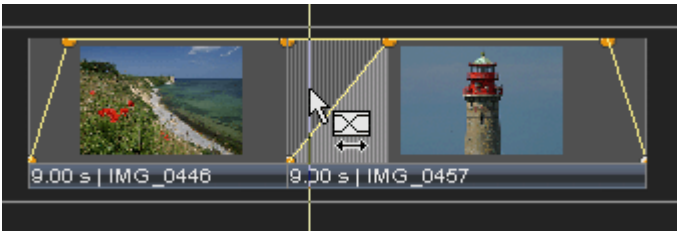
Grab an object in the info line and move it onto a second object to create a **dissolve** in the overlapping area.. Depending on the preset crossfade, the ramp shape varies:

For picture and video tracks **unilateral crossfades** are factory-set. In this case, the first object maintains full opacity and is then covered up by the second.

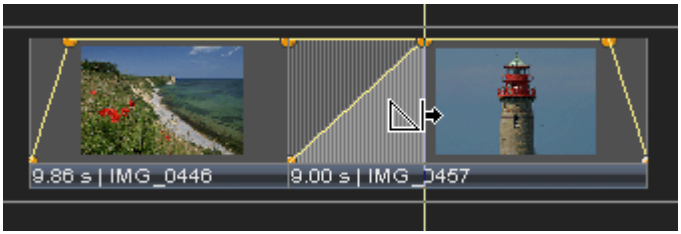
For picture tracks with **addition**, **standard crossfades** is the default setting. In such a case, the first object is faded out to darkness via the ramp. For audio objects, too the ramp band behaves likewise.

Info In the picture track and video track properties, the type of crossfades can be changed. See Picture tracks and Video tracks.

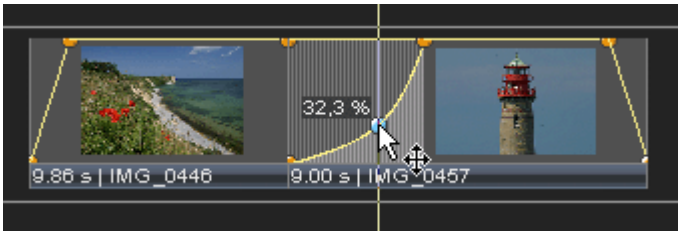
The dissolve can be grabbed with the mouse and **shifted in time** as soon as the mouse pointer is provided with an "x" symbol. For this purpose you need to enable tool **Move fades**. When you grab the dissolve near the edge, the mouse pointer jumps to the exact beginning or end. This feature may be useful when trying to align various objects.



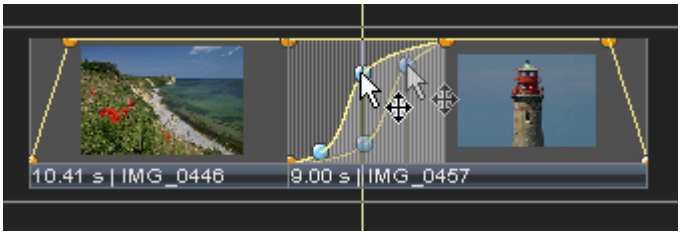
The **length of dissolves** can be modified after enabling tool **Stretch fades**. To do so, hold the **D** key and drag the beginning or the end to adjust it in length. Even a fade-in or fade-out can be modified this way, by grabbing and dragging the object beginning or end while holding the **D** key.



By adding nodes, **dissolve ramps** can be edited by setting individual nodes just like individual objects.



In order to **highlight nodes in dissolves** click near the ramp band and draw up a frame which contains the required nodes. Alternatively, you can highlight several nodes one after the other by clicking them while holding the **Ctrl** key. Highlighted nodes can be shifted simultaneously. Cancel highlighting by drawing up a frame without any nodes.



Info Data objects behave differently. They cannot be dissolved on one track because they only have two standard nodes.

Time-shifted dissolve of objects

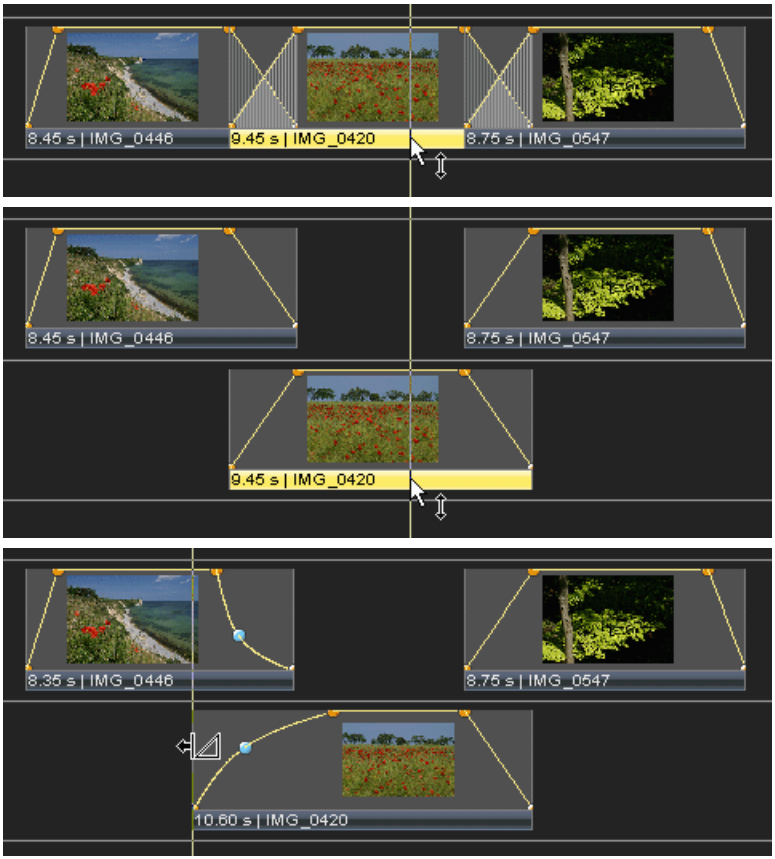
The following method requires the Starter License as a minimum in order to add further tracks.

For fade-ins our outs to start and end at the same time the following method can be used:

1. When two objects are dissolved on one track, you need to drag one of them into another track. If no track is available, add one by right-clicking a track head, selecting **Insert track** ▶ followed by the appropriate track type.

2. In the toolbar, enable tool **Vertical dragging**, which can also be achieved by pressing the **V** key. Grab the corresponding object at its info line and drag into a second track of the same type, i.e. pictures into a second picture track, etc. You may have to add a track.

3. Fade-ins and outs are now no longer linked up with each other and can be edited freely... .



Fading in objects

Fading in one object into another object, e.g. comment into music, or text slides into pictures, requires two tracks.

1. Position the object to be faded in in a second track in parallel with the other object.

   By double-clicking the ramp band and setting nodes you can modify it and adjust volume and transparency of both objects.

Info Images or titles that are to be fade into some other picture or video must be located above any other tracks. See also Shifting tracks.

Mute Function

This function allows you to mute or darken an object via a control track. At this moment this is only possible for picture objects, to produce hard cuts and blinking effects. Moreover, the mute function can also be used to control the shutter in slide projectors. See Hard cut with shutter.

Hard cut

Right-click the corresponding picture object and select **Control tracks - Mute**. Following this, a control track will be displayed in the object.

Double-click the control track to set mute areas. The red color indicates the muted area.

The length of the red area, i.e. the corresponding point of time can be adjusted by dragging it with the mouse. When you grab the boundary of a red area it is highlighted and can be moved. You can delete the area boundary by right-clicking it and selecting **Remove**.

For a hard cut, two objects are placed in different picture tracks, and the beginning and the end of the mute area must be accurately aligned. This can be done quite easily by activating function **Snap to objects** in the function bar which turns the Locator magnetic. See Snap to objects.

Info If you shorten or extend the area by double-clicking it, the old area boundaries are displayed as gray lines. They have no direct effects and can be removed by right-clicking them.

Blinking effects

In addition to hard cuts it is also possible to create regular blinking or pulsing effects. To do so by changing the ramp band is much more tedious and the outcome is usually not as regular as via the Mute function.

1. Right-click the corresponding picture object and select **Control tracks - Mute**.

2. Right-click the picture object once again and select **Special Functions – Create ramp**.
3. Under **Mute off** (bright phase) and **Mute on** (dark phase) you can enter times for the blinking effect.
4. Click on **Assign** and the dark/bright phases will be displayed in the control track.

Info

- To change the blinking rhythm right-click the picture object, select **Special functions – Create ramp** once again and alter the values.
- Find out about hiding and removing control tracks at Control tracks in objects.

Objects with key frame control

Objects with visual contents allow keyframe control for dynamic positioning and modification of pictures, videos, live video input or texts on the screen. This way "picture-in-picture" effects, camera movements or zoom effects can very simply be implemented. The procedure is always the same. Special information on the individual effects can be found under Visual effects.

This is how you create control tracks for keyframes:

1. Right-click the object whose picture or video, etc. is to be controlled and select **Control tracks**.
2. In the dialog box, you can choose combined control tracks at the top and Individual control tracks with parameter objects at the bottom. Place the checkmarks as desired and close the dialog by clicking on **OK**.

Further information on editing keyframes can be found in topic Keyframe Editor.

Info You can have new objects created along with control tracks. See **Global Options** - **Objects** - Pictures, Text/Ticker, Video or Live Video/TV.

Control tracks in objects

Several objects, e.g. picture and video objects allow control tracks to be enabled in order to perform additional functions, such as keyframe control or muting. Information about the actual functions can be found at

Visual effects

Muting / pulsing objects

Pulsing slides

Adding a control track

- Right-click an object and select **Control tracks**. In the dialog popping up, select the control tracks for the appropriate functions and click **OK**.

Info Individual control tracks for **Rotation**, **Position** and **Zoom** to be edited in the Keyframe Editor can only be selected if the corresponding checkmark next to **Combined control tracks** has been removed.

Copying/pasting all the keyframes of a control track

- Right-click some empty space of the control track you want to copy and select **Copy**.
- Right-click the control track you want to paste the previously copied keyframes into and select **Paste**.

Info

- If the object does not have a suitable control track you will have to add one before pasting the keyframes.

- Control tracks with keyframes can also be copied and pasted from the Media Pool. See Using pre-defined keyframe effects.

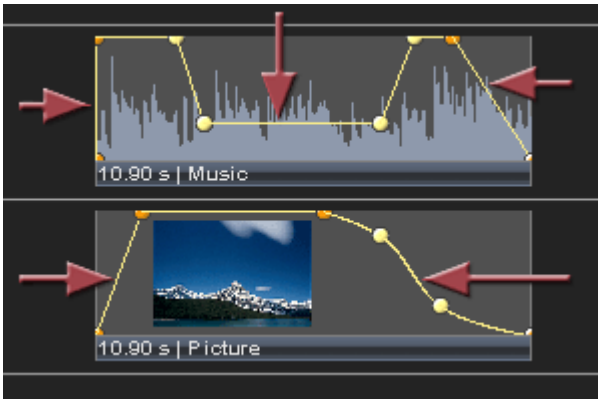
Removing a control track

- Right-click an object with a control track and select **Control tracks**. Remove the checkmark next to the control tracks you want to remove and click **OK**. This removes the appropriate control tracks including all their keyframes!
- By clicking **Remove all control tracks** all control tracks and keyframes will be deleted.

Editing ramps

Editing the ramp band

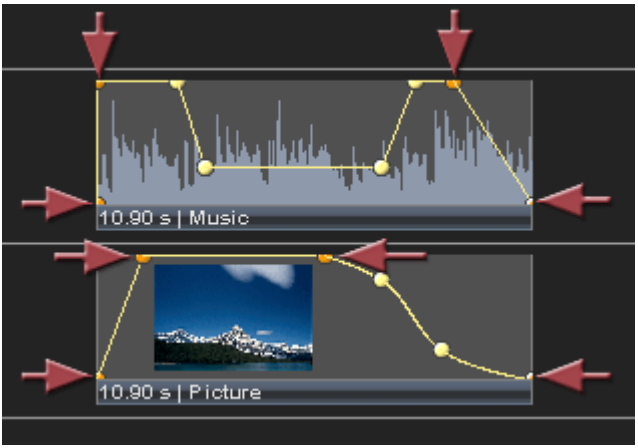
An object is covered by a ramp band from the first to the last node. By adding and shifting nodes any shape of ramps can be produced.



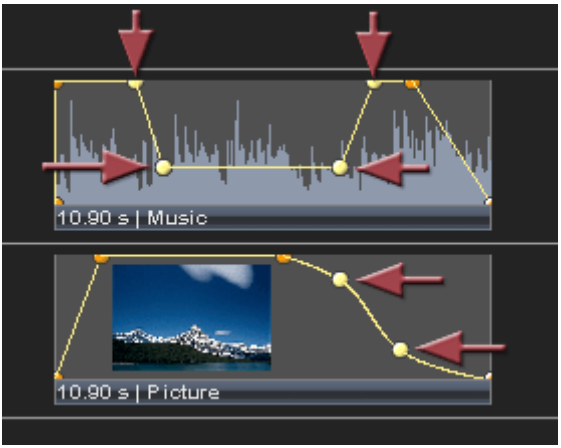
Above you can see the ramp band for audio and picture objects. According to the type of media you can control the following factors:

- **Picture objects** ... brightness or transparency, in accordance with the mode used
- **Sound objects** ... the volume
- **Video objects** ... the transparency
- **Data objects** ... according to the control channel, e.g. voltages, DMX values, position data, switching states, etc.

Every object has four red **standard nodes** which are very useful for simple fading in and out, as well as for dissolves. You can move them with the mouse, but cannot delete them. When shifting standard nodes, brightness values (... below 100 %) and dissolve times or fade-in and out times are displayed. You can set **additional nodes** to shape the ramps.



Standard nodes at the top and below...



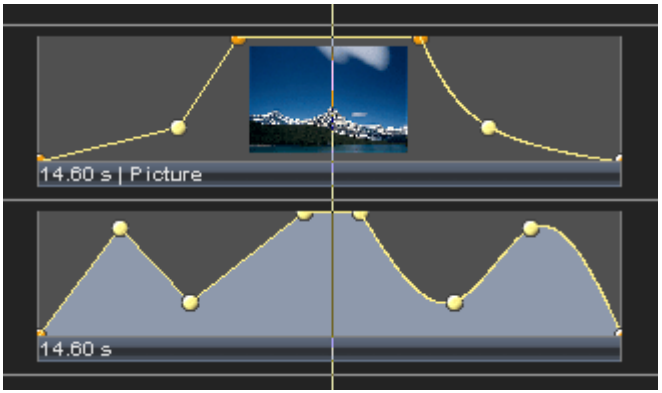
...some additional nodes

Info Data objects partly behave differently. They only have two standard nodes and retain their last value. See also Programming analog/DMX devices.

Shaping ramps

Additional nodes are used for shaping ramps. Double-click in the object to set a node. This node can be moved with the mouse. For additional nodes you can choose between two **types of ramp shapes**:

- **Linear** ... produces nodes connected by a straight ramp band, like a tightened thread. They are ideal for straight section, e.g. for volume reductions or in general when the value is to remain constant over a certain period. Enable tool **Linear keyframes** and set the nodes by double-clicking into an object.
- **Spline** ... produces nodes connected by a curved ramp band, like a bent piece of wire. They are ideal for curved shapes, but not for straight progressions. Enable tool **Spline keyframes** and set the nodes by double-clicking into an object. Shortcut via the **O** key.



Linear on the left, **Spline** on the right

Splines cannot be used properly for transitions from straight to bent curve portions. This is what Bezier nodes are for.

- **Bezier** ...are nodes which can be set via a number of parameters and let you design a variety of different ramp shapes. After highlighting the nodes two additional handles appear which, by dragging, allow editing of the ramp shape. For simple applications there are two tools with presets for Bezier nodes:

  SmartMove Keyframes ...the parameter curve, starting from a horizontal curve, runs smoothly to the next keyframe and is ideal for

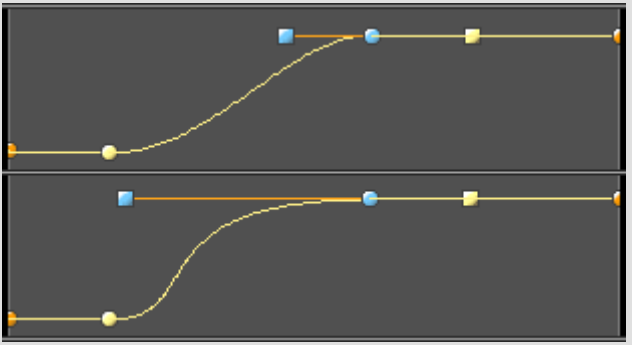
soft movements. During object modifications the handle parameters are adjusted. Shortcut via the **Z** key.

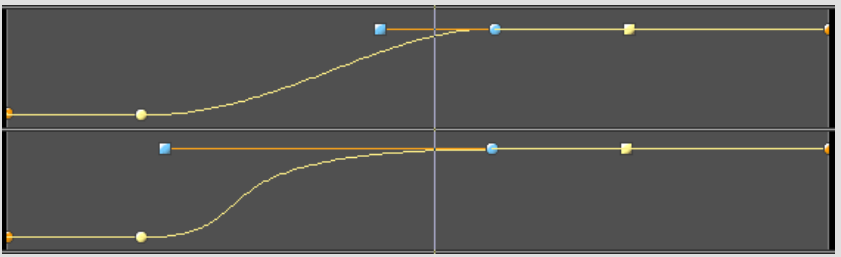
Symmetric keyframes ...creates also a node with Bezier properties. The handles, however, have identical tangents at both sides whose values are not object-related. Shortcut via the **U** key.

Note: Bezier nodes or keyframes become ineffective when their ramp bands are connected to adjacent Spline nodes or keyframes.

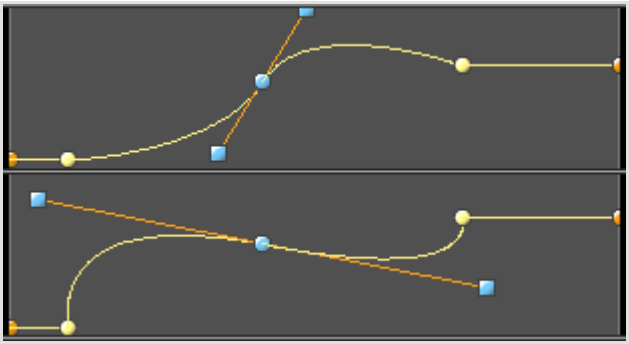
Show different effects of the two Bezier tools

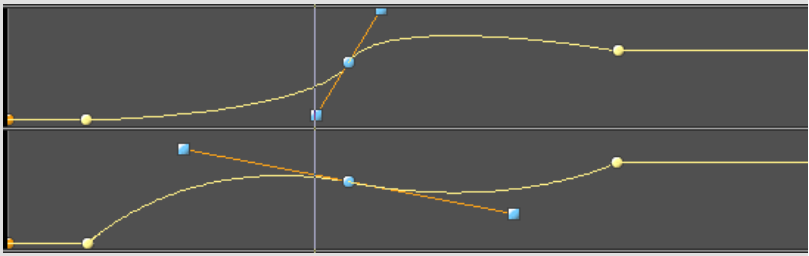
Below you can see ramp shapes in parameter objects as they are created in individual control tracks. The behavior is same with all types of objects though.





SmartMove Keyframes are ideal for soft accelerations and decelerations of movements. By moving the handles the curve either gets flatter or steeper. As long as the tangents with the handles remain horizontal, the transitions to the linear curve portions are perfectly soft. When the objects are stretched, the tangents change as well.



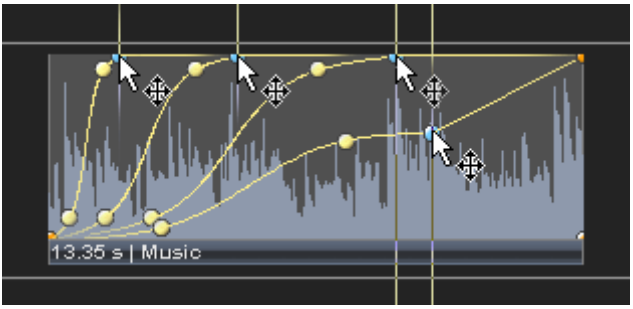


Symmetric keyframes have symmetric tangents. If you drag on one hand the other half changes as well. By rotating the tangent a completely diffe ent ramp shape is created. When the object is stretched or compressed t tangents and their handles do not change at all. They are not dependent the length of the object (right image).

Info The tools for node selection can also be enabled temporarily. Hold the shortcut key, set the node or keyframe by double-clicking and then let go of the key. See also Toolbar.

Changing fade in and out

When shifting an inner standard node, all other ordinary nodes located between this standard node and the beginning or the end of the object, respectively also change their position proportionally. A ramp form will thus maintain its properties.



Fade in and out characteristics are maintained.

Making slide dissolves more harmonious

Use ramps to make slide dissolves more harmonious. Take, for example, a very dark slide and dissolve it with a slide with very bright areas. The bright slide will very abruptly fade into the dark slide, due to the reaction time of the halogen lamp. A ramp with a gentle start made up of two splines will cause a much more harmonious dissolve. This is a field where you will need to experiment and learn by experience.

Deleting nodes

- Double-click the node to delete it.
- If you want to delete several highlighted nodes, right-click one of these nodes and select **Remove**.
- You delete all the nodes of an object by right-clicking the object and selecting **Ramp** - **Reset**.

Highlighting nodes

- Hold the **Ctrl key** down to highlight a number of nodes by clicking them.
- By drawing a frame you can highlight several nodes and move or delete them simultaneously.

- Holding the **Ctrl key** and dragging a time frame in an object with the mouse highlights all nodes in this area.

Info Standard nodes and additional nodes cannot be highlighted simultaneously.

Aligning nodes

If you want to align the height of a node exactly with the height of the adjacent node, you can do so in two ways:

- You set "aligned" nodes. To do so, you hold the **Alt** key while double-clicking. The new node will be created at the height of that adjacent node which is nearer in height. Alternatively, you can highlight a node to set the new node at that height.
- If you want to align the height of an existing node, you right-click it and select **Align**. It will be aligned in height as described above. Moreover, you can also enter the height of a node numerically via the Properties Dialog (right-click the node).

Info Movement tools allow the direction of node movements to be confined. For vertical movement press the **V** key and for horizontal movement the **H** key. See also Toolbar.

Displaying node values

- When you highlight one node the values are displayed in a little flag. You can have all node values displayed or switch off display of the values altogether, by clicking main menu item **View** - **Display node values** and selecting the desired type of display.
- You can choose whether the values are to be displayed in percent, decibel or as DMX values. To do so, right-click a node and select Proper-

ties. Under **Value** select the corresponding format. The unit chosen herein applies to all nodes of an object.

See also

Default duration for new objects

Copying/pasting ramps

Similar to other Windows programs, you can also copy data into the clipboard and paste it to another location in Wings Platinum.

- Right-click an object and select **Ramp – Copy.**
- If you want to copy the ramps of a dissolve, right-click the dissolve area and select **Copy ramp**. If the menu does not appear, move the mouse pointer to the location where the X-symbol appears and press the right mouse button.
- Ramps can be pasted most selectively. Right-click the corresponding location where you want to paste it and select **Ramp - Paste.** You can choose the following pasting locations:
    - Fade-in portion
    - Middle portion
    - Fade-out portion
    - Crossfade of two objects
    - Paste **all parts of a ramp** by pressing the **Shift**-key additionally when selecting **Paste** ramp.
- Before you can **apply the ramp to several objects**, proceed as follows:
    1. Copy the corresponding ramp to the clipboard as explained above, e.g. directly from an object or from the Media Pool or preview window.
    2. Highlight the corresponding objects you want to transfer the ramp to. See also Highlighting objects.

3. Hold the **Shift** key, right-click the middle portion of one of the selected objects and select **Ramp** – **Paste** for the new ramp to be pasted to all selected objects.

Info Please bear in mind, that in this case a crossfade (dissolve of two objects) is not accepted as pasting location.

Predefined ramp shapes

You can define your own ramp shapes and apply them to any picture, sound and video objects. You may start out by producing a collection of ramps with a variety of dissolve properties or even special effects which you can use and apply whenever you need them. This will add to flexibility and efficiency.

Creating or editing ramp shapes

1. In the Media Pool click category **Ramps**.
2. If there is no screen available yet, right-click a free area in the Media Pool and select **Add**. A ramp will be displayed, which can be edited like an object in the Preview Window. ... See also Editing ramp band and Displaying a Preview Window. In addition to this, the context menu (right-click the Preview window) offers the following features:
    - **Copy -** for copying the fading-in properties to the fading-out ramp and vice versa.
    - **Flip -** to flip the ramp shape, e.g. to convert a concave ramp into a convex one.
    - **Smooth -** to harmonize the ramp nodes with reference to each other.

- **Simplify** is used for eliminating superfluous nodes, e.g. for ramps which were produced via slider control or which were imported from old Wings 4.X shows.
- All functions mentioned above can be chosen separately for the fading-in and the fading-out ramp.
- **Reset** deletes all nodes except for the standard nodes.

3. A ramp consists of three parts to be edited: Fading in, center portion and fading out. By adding nodes you only specify the **ramp characteristics**, whereas the values of the standard nodes and their extension in time are currently irrelevant. Only if you apply a ramp to an object will there be an extension in time; the locations of the standard nodes will remain as they were in the object.
4. If you want to **edit a ramp**, mark it in the Media Pool and modify the ramp in the Preview Window.

Info

- Modifications in time can only be made for the objects in the timeline. For new objects, default durations can be specified. See Default duration for new objects.
- To simplify editing of ramps, the **Preview Window** can be **enlarged**. With the mouse, grab it at the raised double line (left margin below the cross) and pull it towards the screen centre. Now you can adjust it in size as desired. By double-clicking the title bar (top margin) or the raised double line you can switch over between the small and the large Preview Window.
- To facilitate editing your ramp you can use a grid in the Preview Window. Right-click the Preview Window and select **Toggle grid**. Every ramp section, i.e. fading in, center portion and fading out are split up into 5 to 10 segments. The grid width is adjusted to the display size and refers always to the corresponding portion of the curve.
- The **type of display** can be changed over between picture ramp and audio ramp. Right-click a ramp in the Preview Window, select **Display as** and then the required type of display. This setting does in no way restrict the free usability of the ramps

- You can also create a dissolve ramp in the timeline followed by copying it into the Media Pool. The advantage is that you can see the ramp pair crossfade and immediately check any modifications with the projectors ... See also Adjusting the track height and Expanding the time axis.

Copying ramp shapes from the timeline into the Pool

...from objects

1. Right-click an object and select **Ramp** &endash; **Copy to Pool**.
2. Name the new ramp and check the ramp portions to be copied.

...from dissolves between two objects

1. Move the mouse to the dissolve section between objects so that the mouse pointer turns into the **X**-symbol. Press the right mouse key and select **Copy ramp to pool**.
2. If necessary specify a new name for the ramp in the Media Pool.

Assigning ramp shapes to objects

1. In the Media Pool click category **Ramps**.
2. Grab the desired ramp with the mouse and drag it to the object it should be applied to:
    - Fading in
    - Centre portion
    - Fading out
    - Dissolving two objects
    - **Apply all parts of a ramp** by pressing the **Shift** key additionally when releasing the mouse key.

Standard ramp for picture objects

You can define a standard ramp for newly created picture, video and text objects by double-clicking the required ramp in the Media Pool. The stan-

dard ramp will be provided with a red frame around it. Double-click this ramp again to remove this property.

Info

- You can apply every ramp to picture, video, text and sound objects.
- Ramps can also be copied via the clipboard. See Copying ramps
- After assigning ramps to objects, the objects and their nodes can be edited as usual.
- For new objects, default times can be specified. See Default duration for new objects.

Importing collections of ramps

Usually a collection of ramps is imported when a project is set up. If the Media Pool does not contain any ramps you can also add some at a later time:

3. In the Media Pool click on category **Ramps**.
4. Right-click the right Media Pool section and select **Import from template...**
5. Select the corresponding template (Default Pools is the default selection) and click **Open** following which the ramps will be displayed in the Media Pool.

See also

Importing from other projects

Simplifying ramps

To get a better overview, ramps which are provided with a high number of nodes can be simplified by removing any extra and superfluous nodes. This is particularly interesting for ramps imported from Wings 4.x and for ramps

produced with a slider control. This function can be applied to any ramps in objects or when editing ramps in the Preview Window.

Attention: We are sorry, but this function is currently not available.

1. Right-click an object and select **Ramp** – **Simplify**. Or, as an alternative, you can right-click a ramp in the Preview Window and select **Simplify**.
2. Now select the ramp portion(s) to be simplified and the accuracy of simplification. For light ramps **Medium** will normally do. The coarser the simplification, the more nodes can be eliminated.

Info

- Wings 4.x ramps are automatically simplified with **Medium** accuracy when being imported.
- There is a comparable function for switch objects without ramp band. Redundant switch points (gray, vertical lines) can be removed by right-clicking the switch object and selecting **Switch points** ▶**Remove redundant points**.

Node Properties

Node properties can be altered.

Right-click the node and select **Properties**. The following settings are possible:

Below **Value** you can enter numerical values for the node and choose the corresponding unit: **Percent**, **dB** (decibel), **DMX** or **Degrees**. The chosen unit always applies to all nodes of an object. For **DMX** a changeover to 16 bit values is possible if very accurate editing is necessary.

The **ramp type** between the nodes can be influenced by choosing the corresponding properties:

- **Linear** ...for linear ramp shapes.
- **Spline** ...for bent ramp shapes, i.e. ideal for oscillating gradients

- **Bezier** ...creates highly customized gradients, which can even be influenced by other parameters.. For easy handling two presets have been introduced:
  - **SmartMove** ...starting from a horizontal section, the curve is bent softly until it reaches the next node. It is therefore ideal for soft movements.
  - **Symmetric** ...as above, but the tangents at both sides are identical and the values are not related to the object.

  Deviating configuration of all Bezier parameters can be effected in the fields below both separately for **Left** and **Right** and **Horizontal** and **Vertical**. Placing a checkmark in column **Abs** allows entry of absolute values in seconds.

Info

- All these options cannot be selected for standard nodes.
- Bezier nodes or keyframes are no longer effective as such when their ramp bands are connected to adjacent Spline nodes or keyframes. Details and examples for using different keyframes or nodes can be found under Shaping ramps.

Copying/pasting objects

Similar to other Windows programs, you can also copy data into the clipboard and paste it again at another location in Wings Platinum. The customary Windows key combinations are used:

- Copy → **Ctrl** + **C**
- Cut → **Ctrl** + **X**
- Paste → **Ctrl** + **V**

In Wings Platinum, you can copy and paste any object and even object ramps via the clipboard. Even copying and pasting whole shows is possible.

Copying and pasting objects

- Right-click one object or several previously selected objects and select **Cut** or **Copy**.
- In order to paste the clipboard contents, right-click some free space in a track and select **Paste clipboard**. If there is not enough space for the objects to be pasted at the required location, a corresponding message is displayed Make sure there is enough space or select a different location for pasting. x It is particularly easy to paste the copied object into new tracks. In this case there is definitely enough space available. See also Copying objects into new tracks.

Info

- When objects are copied from several tracks, they can only be pasted to a different location on the same tracks or into new tracks.
- When grouped objects are copied, the pasted objects are assigned to a new group. If the copied objects contain several groups, these groups are maintained and provided with individual group indexes. See also Grouping objects.
- When adding parts or whole shows from other projects, the corresponding media files are added to the Media Pool in the folder of the corresponding category chosen last.
- Additional timelines are a good place for temporary storage of objects. ...See Adding a timeline.

Pasting objects into new tracks

When objects are copied from several tracks, they can also be pasted into new tracks.

- Right-click the area below the tracks and select **Paste clipboard to new tracks**.

This causes new tracks to be created and the objects from the clipboard to be pasted to them. In addition to this, a group track has been created, which allows you to hide the new tracks and simply drag them to a different position. If necessary you can drag the objects onto a different track while holding the **V** key.

Cutting objects

Objects can also be cut, which may be very important for sound and video-montage. This is how it is done:

1. Move the locator to the position where you would like to do the cut. If you want to cut several parallel objects at the same time you need to highlight them first.

   Info Cutting is not possible in the cross fade area of two objects on one track.

2. Right-click the corresponding position of the object and select one of the following menus:

   - **Cut left part** ...cuts off part of the object to the left of the locator
   - **Cut right part** ...cuts off part of the object to the right of the locator
   - **Divide**...divides the objects into two objects

The toolbar contains also cutting tools which can be used without opening the context menus. See Toolbar.

Info

- You can also directly right-click the location where you would like to do the cut. Fine-adjust the location of the cut by dragging the left or right edge.
- Make sure you try out the magnetic Locator available in function **Snap to objects**. In many cases, this the easier and simpler way. See Snapping to objects.
- For an accurate adjustment of cuts the individual video pictures can be displayed at full resolution in the Preview Window allowing for frame-accurate cutting. See Frame-accurate cutting of videos.
- A number of short video snippets following closely one after the other may cause problems for real time playback based on original data. In this case the cuts are rendered incorrectly. The extent of this effect

and the object length to cause this effect depends on the codec used for editing the videos. DV videos show a more favorable behavior, while MPEG-2 and WMV videos behave less favorably due to the higher key frame intervals. In case of problems you could create a mixdown of this particular scene and use it instead of the original videos.

Stretching or compressing objects

An object along with all its nodes can also be **stretched** or **compressed**, which affects the contents of video or audio objects, too.

1. In the toolbar enable **Stretch objects**, which can quickly be done by clicking the **W** key.
2. Drag the beginning or the end of an object with the mouse to the desired length. All nodes will change their position proportionally. For sound objects the playing time but not the pitch will change (requires the Pro License or up). See also Changing playing speed and pitch. The playing time of videos changes, too, i.e. they are played back either in slow or in fast motion (this requires the Pro License or up).

Info

- For sound and video objects, the playing speed can also be altered numerically by changing the pitch (speed factor). See Audio Object Properties and Video Object Properties.
- For playing videos or picture sequences at varying speed, i.e. when they are compressed or expanded, you should definitely use Intermediate Video Data as pitching of original data uses up a lot of computer performance. In combination with Intermediate Video Data the performance demand increases only for a higher data rate, i.e. when the speed is increased.
- The ramp band of an object cross-faded with another object on the track, cannot be changed in the cross-fade area. While compressing, nodes in the middle portion may therefore disappear when they get into the cross-fade area.

See also

Changing the object duration via the entry dialog

The duration of one or several objects can also be changed via the entry dialog. This can be very handy for extending data objects or for simultaneously shortening video and sound objects.

1. Mark and highlight the corresponding objects, right-click them and select **Change duration...**
2. Under **New duration** enter the corresponding duration. Please consider that due to the audio data, audio and video objects are limited in their maximum duration.
3. Click the corresponding Change Mode and **OK**.

Info Stretching and compressing audio objects requires an Audio FX/Pro Module or the Multidisplay License as the audio needs to be rerendered. (time stretching).

Extending objects

This is a function you may require for aligning cuts of sound objects. If, for instance, the pause between two tones has become too small after cutting, you can drag the objects away from each other and increase the pause to the desired length. The created gap can be removed as follows:

- Right-click the object which is to be audible in the pause and select **Dock/ Extend** - **Extend left** or **Extend right**. The object will exactly be extended up the next object.

Info Make sure you try out the magnetic Locator available in function **Snap to objects**. In many cases, this the easier and simpler way. See Snapping to objects.

Aligning/docking objects

Objects can be aligned with each other. This may be necessary if you want to join two cut sound objects very exactly or when a sample in a different track is to start at the same time.

Docking two adjacent objects in the same track

- Right-click the object which is to move up to the other object and select **Dock / Extend** - **Dock left** or **Dock right.**

Keeping the position in time and extending one object up to an adjacent one.

- Right-click the object which is to be extended and select **Dock / Extend** - **Extend left** or **Extend right.** A sound object can only be extended when audio data are available.

  Tip Any subsequent alignment of sound cuts can performed, after checking whether the timing is correct, by joining the two samples via this function.

Aligning objects on different tracks

1. Start out with a rough alignment of the object.
2. Mark the object it should be aligned with (... which must not change its position in time).
3. Right-click the object which is to be aligned and select **Align**.

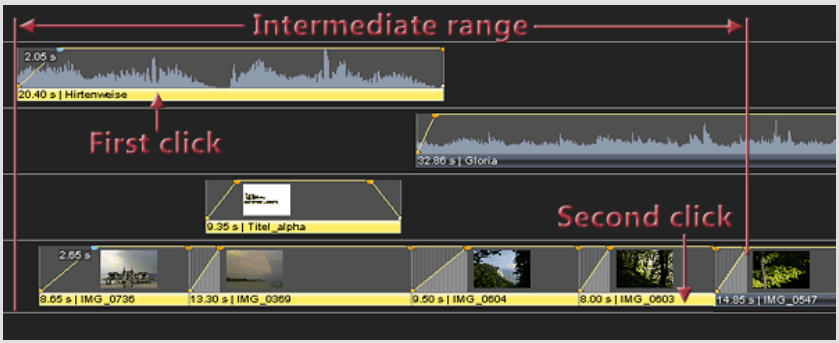
Info Make sure you try out the magnetic Locator available in function **Snap to objects**. In many cases, this the easier and simpler way. See Snapping to objects.

Marking objects

- Just click the info line of the corresponding object to select or highlight it. The info line of highlighted objects is displayed in yellow.
- In order to **mark additional objects**, click the info line of other objects while pressing the **Ctrl** key.
- **Mark a number of objects within one section** by marking the first or left object and, while holding the **Shift** key, the last or right object. All objects located between these two marked objects will be marked as well. This works across several tracks, too. The following rule applies:

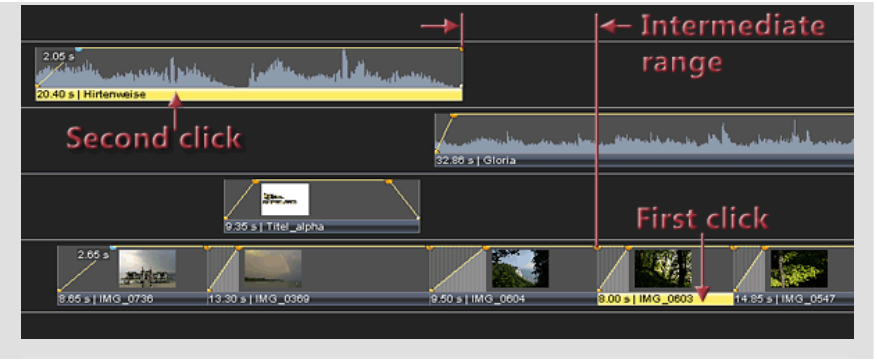
Info All objects which are fully contained within the left edge of the first clicked object and the right edge of the last clicked object are marked. **Show example**.

Marking an object area while holding the Shift key



Top: All objects located in the intermediate range have been marked. The right piece of music and the last picture object are not fully contained within the intermediate range and have, therefore, not been marked.

Bottom: In this case, the objects were clicked in a different order, so that the smaller intermediate range does not accommodate any object in its entirety. Therefore no object has been marked.



Whether objects need to be located fully or only partially between the first and the last object in order to be marked, can be defined under **Options** – **Global Options - Objects**.

- Right-click some free space in a track and you can select several objects on this track by choosing one of the following options:

  Select all objects ... highlights all objects in this track

  Select objects to the left ... highlights all objects to the left of the locator

  Select objects to the right ... highlights all objects to the right of the locator

  Additional functions available are: **Invert selection** and **Hide selection**.

- If you want to **mark all objects** start out by marking all tracks by clicking the track heads while holding **Ctrl** and **Shift** keys. Following this, you right-click some free space on a track and choose **Select all objects**.

Info

- By marking several tracks, the objects on these tracks are marked as well when you select one of the above options. Please note that this way objects on hidden tracks cannot be marked. See also Grouping tracks.
- If several objects are marked, they cannot jointly be moved to other tracks.

Shifting Objects

Grab an object in the **info line** and move it Show info line When you grab the edge of the info line with the mouse, the mouse pointer jumps to the exact beginning or end. This feature may be useful when trying to align the object with other elements or with graphically displayed sound.

When grabbing an object at the front or end, holding the mouse button and pressing one of the **Cursor** keys (left/right), the object is moved pixel by pixel.

Methods for exact alignment can be found under Snapping to objects and Aligning objects.

Shifting several objects

Simply mark the required objects and shift them with the mouse. There are various ways of highlighting a number of objects. See Marking objects.

- When you grab the edge of the info line with the mouse, the mouse pointer jumps to the exact beginning or end. This feature may be useful when trying to align various objects.
- Several highlighted objects can only be shifted in time, they cannot be jointly moved into other tracks.
- Make sure you try out the magnetic Locator available in function **Snap to objects**. In many cases, this the easier and simpler way. See Snapping to objects.
- It is also possible to shift the whole content of a timeline from the Locator position. See Shifting timeline contents from Locator.
- When objects cannot be shifted any more, they may have got "jammed". Use function **Check project** to find jammed objects and remedy the fault. See Checking a project.

Shifting following objects along

When editing objects you can also shift along later objects or objects to the right of the Locator. Function **Shift following objects** can be used for shifting objects but also for shifting dissolves and for adjusting the right object edge.

- In the tool bar click **Shift following objects**.(shortcut via the **Q** key). By shifting an object, a dissolve or the right object edge (... the mouse pointer is provided with an additional symbol as an indication for this mode) all objects in this track located to the right are shifted along. By marking additional tracks the objects in these tracks can also be shifted along. See Marking tracks.
- Click **Shift following objects** once again or press the **Q** key to deactivate this shifting mode. **Enable the tool only temporarily** and you need not disable it again: Hold the **Q** key down, shift the object and let go of the **Q** key again.

Info

- Under **Global Options** – **Objects** you can choose whether those objects which are located at the height of the Locator are to be shifted along.
- Shifting grouped objects or locked objects to the right of the Locator may result in collisions with other objects. In this case shifting is blocked.
- When objects cannot be shifted any more, they may have got "jammed". Use function **Check project** to find jammed objects and remedy the fault. See Checking a project.

Shifting object contents in time

The contents of all objects with a time dimension in their media files (... sound or video) can be shifted in time without changing the object form The length of sound or video object portions, therefore, remains the same. Only the location of the portion to be played is changed. Just try it out:

- Keep the **Alt** key pressed, grab the object content with the mouse and move it to the right or the left.

Info In order to be able to shift object contents, the object must be shorter than the media file, i.e. must be trimmed.

Replacing object contents

Media files or the contents of an object in general can be replaced without the object losing its form or position. This is how you replace the media file of an object.

1. In the Media Pool click on the corresponding category.
2. Drag the corresponding media file or any other suitable content (e.g. switches, control channels, sliders, etc.) from the Media Pool onto the corresponding object and let go of the mouse key.

Info

- Only media files of the same type or category can be replaced.
- If the running time of the newly assigned audio or video file is shorter than the object, the object is shortened correspondingly.
- Pictures contained in picture objects can also be directly replaced in the timeline. See Shifting object contents.

Closing gaps between objects

This function allows you to close the gaps between several objects. This is a practical feature for viewing video footage, which allows you to close the gaps after cutting out inferior or superfluous scenes and provides you with a rough cut of all scenes.

Right-click some free space on the track the gaps of which should be closed. Select **Close gaps** and the corresponding variant.

If gaps on a number of tracks are to be closed, you need to mark the tracks beforehand.

See also

Extending objects

Snapping to objects

Grouping objects

Any number and choice of objects can be grouped. This means that when one object from the group is selected, it is always the whole group that is selected or deselected.

Creating a new group of objects

1. Simply mark or select the required objects.
2. Right-click one of these objects and select **Grouping ▶Create new group**. The group index is displayed on the left margin in the info line.

Assigning objects to an existing group

1. Mark or select the objects to be added to a group.
2. Right-click the selected object and choose **Grouping ▶Assign group**.
3. Under **New** enter the index of the group which the selected objects should be added to, followed by clicking **OK**.

Changing groupings

1. Select the objects of the group which are to be added to another group.
2. Right-click the selected object and choose **Grouping ▶Change group**.
3. Under **New** enter the index of the group which the selected objects should be added to, followed by clicking **OK**.

Info When grouped objects are copied, the pasted objects are assigned to a new group. If the copied objects contain several groups, these

groups are maintained and provided with individual group indexes. See also Copying and pasting objects.

Remove grouping of an object group

1. Click in the info line of a group object.
2. Right-click one of these objects and select **Grouping ▸Remove grouping**.

Removing objects from a group

1. Click a free location on a track to invert selection of all objects.
2. Right-click the object to be removed from the group and select **Grouping ▸Remove grouping**.

Locking objects

Once editing of objects has been finished and the objects are synchronized, it may be useful to protect them from unintentional editing or shifting by locking them.

- Right-click the corresponding object and select **Status** - **Locked**. If you want to lock several objects you need to mark them.... See Marking objects. Locked objects can be recognized by the key symbol.
- The same way objects can be unlocked.

Disabling objects

Individual objects may be disabled for test purposes or for analyzing processes.

- Right-click the corresponding object and select **Status** - **Disable**. If you want to disable several objects you need to mark them.... See Marking objects. Disabled objects can be recognised by the red symbol in the info line.

- The same way objects can be enabled again.

Removing objects

- Right-click the corresponding object and select **Remove**.
- If you want to remove several object, mark all of them and then proceed as described above.

  See also Marking objects

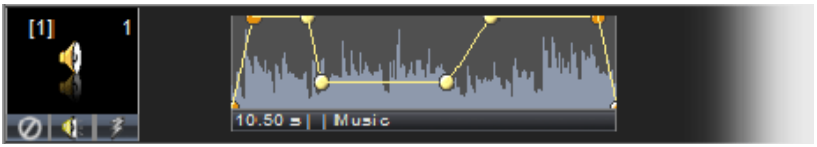
Attention! This function removes objects from the timeline. The media files, however, remain in the Media Pool. Please remember, however, that any editing of the objects, e.g. cuts, dissolve ramps, keyframes, etc. is lost.

Object properties

Objects on their tracks

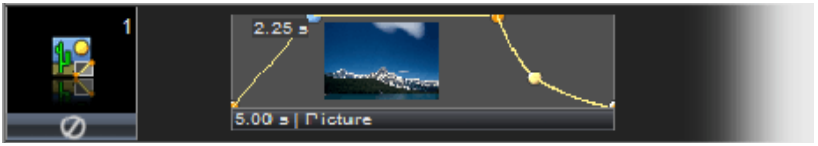
There are various objects which are placed on different tracks where they can be edited. See Editing objects.

Sound objects



Audio tracks and Sound object properties

Picture objects

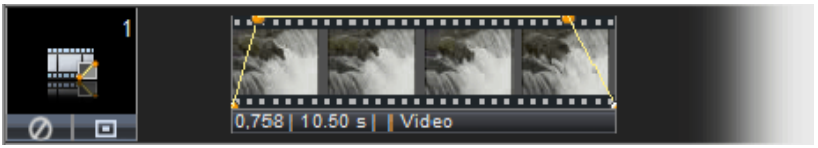


Picture tracks and Picture object properties

Text objects

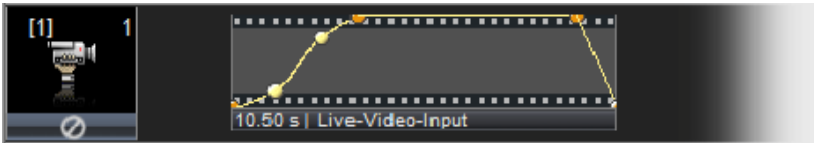
Picture tracks and Text Object Properties

Video objects



Video tracks and Video object properties

Live video/TV objects

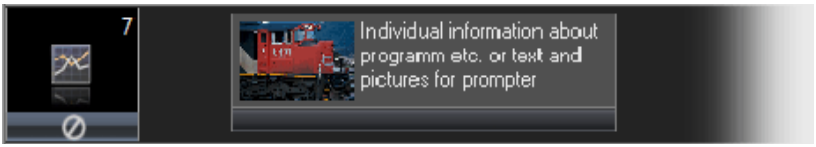


Live-Video/TV tracks and Live video/TV object properties (available from the Pro License and up)

Ticker objects

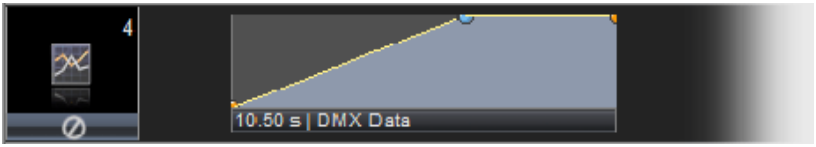
Ticker tracks and Ticker object properties (available from the Advanced License and up)

Notes objects



Universal tracks and Notes object properties (available from the Advanced License and up)

Data objects



Universal tracks and Data object properties (available from the Advanced License and up)

Switch objects

Universal tracks and Switch object properties (available from the Advanced License and up)

Marker objects

Marker tracks and Marker properties, Value marker, Command marker (available from the Advanced License and up)

See also

Group tracks

Adding or removing tracks

Editing in the Properties Table

The Properties Table shows the properties of highlighted objects. This is a useful features as the values in the table are continuously updated when an object, a node or a keyframe is shifted in the timeline.

Most parameters can also be edited directly. Unfortunately, the properties referring to the object itself, i.e. start time, duration, display time as well as fade in and out times, presently cannot be directly edited in the Table.

For most objects you have the choice whether you want to edit in the Table or rather in the familiar dialog box. Rarely used parameters are sometimes only available in the Properties dialog. But there are also some functions, such as realtime effects or the VST PlugIns that can only be configured in the table.

Selecting and editing in the Properties Table

For easy and fast editing in the Properties Table note the following:

- First highlight the object for the parameters to become visible in the Properties Table. If the parameters fail to be displayed highlight some other object followed by highlighting the desired object.
- If you want to enter a value in a field, click this field directly and enter the corresponding value. The entry becomes effective after pressing the **Enter** key.

- Quite often some other controls appear after clicking the field or the parameter name:

  Buttons for certain tasks, such as selecting and removing files or for opening settings dialogs.

  Button for opening selection menus.

  Slider controls for adjusting values. These sliders can dragged with the mouse and be moved with the mouse wheel. Of course, values can also be entered directly.

  Tip: You can save one click by clicking the area where you think the control element could be. For some functions, such as removing or copying you should be cautious and start by clicking on the parameter name for the buttons to be displayed.

See also

Editing effects in the Properties Table

Dynamic transparency masks

Using PlugIns

Sound Object Properties

Right-click a sound object and select **Properties**.

Sample **Peak Level** specifies the peak level in the original file. Click on to search for the object peak level. See also Adjusting the volume.

Under **Render properties** you can enable **Loop**, if the audio is to be played in a loop. Please note that the entire audio file is always repeated. If necessary, create a short, loopable audio file by cutting and exporting. See also Asynchronous audio playback.

In field **Comment** you can enter any designation to become visible in the object info line.

- Under **Speed factor / pitch factor** you can define playing speed and pitch independently. After placing a checkmark next to **Enable settings**, the following settings are possible:
  - **Pitch factor = speed factor** ...placing a checkmark there will change both factors together. An increase in speed will have an effect on the pitch and may cause the "Mickey Mouse" effect.
  - **Speed factor** ...changes the playing speed and the possible object length. E.g. a factor of **0.5** causes a reduction in speed by half and allows double the object length. The beat is also reduced by half. A factor of **2**, in contrast, results in double the speed; a factor of **1** stands for the original speed.
  - **Pitch factor** ...affects pitch and timbre. A factor of **0.5** reduces the pitch exactly by one octave, which corresponds to the audio frequencies being reduced by half. A factor of **2** increases the pitch exactly by one octave, which corresponds to a doubling of the audio frequencies; factor **1** corresponds to the original pitch.

    Important: As time stretching at high quality requires a lot of computer capacity, playback in real time is only at prelistening quality. To maintain optimum quality and save computer power, you should export the object after editing as a new file. See also Changing playing speed and pitch.
  - Button **Default settings** allows resetting of speed and pitch.

The volume of the corresponding object can be altered by means of the slider control. ... See also How to use slider controls.

Picture Object Properties

The properties of picture objects can be edited either in the dialog or in the table:

Dialog

Right-click a picture object and select **Properties**.

Picture size of picture display data

Here you specify the display data for this particular picture object. The following options are available:

- **Allow optimization** ...allows creation of optimized display data with an appropriate picture size in accordance with the highest zoom settings used. This option should only be disabled for very serious reasons. See also Optimizing display data for pictures.

  Info The percentage next to **currently** refers to the picture size preset in the screen properties and is only displayed after optimized display data have been created. As both portrait and landscape formats are considered, this value does not necessarily corresponds with the zoom settings.

- **Use screen settings** ...uses display data at the size defined in the screen properties.
- **Use size of original picture** ...uses display data at exactly the size of the original picture. This option is only appropriate in special cases.As a former Watch Out users you should not choose this option not just because you are used to it, because this way you can't take advantage of optimized display data creation.
- **Custom** ...allows entry of an individual picture size for the display data.

Resulting picture size

- **Size factor** ...allows entry of a correction factor (standard = 100%) which takes effect on all the settings above, i.e. also on creation of optimized display data.
- **→Picture size** ...displays the display data picture size resulting from all the entries.

Info The resulting display data can never be larger than the original size of the pictures.

Render properties

- If the **Alpha Channel** or the transparent areas of a picture are to be disregarded for the image blend, check **Ignore alpha channel**. ... See also Compositing methods. This function works for tracks in all Compositing Modes, i.e. Addition and Alpha Control.

  Info If an image file contains several alpha channels, it may not be displayed properly. In such a case you may have to remove superfluous alpha channels from the image file.

- **Always load complete picture** ...causes the complete picture to be loaded into the graphics memory even if only a part of it is visible in the screen. Usually, only those picture portions are loaded that are to become visible on the screen.
- **Screen field clipping** allows output for "Picture-in-picture" effects to be restricted so that a zoomed or moving image is restricted to the screen field. There are two options for this:
  - **Enable screen field clipping** only ...position and rotation affect insert and image; zoom affects the image only.
  - **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

  See also "Picture-in-picture" effects

Slide Projector

- A picture can be anchored or locked to the assigned slide projector or tray compartment.
- This is also the place to enable and disable the HighLight function and the Standby Function or projectors which support this function.

Mouse-click trigger

The corresponding field show whether a trigger is linked up to it. Click **Display trigger** to have it displayed in the Media Pool. Click **Remove trigger** to remove the link between trigger and object. See also

Executing triggers via screen objects.

In field **Comment** you can enter any designation to become visible in the object info line.

Table

Highlight the corresponding picture object so that the tabs with the parameters are displayed in the Properties Table.

Choose the tab you need information for:

Object

The parameters displayed are for your information only; they cannot be edited. There is one exception: You can enter Comments here.

Times

- **Start time** ...refers to the beginning of an objects calculated from the beginning of the timeline.
- **Duration** ...defines the length of an object.
- **Fade in time** ... defines the duration of a fade in, i.e. the distance between the first two standard nodes. Show standard nodes.
- **Display time** ...defines the period of time the object is displayed, i.e. the distance between the second and the third standard node.
- **Fade out time** ...defines the duration of the fade out, i.e. the distance between the last two standard nodes.

Properties

- **Comment** ...here you can enter any designation to become visible in the object info line.

Picture

Output

- **Display data** ...indicates the current pixel size of the long side of this image's display data. If the number is displayed in red, the size was limited due to the fact that the size of the original

image was too small. If you click **Further options for display data** will be displayed.

Picture size of picture display data

- **Allow optimization** ...allows creation of optimized display data with an appropriate picture size in accordance with the highest zoom settings used. This option should only be disabled for very serious reasons. See also *Optimizing display data for pictures*.

  Info The percentage next to **currently** refers to the picture size entered in the Screen Properties and is only displayed after optimized display data have been created. As both portrait and landscape formats are considered, this value does not inevitably corresponds with the zoom settings.

- **Use screen settings** ...uses display data at the size defined in the screen properties.
- **Use size of original picture** ...uses display data at exactly the size of the original picture. This option is only appropriate in special cases. Former Watch Out users should not choose this option hastily just because they are used to it, because this way they can't take advantage of optimized display data creation.
- **Custom** ...allows entry of an individual picture size for the display data.

Resulting picture size

- **Correction factor** ...allows entry of a correction factor (default setting = 100%), which takes effect on all the settings above, i.e. also for creation of optimized display data.
- **Picture size** ...displays the display data picture size resulting from all the entries.

Info The resulting display data can never be larger than the original size of the pictures.

- **Ignore alpha channel** ...if you check this box the alpha channel or the transparent areas of a video are not utilized for the

composite picture.

Info A picture file that contains several alpha channels may not be displayed correctly. In such cases remove superfluous alpha channels from the picture file.

- **Enable screen field clipping** ...the next two options allow you to limit output of zoomed or moving pictures of a "picture-in-picture" effect to the screen field. There are two options for this:
- **Enable screen field clipping only** ...position and rotation affect insert and image; zoom affects the image only.
- **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

  See also "Picture-in-picture" effects
- **Realtime effects** ...when you choose this option a third tab is added which allows selection of effects.

Slide Projector

- **Projector locked** ...the picture is permanently assigned to a particular slide projector and is no longer moved to any other projectors when the images are sorted automatically.
- **Tray slot locked** ...the image is locked to a particular tray slot and no longer moved during sorting.
- **HighLight activated** ...the HighLight function is activated when this picture is shown, provided the slide projector supports this function. See also **HighLight function.**
- **Standby activated** ...the HighLight function is activated when this picture is shown, provided the slide projector supports this function. See also Standby function.

Mouse-click trigger

- **Trigger** ...shows whether a trigger is linked up to it. Click to have it displayed in the Media Pool. Clicking deletes the link between trigger and object. See also Executing a trigger via a screen object.

Special settings

- **Additive Compositing** ...check this box if you do not want to use transparency control for adding your image to the composite image but addition.
- **Don't tile picture** ...check this box if the complete texture of the image is always to be loaded to the graphics memory. For certain effects this setting is necessary in order to avoid visible tiles. Usually a picture is transferred in the form of many little tiles to save performance and storage capacity if only part of it is required.
- **Always load complete picture** ...loads tiled pictures always as whole even if only a part of it is visible on the screen. Usually, only those picture portions are loaded that are to become visible on the screen.

Effects

This tab allows activation of visual effects. Further information can be found under Editing effects in the Properties Table.

Video Object Properties

The properties of video objects can be edited either in the dialog or in the table.

Dialog

Right-click a video object and select **Properties**. In the dialog you can

make the following settings:

Render Properties

- If the **Alpha Channel** or the transparent areas of a picture are to be disregarded for compositing, check **Ignore alpha channel**.
- If the video is to run in a loop, place a checkmark next to Loop. Please note that the entire video file is always repeated. If necessary, create a short, loopable video.
- If the video loop is to continue during Pause Mode, place a checkmark next to **Asynchronous**. See also Asynchronous playback of video loop.
- If you place a checkmark next to **Auto-Mute**, the video will not be visible when the presentation is started. It needs to be started via a trigger. The following options affect video playback:
    - **Group** ....is used for grouping auto mute objects to be controlled jointly via a trigger. The number of groups can vary from **1** to **250**. **0** does not effect assignment to a group and the objects will always react to all trigger actions, no matter which group the trigger addresses.
    - **Start always at beginning of video** ...causes video playback to start always at the beginning. If this box is not checked, the Locator position in the object defines the location where video playback is to start.
    - **Pause at start and after every ... cycles** ...defines how often the video is to run in a loop. With a setting of **zero** the video is continuously repeated until the end of the object is reached.

  Further information can be found under Control of asynchronous playback via triggers.
- **Screen field clipping** allows output for "Picture-in-picture" effects to be restricted so that a zoomed or moving image is restricted to the screen field. There are two options for this:
    - **Enable screen field clipping** only ...position and rotation af-

fect insert and image; zoom affects the image only.

- **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

See also "Picture-in-picture" effects.

Frame rate / Pitch

Here you can change the video frame rate by choosing a preset by clicking .

Choosing **User defined** allows you to enter any frame rate next to **Frames/s** or a speed factor next to **Pitch**. The following applies: original speed (pitch = 1), more slowly (pitch lower than 1) or faster (pitch higher than 1).

See also Expanding or compressing objects.

Info Playing videos at varying speed, i.e. when they are compressed or expanded, requires more computer performance as the playback mode has to be changed. This is why weaker computers or HD videos may cause problems, such as jerky playback or pictures and audio drifting apart.

Hardware-Rendering

The frame buffer size is usually set centrally in the global options under **Objects** - **Video**. But it is also possible to set individual frame buffer sizes for every video object.

- Place a checkmark next to **Individual frame buffer size** and enter the corresponding buffer size. Usually, 2 to 3 frames should do. Higher values improve reliability but use up more graphics memory.
- Place a checkmark in front of **Individual preload time** and enter the period in seconds preloading is to start at the earliest time be-

fore the video is played back. many videos are played at the same time, the video files are also loaded at a later time. The default preload value is 60 seconds.

Pitch (speed factor)

Under **Pitch (speed factor)** you can enter whether the video object is played at the original speed (pitch = 1), more slowly (pitch lower than 1) or faster (pitch higher than 1). Click **Standard** to resume the original speed. See also Expanding or compressing objects.

Info Playing videos at varying speed, i.e. when they are compressed or expanded, requires more computer performance as the playback mode has to be changed. This is why weaker computers or HD videos may cause problems, such as jerky playback or pictures and audio drifting apart.

Alpha mask

Under **Alpha Mask** you can choose from among the following options for transparent display:

- By removing the checkmark next to the image file you can deactivate image file evaluation for the mask. See also Producing transparent areas via masks.
- On the left next to **Alpha channel** you can choose the channel for transparency control.
- The transparent areas can be inverted by placing a checkmark next to **Invert mask**. Those areas that was visible will turn transparent and those that were transparent will turn visible.
- Click **Display pool object** to have the image file displayed which is linked up with it in the Media Pool.
- Click to remove the link between image file and mask.
- With a checkmark next to **Chroma Keying** certain areas of the video can be made transparent (blue box effect). To specify the color range, click **Settings**..... See also Transparency control via

chroma keying.

Info If an image file contains several alpha channels, it may not be displayed properly. In such a case you may have to remove superfluous alpha channels from the image file.

Mouse-click trigger

The corresponding field show whether a trigger is linked up to it. Click **Display trigger** to have it displayed in the Media Pool. Click **Remove trigger** to remove the link between trigger and object. See also Executing triggers via screen objects.

In field **Comment** you can enter any designation to become visible in the object info line.

Table

Higlight the corresponding video object so that the tabs with the parameters are displayed in the Properties Table.

Choose the tab below you need information for:

Object

The parameters displayed are for your information only; they cannot be edited. There is one exception: You can enter Comments here.

Times

- **Start time** ...refers to the beginning of an objects calculated from the beginning of the timeline.
- **Duration** ...defines the length of an object.
- **Fade in time** ... defines the duration of a fade in, i.e. the distance between the first two standard nodes. .
- **Display time** ...defines the period of time the object is displayed, i.e. the distance between the second and the third standard node.
- **Fade out time** ...defines the duration of the fade out, i.e. the distance between the last two standard nodes.

Properties

- **Comment** ...here you can enter any designation to become visible in the object info line.

Video

Output

- **Ignore alpha channel** ...if you check this box the alpha channel or the transparent areas of a video are not utilized for the composite picture.
- **Enable screen field clipping** ...the next two options allow you to limit output of zoomed or moving pictures of a "picture-in-picture" effect to the screen field. There are two options for this:
- **Enable screen field clipping** only ...position and rotation affect insert and image; zoom affects the image only.
- **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

  See also "Picture-in-picture" effects.
- **Realtime effects** ...when you choose this option a third tab is added which allows selection of effects.

Mouse-click trigger

- **Trigger** ...shows whether a trigger is linked up to it. Click to have it displayed in the Media Pool. Clicking deletes the link between trigger and object. See also Executing a trigger via a screen object.

Effects

This tab allows activation of visual effects. Further information can be found under Editing effects in the Properties Table.

Picture Sequence Properties

In the Media Pool click on category **Videos**. The list displayed provides a lot of information about the corresponding files. The actual properties dialog can be opened by right-clicking the picture sequence and selecting **Properties**. Picture sequences can be distinguished from videos by the corresponding symbol.

Here you can define the properties to take effect on all video objects in the timeline linked up with it:

General

- **Frames/s** ...is usually defined when the images are first added to the Media Pool. The frame rate can only be changed if the picture sequence has not yet been added to the timeline as an object. Alternatively, the frame rate can also be influenced by pitching. See Stretching or compressing an object.

  Attention: Currently the frame rate can only be changed via **Pitch**.

- **Create display data automatically** ...is enabled by default and ensures that display data are created automatically for video objects in the timeline. If this function is disabled, no display data will be created and a green cross will appear in front of the corresponding file in the Media Pool. The green cross disappears once display data are available. See also *Differentiated creation of display data for videos*.

Intermediate video data

- **Create/use intermediate video data** ...is enabled by default and ensures that intermediate video data are automatically created and used during presentation. This ensures problem-free operation and good performance. Any necessary deinterlacing is always applied simultaneously.
- **Quality** ... defines the quality of video images. The better the quality, the lower the compression and the larger will the files be. The following options are available:

  - **Best possible (Q1)** ... compression is very low and quality very high.
  - **High (Q2)** ... compression is low and quality high.
  - **Normal (Q3)** ... compression and quality are well-balanced.
  - **Low (Q4)** ... compression is high and quality low.
- **Seeking** ... defines the speed at which a position within a video can be found. This setting affects the keyframe interval, i.e. the distance between keyframes with the entire image information. Fast seeking of the locator requires large files, slow seeking allows smaller files.
  - **Fast (P1)** ... uses a keyframe interval of 10 and allows very fast positioning of the Locator.
  - **Medium (P2)** ... uses a keyframe interval of 20 and allows still quite fast positioning of the Locator.
  - **Slow (P3)** ...uses a keyframe interval of 300 and positioning of the Locator requires some time.
- Instead of **Original size** you can also enter a lower image size for the intermediate video data. When you choose **Width** or **Height** you only need to enter the selected parameter; the second will be adjusted automatically in accordance with the aspect ratio chosen.

Further information can be found under Changing the properties of intermediate video data.

Info

- Please note that output of picture sequences cannot be based on the original data when they are presented from the timeline but require a presentation based on intermediate video data. If you do not want to use intermediate video data you need to restrict the presentation to display data by clicking button in the track head so that it changes to .
- Media Pool column **Intermediate video data** shows the properties of the intermediate video data. The first letter stands for the quality, the second for seeking and other parameters refer to the resolution. In example **Q3P2 (1280 x 720)** refers to a quality of "normal", seeking of "medium" and a video image size of 1280 x 720 pixels.

Live video/TV object properties

The properties of live video/TV objects can be edited either in the dialog or in the table.

Dialog

Right-click a video object and select **Properties**. The dialog allows the following settings:

Render properties

You can restrict output for "Picture-in-picture" effects so that a zoomed or moving image is restricted to the screen field. There are two options for this:

- **Enable screen field clipping** only ...position and rotation affect insert and image; zoom affects the image only.
- **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

See also "Picture-in-picture" effects

Alpha mask

Under **Alpha Mask** you can choose from among the following options for transparent display:

- By removing the checkmark next to the image file you can deactivate image file evaluation for the mask. See also Producing transparent areas via masks.
- On the left next to **Alpha channel** you can choose the channel for transparency control.
- The transparent areas can be inverted by placing a checkmark next to **Invert mask**. Visible areas will turn transparent and transparent

ones visible.

- Click **Display pool object** to have the image file displayed which is linked up with it in the Media Pool.
- Click to remove the link between image file and mask.

Info If an image file contains several alpha channels, it may not be displayed properly. In such a case you may have to remove superfluous alpha channels from the image file.

Mouse-click trigger

The corresponding field show whether a trigger is linked up to it. Click **Display trigger** to have it displayed in the Media Pool. Click **Remove trigger** to remove the link between trigger and object. See also Executing triggers via screen objects.

In field **Comment** you can enter any designation to become visible in the object info line.

Table

Highlight the corresponding video object and the tabs with the parameters will be displayed in the Properties Table.

Please choose the tab you need information for:

Object

The parameters displayed are for your information only; they cannot be edited. There is one exception: You can enter Comments here.

Times

- **Start time** ...refers to the beginning of an objects calculated from the beginning of the timeline.
- **Duration** ...defines the length of an object.
- **Fade in time** ... defines the duration of a fade in, i.e. the distance between the first two standard nodes. .

- **Display time** ...defines the period of time the object is displayed, i.e. the distance between the second and the third standard node.
- **Fade out time** ...defines the duration of the fade out, i.e. the distance between the last two standard nodes.

Properties

- **Comment** ...here you can enter any designation to become visible in the object info line.

Video input

Output

- **Enable screen field clipping** ...the next two options allow you to limit output of zoomed or moving pictures of a "picture-in-picture" effect to the screen field. There are two options for this:
- **Enable screen field clipping** ...position and rotation affect insert and image, zoom affects the image only.
- **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

  See also "Picture-in-picture" effects

Mouse-click trigger

- **Trigger** ...shows whether a trigger is linked up to it. Click to have it displayed in the Media Pool. Clicking deletes the link between trigger and object. See also Executing a trigger via a screen object.

Text Object Properties

Right-click a text object and select **Properties**.

- In field **Text** you can enter the text to be displayed. This field is not active if a function for date and time display has been selected.
- **Screen field clipping** allows output for "Picture-within-picture effects" to be limited, i.e. a zoomed or moving picture remains within the boundaries of the screen field. There are two ways of doing this:
  - **Enable screen field clipping only** ...position and rotation affect insert and image; zoom affects the image only.
  - **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

- **Mouse click trigger** ...shows whether a trigger is linked up to it. Click **Display trigger** to have it displayed in the Media Pool. Click **Remove trigger** to remove the link between trigger and object. See also Executing triggers via screen objects.
- In field **Comment** you can enter any designation to become visible in the object info line.

- Under **Font** you can largely influence the text display:
  - **Aspect ratio of text area** ...determines the aspect ratio of the area for displaying the text. E.g. if you want to run multi-line closing credits on the screen you need portrait format, e.g. **1 : 2**.
  - **Font** ...for selecting the desired font. The chosen font need not be installed on the presentation computer.
  - **Font height** ...defines the font height as a percentage of the screen height. **Note:** For text arranged in an arc the font height depends on the length of the text.
  - **Spacing** ...defines the space between the individual letters. **Note:** This option is not available for text arranged in an arc.
  - **Width** ...influences the letter width, i.e. the letters are distorted.
  - **Height** ...influences the height of the letters, i.e. they are also distorted.

- **Skew horiz.** ...allows skewing of the letters, i.e. they are displayed in italic.
- **Skew vert.**. ...allows skewing of the letters in vertical direction.
- **Rotation** ...rotates the letters around the Z-axis. **Note:** This option is not available for text arranged in an arc.

- Section **Paragraph** allows you to take an influence on the text flow:
  - **Line spacing** ...varies the space between the lines. **Note:** This option is not available for text arranged in an arc.
  - **Alignment** ...affects alignment and position of the text within the text area. **Note:** This option is not available for text arranged in an arc.
  - **Auto-wrap** ...ensures automatic word wrap within the specified text area if the lines get too long. **Note:** This option is not available for text arranged in an arc.
  - **Render as** ...**Text lines** is the default setting. If you choose **Arc** the text is arranged in an arc, which can be defined by **Radius**, **Angle** and **Segment**.

- Under **Fill** you can influence the font fill color if checkbox **Fill** is enabled:
  - **Color** ...allows you to choose the color for the font fill. Click in the field next to it to open the color selection dialog. **Details on color selection**.

    - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
    - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer ta-

kes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Alpha** ...defines the opacity of the font fill. 100% means full opacity and 0 percent full transparency.
- **Effect** ...allows selection of various effects for text display, such as Blur, Shadow and Contour. The parameter next to it determines the intensity of the effect.

- **Outline** enables addition of a border line upon checking the box and its editing independently of the fill:
  - **Color** ...allows selection of the border line color. Click the field next to it to open the color selection dialog. **Details on color selection**. The outline color affects transparent effects.

    - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after compari-

son can be made.

- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Alpha** ...determines the opacity of the outline. 100% means full opacity while 0 percent means full transparency.
- **Width** ...determines the width of the outline. If you checkmark box **Dashed** the border line is dashed and the division can be determined by the percentage entered.
- **Effect** ...allows selection of various effects for text display, such as Blur, Shadow and Contour. The parameter next to it determines the intensity of the effect.

- Under **Shadow** you can add a shadow by checking this box and edit it as follows:
  - **Color** ...allows selection of the shadow color. Click the field next to it to open the color selection dialog. **Details on color selection**. The shadow color affects transparent effects. If you don't want any transparent effects, enable black shadow with 100 % opacity without offset.

- For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the

dialog is opened again.

- **Alpha** ...determines the shadow transparency. 100% means full opacity and 0 percent full transparency.
- **Angle** ...determines the direction of the shadow.
- **Offset** ...defines the offset of the shadow.
- **Extent** ...defines the amount by which the shadow is to be larger than the text.
- **Blur** ...defines the softness of the shadow edge.

- Under **Presets** you can choose a preset from the range of available presets and save your own presets. See Creating and using text presets.

Info By default the text appears in white. Users of the Basic or Starter license who want to use colored text may do so via the keyframes in color control tracks. See Color control tracks.

Ticker Object Properties

Right-click a ticker object and select **Properties**.

- In field **Text** you can enter the text to be displayed. This field is not activated if a function for date and time display has been selected.

In field **Display of date / time** you can choose whether the current date, the time or timecode is to be displayed:

- **Disabled** ...no date or time display.
- **Date only** ...displays the current date only.
- **Time only** ...displays the current time only.
- **Date + time** ...shows both.
- **Special formatting** ...allows a number of date and time formats as well as a combination with text. Entries can be made in the field next to it. **Date and time display formats**

  The following format characters produce the following information:

%a ...for weekdays, abbreviated, e.g. **Fr** for Friday

%A ...for weekdays, e.g. **Friday**

%b ...for month, abbreviated, e.g. **Jul** for July

%B ...for month, e.g. **July**

%c ...for date and time in local format, e.g. **23.07.2004 11:09:58**

%d ...for the day of a month as a decimal figure (01 - 31)

%H ...for hours in 24-hour format (00 &endash; 23)

%I ...for hours in 12-hour format (00 &endash; 12)

%j ...for the day of a year as a decimal figure (001 - 366)

%m ...for the month as a decimal figure (01 - 12)

%M ...for the minute as a decimal figure (00 - 59)

%p ...for marking mornings/afternoons in accordance with local format, e.g. **A.M.** / **P.M.**

%S ...for seconds as a decimal figure (00 - 59)

%U ...for the calendar week as a decimal figure, with Sunday being the first weekday (00 - 53)

%w ...for weekdays as a decimal figure (0 &endash; 6, Sunday is 0)

%W ...for the calendar week as a decimal figure, with Monday being the first weekday (00 - 53)

%x ...for the date in local format, e.g. **24.07.2004**

%X ...for the time in local format, e.g. **11:37:49**

%y ...for the year without century as a decimal figure (00 &endash; 99), e.g. **04**

%Y ...for the year including century as a decimal figure, e.g. **2004**

%Z ...for the time zone (only possible if the time zone is known by the system), e.g. **Western European Standard Time**

%% ...for display of the percent sign in the text

The additional character **#** allows you to enter the date in extended form. Examples:

%#x ...for **Friday, 23 July 2004**

%#c ...for **Friday, 23 July 2004 11:52:08**

This option is not available for all date formats.

- **Locator position in timeline** ...displays the current time in the timeline; reference is the time bar in the timeline.
- **Locator position in object** ...displays the current time relative to the text object, i.e. the reference 0:00 is the beginning of the text object.
- **Countdown to object end** ...counts the time within the text object back to zero; reference is the object end. During an event, this function can be used to display the remaining time in the break.

Info For the last three types of representing the Locator Position the following options are available:

- When the fractional digits of the timeline time display are set to **frames**, the same format will also apply to the display on the screen. See also Changing time display and resolution of the timeline.
- Next to **Timecode offset** you can enter an offset between the displayed time and the actual Locator position.

The text is formatted in accordance with the settings in the ticker field. Alternatively, the following three settings for the ticker object can be changed. To do so, add a checkmark next to the corresponding setting:

- **Alignment** can be left aligned or centered.
- For **Motion** you can select **None**, **Horizontal** or **Vertical**. With a Multidisplay License you can also enable a **ticker loop** for continual repetition of the text.
- The **speed** of animated text is entered as a percentage of the screen per second.

Field **mouse-click trigger** shows whether a trigger is linked up to it. Click **Display trigger** to have it displayed in the Media Pool. Click **Remove trigger** to remove the link between trigger and object. See also Executing triggers via screen objects.

In field **Comment** you can enter any designation to become visible in the object info line.

Notes Object Properties

Right-click a note object and select **Properties**.

- In field **Text** you can enter the text to be displayed in the note object.
- Add a checkmark next to **Bold** and **Italic** to format the text in the note object.
- A checkmark next **Display on Stumpfl Iseo text field** and entry of the remote index enables sending text and pictures to Iseo or Wings Remote. See also Sending texts and images to Stumpfl Iseo.
- A checkmark next to **Display in notes window** makes sure that the text is displayed in the specified notes window **1** to **4**. See also Displaying text in notes windows.
- A checkmark next to **Keep display after object end** provides for the text to be displayed in the notes windows until some new text overwrites the old one.
- Field **Picture** shows a picture (if applicable) which is to be sent to Iseo or Wings Remote. This picture can be displayed in the Media Pool by clicking **Display pool object**. The picture can also be removed from the notes object.
- In field **Comment** you can enter any designation to become visible in the object info line.

Data Object Properties

Right-click a data object and select **Properties**.

- **Input value for live and record mode** specifies a control element of an external input device that has possibly been allocated. Click on to remove the allocation.

- Under **Output devices** you will find the devices to which the values are output. Highlight a device, click on to remove the link.
- Use both arrow keys to change position or order of a highlighted device within the list of devices. The order also has an influence on the time the information is transmitted (...within a range of milliseconds). However, this may be important for devices that are functionally linked.
- **Cyclic output** enables cyclic output to the above mentioned devices.
  - **Inverse** ...outputs the latest value to all devices and cyclically sets one to zero. Usually, all devices are set to zero and the latest value is cyclically output to one of them.
  - **Reverse**...reverses the order, i.e. start is at the last device.
  - For **Cycles** enter the required number of output cycles for this object. The frequency depends on the length of the object and the number of cycles.
- In field **Comment** you can enter any designation to become visible in the object info line.

Switch Object Properties

Right-click a switch object and select **Properties**.

- **Input value for live and record mode** specifies a control element of an external input device that has possibly been allocated. Click on **Remove** to remove the allocation.
- Under **Output devices** you will find the devices to which the values of the data object are output. Highlight a device and click **Remove** to remove the link.
- Use both arrow keys to change the position or order of a highlighted device within the list of devices. The order also has an influence on the time the information is transmitted (...within a range of milliseconds). However, this may be important for devices that are functionally linked.
- **Cyclic output** enables cyclic output to the above mentioned devices.

- **Inverse** ...outputs the latest value to all devices and cyclically sets one to zero. Usually, all devices are set to zero and the latest value is cyclically output to one of them.
- **Reverse**...reverses the order, i.e. start is at the last device.
- For **Cycles** enter the required number of output cycles for this object. The frequency depends on the length of the object and the number of cycles.

- In field **Comment** you can enter any designation to become visible in the object info line.

Marker Properties

Right-click a marker and select **Properties**.

Under Marker Type you can select various functions:

- **Position Marker** ... serve for marking any time position in the timeline. In Wings Platinum you can jump from one position marker to the other by pressing and holding the **Ctrl** key while pressing the left or right **Cursor** key (arrow keys). You can enter a **Remote Index.** When you click **First free remote index**, the first free index is assigned and thus double assignment excluded. Position markers with a **Remote Index** can be access via Trigger Actions or Remote Commands, e.g. playback from position marker XX. x When presenting a show as EXE Presentation you can directly access markers provided with these remote indexes via number keys **1** to **9**. When presenting a show from CF Card using Event Control or SC Master series units, you can press the skip keys on the IR remote control to jump from one marker to another.

  Info Every function or every type of object, respectively has its own remote indexes. Thus it is possible that there are remote indexes with the same number for timelines, position markers, triggers, mix groups, etc.

- **Pause Marker** ... stop playback. This applies to playback both in presentation mode and from CF Card for all types of Event/SC Master series models.

- **Stop Markers** ... terminate playback. When presenting with an Event Control or SC Master series unit, stop markers terminate show playback.
- Jump Marker ... cause the Locator to jump to the Position Marker with the corresponding Remote Index. If the Remote Index is zero, the Locator jumps to 0:00 seconds. This allows continuous loop playback of a show, for example.
- **PowerPoint Markers** ...are used for controlling PowerPoint presentations. For this purpose you need to define what is to happen under **Action**. See also Incorporating PowerPoint presentations.
- **Reset Markers** ... terminate playback. For video or EXE presentations a possible background image is removed and fullscreen mode terminated.
- **Execute trigger** ...this marker executes the corresponding trigger during playback. The info line shows the type of trigger linked up with this marker. This type of marker is only available in combination with the Advanced License or the Show Control Module.

Attention! Some triggers start functions which may cause playback to be aborted and data to be lost unless you have previously saved them! Think carefully about the trigger actions you want to use.

In field **Comment** you can enter any designation to become visible in the object info line.

Command Marker Properties

Right-click a command marker and select **Properties**.

- Under **Command** / **Data** you can enter the sequence of characters for the command. **Input format**
  - By default, decimal values are directly accepted. bytes must always be separated by a separator (space or comma).
  - ASCII characters must be entered between quotation marks.

- For input of hexadecimal values, every byte must be marked as "Hexbyte". This can be done by adding the following characters: **0x12**, **h12**, **12h** or **$12** (in our examples 12 is the byte information).
- In line **Hexbytes** you can see number and information of hexadecimal bytes sent off by Wings Platinum.

- Under **Output devices** you will find the ports to which the sequence of characters is output. Highlight the device and click on to remove the link.
- In field **Comment** you can enter any designation to be visible in the object info line.

Value Marker Properties

Right-click a value marker and select **Properties**.

- Under **Value** you can choose the corresponding unit and enter the target value.
- Under **Value fade time** you enter the time it should take for the value to change from the current value to the target value.
- Under **Output devices** you will find the devices used for output of value marker values. Highlight a device and click on to remove the link.
- In field **Comment** you can enter any text to become visible in the marker info line.

File Marker Properties

Right-click a file marker and select **Properties**.

- Under **Filename** you enter name and pathname of the file to be executed. If you specify a document, the program provided for by Windows is used to open it.
- Under **Parameter** you enter parameters to be supplied to the program specified above, e.g. what file to open. This entry depends on the program used. Usually, it can remain empty.
- Under **Action** you can specify further actions, e.g. **Print** for printing a document. The range of possible actions only depend on the program started.
- Under **Directory** you can specify a working director for the started program.
- Under **Mode** you can choose the way the window is to be displayed:

  Normal window ...the program window is displayed in accordance with the last size setting or as specified under **Position**.

  Maximized ...the program window is displayed at maximum size.

  Minimized ...the program window is not opened, it is only visible in the task bar.

  Info For minimized opening of a document you should specify the program (under filename) and the document (under parameter) separately.

- Tick **Wait for program termination**, if Wings Platinum is to wait for the program to be terminated. Usually playback in Wings Platinum is continued.
- Under **Position** you can enter values defining position and size of the program window. When **Position** is ticked, one of the following entries for the window are obligatory.
- Under **Window class** you enter the corresponding classification, e.g. **screenClass** for PowerPoint.
- Instead of the window class, specifying a **window title**, e.g. **Brief 1 - Microsoft Word**, will do most of the time.
- In field **Comment** you can enter any text to become visible in the marker info line.

Attention! Unfortunately, it may happen that the corresponding programs do not react as intended; every program may interpret on its own the information it received.

Info EXE presentations should not be started via file markers since this causes two instances of Wings Platinum to be running that use up each other graphics resources such as the full screen. This will only be successful if you do without the screen in Wings Platinum.

See also

Incorporating PowerPoint presentations

Displaying object values

The node time values for the objects can be displayed. This is a very practical feature if you want to find out about the duration of dissolves or the display time of picture objects.

Displaying node values

- Mark one or more nodes, and their values are displayed in a little flag.
- Node values can also be displayed permanently or the display be disabled by clicking **View** – **Display node values** in the main menu and choosing the corresponding type of display.
- The **type of node value** displayed (%, dB, DMX, degree) can be chosen arbitrarily. Right-click a node and select **Properties**. After selecting the type of value, all node values of an object are displayed accordingly.

Displaying the object display time

For nearly all objects the duration, i.e. the length of an object in seconds, can be displayed in the info line.

- In the function bar below the main menu click **Options** and select **Global Options** – **Objects** followed by the appropriate object type. If this entry is not visible, click on the plus sign next to **Global Options**.

- Enable **Show duration** for those object types of for which the display duration is to be shown in the info line.

Info For media without time dimension, e.g. pictures, texts or data, individual default settings can be made for object creation. See **Options** - **Global Options** - **Objects**.

Default duration for new objects

For certain types of objects (pictures, live video/TV, text, data and switch objects) a default duration can be entered. This is done in the Global Options for the corresponding type of objects:

- Pictures
- Text/Ticker
- Live video / TV
- Data
- Switches

Info For pictures, the value in an existing object can also be used as default duration. For this purpose, right-click the corresponding picture object and select **Ramp** ▶**Set durations as default**.

Undo/Redo Function

Needless to say that Wings Platinum also features an Undo/Redo Function to undo or redo virtually any editing step. For this purpose, Wings Platinum automatically saves every editing step up to a total of 99.

- In the tool bar below the main menu click on **Undo** or on **Redo**. Both functions are also available in the main menu under **Edit**. This way you can undo or redo up to 100 steps if necessary.

Manual saving of undo steps

There are certain situations when automatic saving of undo steps tends to take irritatingly long. In such cases you can switch off automatic saving of undo steps and save the steps manually.

1. In the toolbar, click on **Save undo step** and a message will appear warning you that automatic saving will be disabled.
2. When you click **OK** automatic saving of undo steps is disabled you need to save the individual undo steps manually by clicking **Save undo step** or by pressing **Alt** + **S**.
3. If you want to change back to automatic saving of undo steps you can click **Edit** in the main menu followed by **Automatic Undo**.

Info You should only disable automatic saving of undo steps if you have important reasons to do so. Please bear in mind that with the automatic saving feature being disabled, you can only return to those editing steps that you have previously saved manually as undo steps!

Picture editing

Wings Platinum offers a wide range of functions for editing pictures. Contrary to virtually any other image editing programs, this is done in a non-destructive way, i.e. the data of the original pictures remain unchanged, while the picture effects only take effect on the display data used for the output (screen, video, icons in the program, etc.). The advantage is, that you may make alterations at any time without any losses and without having to save the original picture file again. This is a clear benefit, in particular in combination with JPEG format, as the picture would be lossily compressed every time it is saved.

Pictures can be edited or picture effects applied as follows:

- **Globally** ... the picture effects take effect on all pictures of a project. The settings can be found under **Options - Project Options - Picture processing**
- **Selectively** ... for every picture file individually. In the Media Pool, right-click a picture file and select **Picture Processing**.
- Moreover, it is also possible to **edit individual original picture files permanently**, by immediately saving the result in the picture file. This is the case for function Rotating pictures or when you open and edit a picture in Wings Platinum via your external image editing program.
- For dynamic editing of images and videos key-frame controlled effects are available. See Visual effects.

Sorting on the lightbox

Lightbox view in the Media Pool allows you to sort your pictures at random, just like on a real lightbox. Moreover, it also allows you to find out whether pairs of pictures are suitable for dissolves.

1. In the Media Pool, click category **Pictures**.
2. Click button **Lightbox view** in the top right Media Pool corner.

3. You can now drag the pictures to any position and arrange them as you like. These are the options:

   - In order to have enough space for sorting, right-click the lightbox and select **Insert empty field** or **Insert empty row**.
   - Images can be dragged and dropped freely on the lightbox. If you drag one or several images on top of another image, these images are inserted and the other images moved further towards the end.
   - If you drag one individual picture on top of another one while pressing the **Alt** key, they swap places.
   - The **Expand / Compress View** function is particularly useful for digital pictures if you want to select the best from among a number of similar motifs. Right-click the picture, hold the mouse key down and move the mouse pointer slightly on that picture to make it appear in the timeline window.
   - The **Dissolve test function** helps you to quickly find pictures for good dissolves. With the right mouse button, drag a picture onto another picture and it will be dissolved in the timeline window as long as the right mouse button is kept pressed. By pressing a number key while doing so, the dissolve time is altered. **1** = 0.5 s, **2** = 1 s, **3** = 1.5 s, **4** = 2 s, **5** = 2.5 s, **6** = 3.5 s, **7** = 5 s, **8** = 7 s, **9** = 10 s and **0** = 0 s.
   - In order to close a gap between two pictures, click on an empty field and select **Close gap**
   - If you want to remove all empty fields, go the main menu and select **Media Pool** - **Close lightbox gaps**.
   - You can also shift and remove several highlighted pictures in one go. Highlighting several files works just like in the Windows Explorer. Hold the Ctrl key to highlight one individual picture after the other, use the **Shift** key to highlight several pictures following each other.
   - If you want to add new images at a certain location, right-click a picture or an empty field and select **Add...** After selecting the new pictures and clicking on **Open**, they are added to the corresponding location and the existing pictures are moved to the end.

After determining the order of the pictures, you can highlight these pictures and drag them into a picture track or an empty space in the timeline. This way a complete dissolve sequence is created.

Tip You can open a second lightbox or an additional Media Pool window by right-clicking a folder or a category and selecting **Open in new window**.

Sorting according to certain criteria

In the List view, the pictures in the Media Pool can be sorted in accordance with certain criteria, such as **Name**, **Used**, **Size**, etc. And this sorting can also be transferred to the Lightbox View.

1. Click button **Lightbox view** in the top right Media Pool corner to display the pictures in list form.
2. Click the parameter in the title bar according to which you want sorting. Click a second time to reverse sorting, i.e. ascending or descending order.
3. In the main menu, click **Media Pool** &endash; **Current Sort Sequence -> Lightbox** to display the pictures in the lightbox in accordance with their sorting order in the list.

Info

- If you want to maintain the sorted order of images when changing over to lightbox view click button **Lightbox view** while holding down the **Ctrl** key.
- Those pictures that are already used in the show as objects are marked in the lightbox by a pink dot in the top left picture corner.
- Pictures contained picture objects can also be exchanged in the timeline. See Shifting object contents.

Picture processing for individual picture files

Every picture file of a project can be edited individually. This is done in a non-destructive way, i.e. the data of the original pictures remain unchanged, while the picture processing only takes effect on the picture files for display in the program (preview pictures for timeline, lightbox, etc. as well as display data for screen display) as well as for video output.

Info Some types of picture processing, e.g. tonal value adjustment, is also possible via object-specific realtime effects. See Visual effects.

Enabling picture processing for individual pictures

1. In the Media Pool, right-click a picture file and select **Picture processing**.
2. Click **Processing configured here** to change over to individual picture processing.
3. Activate the desired effects by clicking and providing them with a check mark and adjust the required parameters. ... See also Parameters and effects of picture processing in this topic.
4. When you click **Preview** you can see the effect of picture processing, i.e. also that of changed values, in the screen window (the Locator must be pointing to the corresponding picture object) and also in the Preview window. This may take a moment or two for large original pictures and slower computers.

Tips

- You can have the picture of an object displayed in the Media Pool. See Displaying Pool Object.
- All picture processing parameters can be copied and pasted. See Copying/pasting picture processing effects.
- The effect of every individual picture processing step (...brightness, contrast, sharpening) can be made visible/invisible in screen and preview window (Locator must be on the corresponding picture object) by checking and unchecking the particular effect.

- If you want to find out about the difference between individual and global effects, just alternate between **The global processing** and **Processing configured here**.

Parameters and effects of picture processing

Automatic scaling of effect parameters

Some parameters for the **blurring** and **unsharp masking** (improving sharpness) functions are dependent on the picture size. Checking **Adjust to reference size** causes the specified effect parameters to refer to the specified reference picture size and be automatically adjusted to the picture size during scaling. If the parameters were not adapted, a certain blurring effect would be distinctly stronger at a smaller output size (e.g. DVD) than at a larger output size. By adjusting the parameters the visual effect is identical for all picture sizes.

The reference size should correspond to the most important output size (e.g. monitor or video projector resolution). The choice of value is relatively uncritical, but once the reference size has been specified for a project it should not be altered any more, otherwise any picture processing such as **Blurring** and **Unsharp masking** that may already have been used in the project will change in their effect.

Picture processing

Types of processing and their parameters

- **Crop** ... Here you can specify the amount of pixels (with reference to the original picture file) to be cut off the margin. It allows you to cut off a certain margin or define certain cropping areas.
- **Flip** ... to choose a certain way of flipping
- **Blur** ... to blur and diffuse the picture The higher the value, the more blurred is the picture. This effects corresponds to the Gaussian blur by Photoshop. It can very well be used for background pictures for inserts or for intermediate pictures for dissolves.
- **Add noise** ... provides the picture with a grain effect, just like highly-sensitive film. In addition to creative applications, this effect can also be used for reducing areas with equal tonal value as they may be cre-

ated in videos for dissolves across larger surfaces, such as, for example, sky.

- **Change contrast** ... changes the gradation of a pictures, makes it "harsher" or "softer". Values above zero increase contrast, values below zero reduce contrast.
- **Change brightness** ... for values above zero the whole picture gets brighter, whereas for values below zero it gets darker.
- **Change saturation** ... changes the color intensity. Values above zero increase color saturation, values below zero reduce it. At a value of &endash;100, for example, only shades of gray are visible. If you deliberately want to choose black-and-white pictures, activate **Greyscale**. In this mode, the tonal values are displayed in accordance with the color brightness values.
- **Unsharp masking** ... is used for improving the sharpness and is a photographic masking process developed for traditional repro technology.
- The value entered for **Strength** specifies the amount of increase in pixel contrast. We recommend values between 80 % and 200 %.
- Under **Radius** you define the number of pixels surrounding the edge pixels and taking an effect on sharpening. With values below 1 only the edge pixels are sharpened, whereas with higher values a wider pixel range is sharpened. We recommend values between 2 and 5.
- Value **Threshold** defines the amount the sharpened pixels are to be different from the surrounding area before they are regarded as edge pixels and sharpened by the effect. With a threshold value of zero all pixels in the picture are sharpened, which means that larger areas, such as sky, may become grainy and busy. By choosing higher values (we recommend between 2 and 10) you can avoid these problems.
- **Sharpen** ... is a simple method to improve the sharpness effect. Compared to Unsharp masking, the contrast of all pixels is increased here. Values between 80 and 90 % are suitable. Higher values increase the effect which, under certain circumstances, may lead to unattractive and coarse-grained images.

Copying/pasting picture effects

Once you have specified picture effects for individual pictures, you can copy these settings into the clipboard and paste them to other pictures.

1. In the Media Pool, right-click the picture file the effects of which you want to copy and select **Picture processing**.
2. Click button **Copy effects to clipboard** and close the dialog box.
3. Right-click the picture file which you want to use the picture effects for and select **Picture processing**.
4. Click button **Paste effects from clipboard** and click OK.

See also

Picture effects for individual picture files

Tips for sharpening pictures

Many users prefer to "sharpen" or "unsharp mask" the original images and perform these operations during scanning, in the image editing program or digital camera. Wings Platinum, however, **requires a different approach**!! You should consider the following:

- Sharpening only makes sense for output size pictures &endash; scaling largely nullifies the sharpening effect and may even reduce the image quality in some cases. The solution is quite simple: In Wings Platinum, use the globally effective picture effects to sharpen the pictures. This type of sharpening takes effect on all pictures and is only performed at the scaled picture during output. Which function you use, i.e. **Sharpening** or **Unsharp masking**, is a matter of taste &endash; just try it out. We have had very positive experience with sharpening. The default setting is 85 %, but the value can be increased to 90 to 95 % depending on the basic sharpness of the original pictures. See **Options** &endash; **Project Options** &endash; **Picture processing**.
- Global sharpening of all pictures is always recommended. As opposed to sharpening in Photoshop or other image editing programs, global sharpening is non-destructive and can be modified or undone at any

time. If global sharpening does not achieve the required results, you can sharpen the pictures individually using different values or methods. See Picture processing for individual image files.

- Only if these two measures do not achieve the required effect - and this should remain an exception - should you start thinking about sharpening the original file in the image editing program. In this case, however, the picture should be scaled to output size (presentation size), although this reduces the possible ways the show can be output. If, for example, the new mega video projector with ultra-high resolution should be available in a few years, you may end up with the problem that the image edited a few years before is too small and must be replaced by a larger image edited likewise. This does not only require extra time, but the original file must also still be available in the archives.....
- If you want to sharpen original images because the digital camera has produced an "unsharp" image or the image has become unsharp after scanning, you should only do so very moderately for the above reasons. Special editing steps, such as partial sharpening, sharpening or blurring of individual channels can only be performed in the corresponding image editing programs. This is why in such a case you should make sure that the picture can be scaled and resharpened again at a later time.

Use the non-destructive image editing features in Wings Platinum, in particular sharpening or unsharp masking, because it gives you maximum flexibility for output and allows you to output your show at maximum quality and appropriate size at any time. This, however, requires correspondingly large original pictures. See Appropriate picture size.

Further considerations on programming and projection

- To achieve best-possible sharpness of the projection, the picture or the display data of the picture, respectively should be available at the same resolution as the physical resolution of the video projector and should be output unscaled at 1:1 by the graphics card to the video projector. Connection of video projector or display to the graphics card should preferably be via DVI or HDMI as it allows for loss-free transfer of the image information.

- Unscaled output of an image by the graphics card works only if no zoom effects are used and the image is only projected at **one particular size**. Strictly speaking, every change in size by the graphics card during the presentation results in reduced picture sharpness. Only representation at **1:1** size produces optimum sharpness. In its picture size optimization, Wings Platinum always takes the largest representation necessary as a basis, i.e. an image, when zoomed smaller, appears to be more out of focus than an image that is placed as an object at its smallest size without any zoom effect.
- Therefore, demanding professionals usually use a trick for camera movements and zoom effects: For the initial setting, e.g. an enlarged stationary section of a landscape, you should use a picture object with optimum sharpness and **1:1** size. At the beginning of the camera movement you fade in to a second version of the image, which is less sharpened in order to avoid flickering at the high-contrast edges during the movement. For the end position, e.g. a stationary picture with many details, you fade in to the third image version which is again represented at **1:1** size and has optimum sharpness.

Admittedly, the variant suggested last is very time consuming. But if you are set on sharpness, this is the way to still achieve further improvements.

Rotating and/or flipping pictures

With this function, the original picture file is saved along with the alterations. This is loss-free even for JPEG format files.

1. Select category **Pictures** in the Media Pool and select the corresponding folder. Following this, the pictures will be displayed on the right.
2. Right-click the required picture file and select **Rotate/flip..**
3. Click on and select the required way of editing.
4. Now click on **Execute**.

After this function has been performed, the layers that may possibly be contained in a picture will no longer be available for edit-

ing. This function cannot be made undone via the **Undo** function; the modification is permanently saved with the image file! In such cases you are advised to make use of your image editing program. See External editing of media files.

Info It is for the above reasons that rotation/flipping is not available for some image formats that support layers and transparencies (PSD, TIF, TGA, etc.). It is also possible to use the non-destructive picture processing of Wings Platinum for flipping images. In this case, the original data are maintained. See Picture effects for individual picture files.

See also

Globally effective picture processing

External editing of media files

Motion: Position - Zoom - Rotation

External editing of media files

You can also use external programs for editing or viewing the media files in your project. For this purpose, Wings Platinum can be linked with external editors or players, e.g. Photoshop for editing of pictures or the Windows MediaPlayer for watching videos, etc. In a context menu, the files can then be opened with the corresponding program and, after editing, Wings Platinum will update the file properties and the display data for presentation.

Linking programs

First of all, you need to link up the corresponding programs with the media files.

1. Click on **Options** in the function bar below the main menu or in the main menu on **Extras** and **Options** in the main menu. On the left, under **Global Options** mark **Media Editors**. If this entry is not visible, click on the plus sign next to Global Options.

2. On the right, you can specify two external programs each for editing audio, picture and video files. To do so, click on **Select program** and enter the corresponding software.
3. If a program is not capable of editing, but only of playing back or showing files, you can remove the checkmark next to **Editor**.

Info In the context menu, the Editors are displayed with the appendix **Edit with**... If the checkmark in front of the Editor is removed, the context menu will display **Open with**... In this case, Wings Platinum will not check whether files were edited.

Opening media files with external programs

If you want to playback or edit media files, i.e. sound, picture and video files, using external programs, proceed as follows:

In the Media Pool, right-click the corresponding media file and select the program, i.e. **Edit with ...** or **Open with ...**

- Alternatively, you can right-click the object in the timeline and select **Edit Pool Object**. If the media file is used in several objects a warning message appears saying that the modifications to the file will affect all the objects linked up with it.

Attention! Audio and video files should not be modified externally in their length (not shortened, in particular) if they are already being used as objects in the timeline. This might result in incalculable faults when playing these objects.

Info

- You can also cause the media file of an object to be displayed by right-clicking the object and selecting **Display pool object**. Column **Used** in the Media Pool will tell you how often this file is used for other objects. Any modifications of this file affect all objects that use this file.
- To create a picture variant, it may be useful to create a duplicate in the Media Pool first and then edit it. See Duplicating picture files.

- If restricted memory capacity is no major issue, you should use TIF format for the pictures, **Advantages of the TIF format**.

  All in all, TIF format offers the best properties:

  - A **color depth of up to 16 bits per channel** offers extra capacity for editing of tonal values.
  - Lossless LZW compression
  - **Embedded color profiles** can be read and considered by Wings Platinum.
  - **Storage of layers** maintains full editability of pictures created in editing programs, e.g. Photoshop (text, layer effects, etc.).
  - **Alpha channels or transparent backgrounds** can be saved and allow extracting of objects, for example.
  - **Semi-transparent areas** are displayed at high-quality by Wings Platinum without any "gray veil".

- After modifying one or several files outside Wings Platinum without using the functions explained above (e.g. for batch editing of a number of files) you should update the File Properties next time you call up the project in Wings Platinum and have new display data created. See Updating Media File Properties and Creating display data for media files.
- As soon as the external program has a checkmark in front of **Editor** in **Global Options** – **Media Editors**, a dialog will appear which, after editing and saving the media files, can be confirmed with OK. Following this, Wings Platinum will update the display data of the modified files.
- Should no external programs be selectable in the context menu, you first of all need to link up external programs with media files.
- If you have altered media files using external programs, the project needs to be saved even if nothing else was changed. If this is not done, Wings Platinum will regard the display data as missing when calling up the project the next time.

Duplicating picture files

When a picture is to be provided with a variety of picture effects, a slide to be used as a duplicate or an image variant to be created in your external image editing program, it may be helpful to produce a duplicate.

1. In the Media Pool, right-click the corresponding picture and select **Duplicate file**...
2. In the following file dialog click on **Save**, to save the file. To distinguish it from the other one, a "**_2**" is automatically added to its file name. Following this, the duplicate appears next to the original image in the light box or, when the images are displayed in a list, at the end of the list. In the list you can quickly find it by sorting the images according to file name and insert date. See Sorting contents.

Converting pictures to JPG format

All pictures within a project or individual pictures can be converted to compressed JPG format, thus reducing the required memory space. Only those pictures without alpha channel are converted that are available in image formats different from JPG.

1. In the main menu click **Media Pool** – Convert pictures to JPG format and the corresponding option:
   - **All pictures** ...considers all pictures contained in the Media Pool.
   - **Only used pictures** ...considers all pictures that have already been used in the timeline.

   Info If you want to convert individual files, right-click a picture file in the Media Pool and select **Convert file to JPG format**. **If this item does not appear in the context menu...**

   ....there is already a JPG file with the same name in the Media Pool which means that conversion is not possible.
2. For **JPG compression** choose the degree of image compression. A low value stands for high quality and low compression, while a high value

stands for inferior quality and causes a corresponding compression resulting in a correspondingly smaller file size. For a good quality we recommend values between **1** and **5**.

3. Pictures are saved under the same name but with a different file extension. A picture named ***Example.tif*** is saved as ***Example.jpg*** after conversion. If, however, a file named ***Example.jpg*** already exists in the same folder you can choose one of the following options:

    - **Skip conversion of original file...** the original file is not converted but is continued to be used.
    - **Accept this JPG file...** the original file is not converted and the existing JPG file is linked up with the picture objects.
    - **Replace this JPG file...** the original file is converted and replaces the existing JPG file. The links with the picture objects are adjusted. However, this is only done when the existing JPG file is not located in the Media Pool.

Click **OK** to start conversion.

Info

- Please bear in mind that JPG compression always causes a loss of image quality. Therefore, you should test the various compression steps and the resulting loss before you actually start converting large numbers of images.
- During conversion the original files remain unchanged and continue to be available on your hard disk.
- Images with a color depth of 48 bits (tif format) are reduced to a color depth of 24 bits during conversion to JPG format.
- Pictures provided with a transparency or an alpha channel (to be recognized by the 32 bit resolution) cannot be converted. JPG format does not support transparency.

Checking picture files during a presentation

For special applications that need to consider dynamically changed picture contents during a presentation, you can have your picture files checked.

Example

Shortly after the beginning of a show you take a picture of the audience to be shown a little later in the show. It is therefore possible to automatically present the current version of modified picture contents, which is particularly interesting for Show Control or industrial applications (e.g. presentation of measuring data).

This how you can activate this function:

1. First of all, add the picture to a show and design a sequence of pictures.
2. In the Media Pool, right-click the picture and select **Properties**.
3. Place a checkmark in checkbox **Always check for newer file version** and click **OK**.

Attention! For the function to work properly, the file name of the picture must not change. This means that the file is overwritten when there are any changes and file format and picture size in pixels remain the same.

Dummy Pictures

If you do not have a particular picture file available yet, you can use a dummy picture to continue programming. And this is how you create a dummy picture:

- With the right mouse button, click in the picture track and select **Insert Dummy Picture**.
- Dummy pictures can also be labelled. Right-click the object containing the dummy picture and select **Display Pool Object**. Now enter the corresponding text in the comment column in the Media Pool. If this column is not visible, move the scroll bar to the right.

- As soon as the corresponding picture file is available, you can simply assign it to the dummy picture object. .. See Replacing object contents.

See also

Programming without digital pictures

Sound editing

The sound track plays a highly important role in a show as it is the means to reach the audience on an emotional level. Wings Platinum supports you by offering highly efficient features for sound track design, with sound object editing being just as simple as editing of any other type of object. Nevertheless, sound editing is special in a number of ways which we have explained in the topics listed below:

The K-System - Checking volume and dynamic range

A harmonic soundtrack mix is a difficult thing to achieve. It should sound good, speech and dialog should be clear and understandable, it should contain sounds and convey a certain atmosphere and sometimes even produce dramatic effects. Dynamics are to be employed in such a way that the soft twittering of a bird can be clearly distinguished from a thunderstorm. Unfortunately, there are quite a number of examples with a questionable quality of loudness and dynamics. A frequent source of irritation is TV sound, which differs markedly in loudness between individual TV stations and, especially, between TV program and commercials, in the sense of "the loudest wins". You may have been in a situation where you wanted to mix your own uncompressed music samples with canned music and it turned out that your own recordings were much too soft - even though the recording levels have been set to zero dB which corresponds to peak level.

The K-System helps you come to terms with such problems and allows you to customize your soundtrack dynamics. The K-System offers the following advantages:

- Loudness-based audio level measurement helps to achieve harmonic sound track audio levels.
- High headroom offers much freedom for dynamic range.
- A defined reference loudness allows evaluation of the sound track that can be reproduced in terms of its sound.

- When AV shows are mixed in accordance with the K-System virtually no loudness jumps occur when different shows are presented.

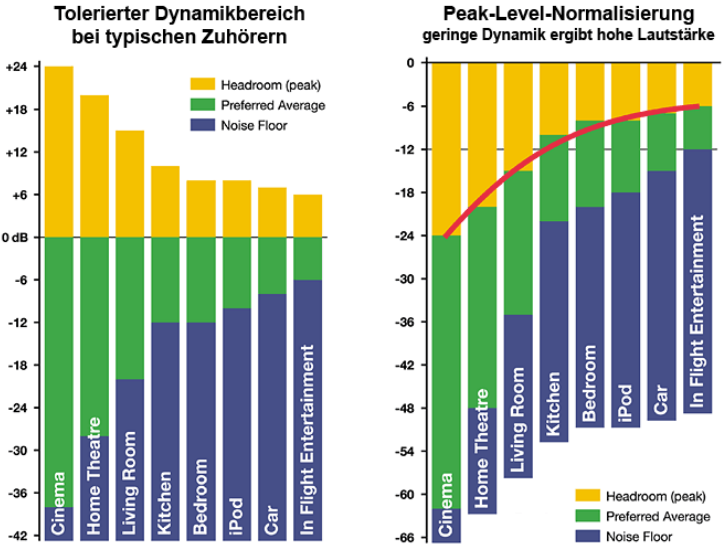
The K-System was presented in 2000 by the US sound engineer Bob Katz. His ideas have been introduced to the standard ITU-R BS.1770 for loudness measurement. Bob Katz's website can be found at http://www.digido.com.

In order to understand the K-System we need to look at a few basics:

- What dynamic range is useful?
- Defined headroom
- Defined reference loudness
- The K-System in Wings Platinum
- Tips for successful K-System application

What dynamic range is useful?

The purpose of an AV show or the location with its ambient noise where the show is presented play a role for the dynamic range used. A cinema allows a much greater dynamic range then an entertainment program in a car or airplane as the ambient noise in a cinema is much lower. Also the room size plays a role for playback of dynamic audio programs. The graph on the left shows listeners' tolerance of dynamic range in a variety of playback environments.



If the peak level of different audio programs is normalized to dB FS (Full Scale), i.e. to peak level, audio programs with a lower dynamic range show a higher loudness than those with a higher dynamic range. This is illustrated in the graph on the right. This is also the reason why highly compressed adverts are so much louder than uncompressed speech recordings. Recordings differ in their loudness, which has so far not been considered in a level control based on peak level measuring.

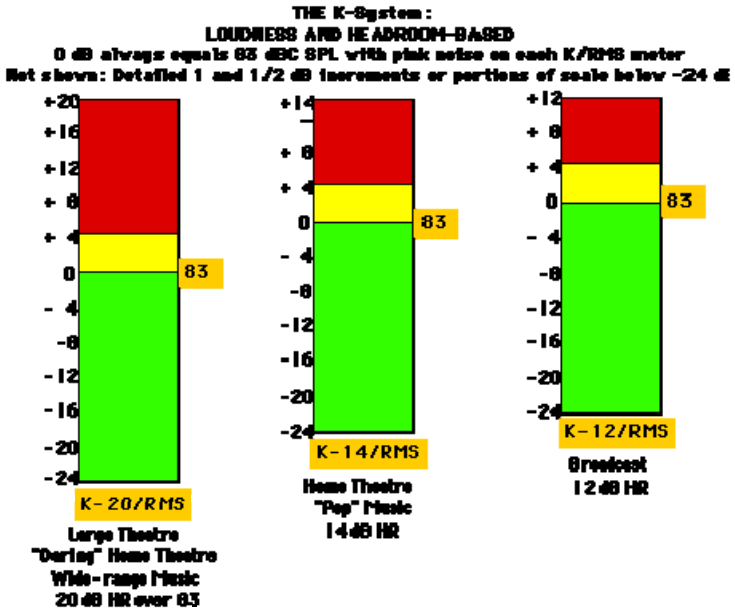
Note: The graph above illustrates that the tolerance does not only depend on the playback environment but also on the age of the listeners. For people of 50+ the tolerance is decreasing. A sound track with high dynamic range may cause problems for an older audience, as they do not understand the soft dialogs and consider the loud effects as unpleasant and sometimes even painful.

Defined headroom

The K-System uses three different meter scales for level measurement with different headroom:

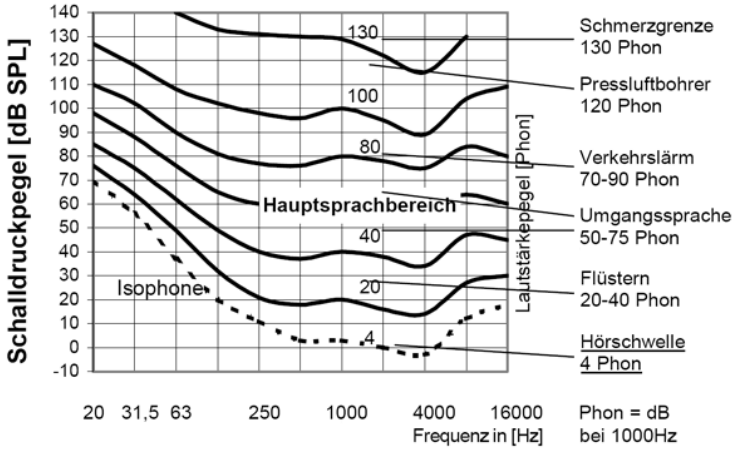
- **K-20** ...with 20 dB headroom for a high dynamic range in large cinemas; 0 dB on this K-scale corresponds to -20 dB FS
- **K-14** ...with 14 dB headroom for home theaters and living rooms; 0 dB on this K-scale corresponds to -14 dB FS
- **K-12** ...with 12 dB headroom for broadcasting and louder environments, such as department stores, fairs, etc.; 0 dB on this K-scale corresponds to -12 dB FS

On the K-System meter scales the 0 dB points differ, thereby allowing for different headroom. Moreover, audio level control is not based on the peak level but on the RMS level. The RMS level in the K-System is the average value of a time window of 600 ms with defined meter increase and decrease rates which means that it has a strong relation to the perceived loudness. The peak level only becomes relevant when it exceeds zero dB FS and that's why an overload meter will do. According to K-System standards you base the level control of your soundtrack on the loudness. This avoids volume jumps and helps to achieve a lot of freedom for accented effects due to the headroom.



Defined reference loudness

The K-System is based on defined playback and listening conditions. The reference loudness of zero dB on the K-scale is defined at 83 dBC SPL (Sound Pressure Level). The reason is the loudness-based perception of different frequency through individuals. We hear low and high frequencies at a lower loudness than medium frequencies. This tendency is stronger at lower sound pressure levels than at higher, as can be seen in the diagram "Listening curves of equal loudness" below. The curves show the sound pressure level at a certain frequency that is necessary to perceive the same loudness as a frequency of 1000 Hz.



A number of studies were conducted looking at various audio samples to investigate the sound pressure at which different frequencies were perceived as balanced. For the majority of people tested this was at a value of 85 dB SPL. In order to create as uniform and balanced listening conditions as possible the K-System reference loudness was defined as follows:

83 dBC SPL = 0 dB RMSon the K-scale

For loudness calibration at the listening location play pink noise at a level of zero dB RMS on the K-System meter scale via a loudspeaker. With a sound level meter set to "C"-weighted and "Slow" response measure the sound level. At mixer or amplifier adjust the loudness at the listening location in such a way that the sound level meter reads 83 dBC SPL. This measurement is repeated for every loudspeaker. For Wings Platinum we have prepared

project **K-System calibration**, which allows you to calibrate your playback system. You should mark your mixer or amplifier volume control with K-20, K-14 and K-12. See Calibrating the monitoring system according to K-System standards.

Note: In addition to the defined loudness level the quality of the monitoring system and the listening room also play an extremely important role. The audio system should sound neutral and be distortion-resistant. For stereo sound the room should have a minimum size of 30 m^2 and at least 40 m^2 for surround sound and it should meet certain acoustic requirements. Listening rooms in the cinema area are Dolby- or THX-certified and often have a size of more than one hundred square meters. VDT (Association of German Sound Engineers) has prepared a PDF-file named ”r;r;Hörbedingungen und Wiedergabeanordnungen für Mehrkanal-Stereofonie in Studio und Heim”r; (Listening conditions and reproduction arrangements for Multichannel Stereophony in studios and homes). See www.tonmeister.de.

Near field monitoring reduces room influences and is well suited for analyzing difficult problems but is rather a stopgap for evaluating dynamics and soundtrack loudness, if the available room provides acoustic problems. However, it is conceivable to prepare the soundtrack under less than ideal conditions and do the finishing mix in a certified listening room.

The K-System in Wings Platinum

You can activate the K-System in the **Global Options** under Audio level and have the choice between **K-12**, **K-14** and **K-20**. After this the following things change:

The audio level display has extra bars for the RMS level which are labeled in accordance with the chosen K-system meter scale.

The peak level display is still available but displayed in gray. If 0 dB FS are exceeded, an overload warning in the form of yellow bars appears.

When audio files are dragged from the Media Pool and dropped into the timeline, the volume level of objects is lowered in accordance with the chosen K-system meter scale by 12 dB, 14 dB or 20 dB. This presetting ensures that the sound is not too loud when played for the first time.

The volume for pre-listening in the preview window and for importing samples from audio CD is also lowered in accordance with the chosen K-system meter scale by 12 dB, 14 dB or 20 dB, otherwise it would be far too loud.

Tips for successful K-System application

Note the following when using the K-System:

- If you have set Wings Platinum for the K-System and want to calibrate your monitoring system, make sure that the volume controls in Windows or in anyother relevant sound card dialogs are set to maximum. After calibration the volume controls must keep their settings. Also the audio mixer input gain must no longer be changed after calibration.
- Volume control via RMS level and K-scale in Wings Platinum provides a good initial basis for judging loudness. The final decision in evaluating loudness and dynamics of your sound track should, however, be best left to your ears.
- The following recommendations for level control of various sound track elements should just give you an idea on where to start:
    - Speech ... -18 dB to -12 dB RMS
    - Soft music ... -20 dB to -12 dB RMS
    - Loud music ... -10 dB to +2 dB RMS
    - Loud sound effects ... 0 dB to +14 dB RMS
- If you export your show as video or EXE presentation, indicate usage of the K-System in the name, e.g. ***Adventure Brazil K-14.wmv***. When the show is presented at an event the presenter knows immediately what volume to set.
- For stereo and in dependence on the signal correlation, the defined reference loudness of 83 dB SPL results in about 86 dB SPL or more. According to the legal regulations such a listening location is regarded as a noisy working place. At this volume you should only mix for about two to three hours and then take a longer break.
- If the listening room is too small or 83 dB SPL are too loud for you in the long run, you should choose a lower listening volume. Mark the resulting volume setting at amplifier or mixer. Use a sound level meter to measure the value your personal reference loudness deviates from 83 dB SPL so that you will be able to reproducibly set and check this volume in the future. In such cases you should check the final sound track in a larger, certified listening room and correct it if necessary.

For permanent installations we recommend optimizing the sound track at the corresponding location.

- Using a K-20 meter scale may result in peak levels of up to 103 dB SPL (83 dB + 20 dB headroom). Your loudspeaker system should be able to play sound at these levels without any distortions. Since the sound level of loudspeakers is measured at a distance of 1 m the specified peak values for playback in large rooms must be clearly above 103 dB SPL.
- Using K-20 and a listening volume of 83 dB SPL, for example, will clearly make the noise of low-quality or faulty systems audible.
- Since high headroom does not allow you to make perfect use of the quantization grid, you should possibly choose 24 bits for the output if your sound card supports this setting. In theory you win 48 dB with 24-bit output as opposed to 16-bit output, as 0 dB FS at 16 bits correspond to minus 48 dB FS at 24-bit quantization. However, only very good 24-bit DA-converters achieve a signal-to-noise ratio of about 115 to 120 dB A, which corresponds to a gain of 20 to 25 dB compared to good 16-bit DA-converters.

Calibrating the monitoring system according to K-System standards

Mixing according to K-System standard requires a calibrated monitoring system to achieve comparable results. The following section describes calibration of the monitoring system. Basic information and tips on using the K-system can be found in topic The K-System - Monitoring volume and dynamic range.

Preparatory steps

For calibration you need a **sound level meter**, which is set to "C"-weighted and "Slow" response. Such equipment is available from specialist shops from EURO 100,-- and up, e.g. DIGITAL SOUND 8922.

The **speakers must be set up correctly**. For a stereo set the loudspeakers and the listening place should form an equilateral triangle. For a surround

set the loudspeakers should be arranged on the imaginary circumference of a circle with the listening place as the center. Any possible subwoofers should possibly be on the same line as the front loudspeakers. Their location, however, is not really critical since frequencies below 80 Hz are virtually impossible to locate (mind the subwoofer crossover frequency).

In order to set all channels to the same level, the **loudspeakers must be adjustable individually** . For active loudspeakers this can be achieved via the loudspeaker level controls. For a stereo set with passive loudspeakers operated via a stereo amplifier the two levels can be adjusted via the balance control. Passive loudspeakers operated via a surround receiver can be adjusted via the receiver menu which usually features the appropriate controls and a calibration program which allows you to set all channels to the same loudness.

The volume control in Windows or any other relevant sound card dialog boxes should be set to maximum. After calibration, the volume controls must definitely keep their settings. Also the audio mixer input gain must no longer be changed after calibration.

Calibration

K-System calibration is based on a sample project which is usually installed from the Wings Platinum DVD along with other sample media.

Start Wings Platinum and open project **K-System calibration** by clicking **Extras** in the main menu followed by clicking **Show folder ▶Sample projects** and double-clicking the above-mentioned project in Windows Explorer.

Check the channel assignment for your sound card. Click **Options** in the toolbar below the main menu and, on the left, select **Global Options** - **Sound cards WDM** or **Sound cards ASIO**, depending on the type of driver used for your sound card. In the dialog box, assign the following stereo outputs:

- **Output 1** ...for front L/R or stereo (channels 1/2)
- **Output 2** ...for center/subwoofer (channels 3/4)
- **Output 3** ...for rear L/R (channels 5/6)

Following this, close the Options Dialog.

1. Now start calibration by pressing keys **Shift** and **F4** following which the screen changes over to fullscreen. Follow the instructions on the screen and click on the required functions. For an AV show soundtrack **K-14** is usually a very practicable solution.
2. Depending on your system setup you need to start by setting all loudspeakers to the same level. In the last phase adjust the control for all channels to the target loudness of 83 dBC SPL. You can activate the test signal for the corresponding loudspeaker by clicking on the loudspeaker symbol. In the end, all channels should be set to the same level of 83 dBC SPL.
3. Unless you have already done so, activate the K-System. Click on **Options** and, on the left, choose **Global Options** - **Audio level**. Next to **Display mode** click and select the K-scale your audio system has been calibrated for.
4. After closing the Options Dialog you can use the K-System. Mark the control for overall loudness with K-12, K-14 or K-20, in order to find the right settings for mixing according to K-System standards. It is important to avoid changing the other relevant controls after calibration. Check calibration again after some time and always right before important mixes.

See also

Tips for successful K-System application

Adjusting the volume

The volume of sound objects can be influenced in a number of ways.

Basic volume of an object

Right-click a sound object and select **Properties**. Use the slider control or enter a value in the numeric field to adjust the volume of the object. The value below the slider specifies the dB by which the volume was changed compared to the original audio file volume.

Adjusting the volume using a ramp band

For sound objects, ramp band and nodes form a time-dependent volume control. This allows you to implement any volume progression.

Changing the volume of several objects

1. Select respectively mark the required sound objects and right-click one of the objects. Select **Special Functions &endash; Change volume ...**
2. Change the volume using the slider controls and click OK. The volume will be changed for all selected sound objects.

Info By clicking **Peak Search** you can determine the peak volume and assess the Peak Level for a numerically correct audio level. The RMS Level, on the other hand, measures the power and can easily be used for judging the subjective perception of loudness.

Adjusting the overall volume of the soundtrack

The volume for the mix of all sound objects is called sum volume or level. Adjusting the sum volume effects all objects likewise. This is how it is done:

- In the Project Explorer, click on tab **Audio level**. Grab one the small double triangle on the very right and move it. You can do this even while playing back. By double-clicking a triangle the control can be reset to zero dB. The triangles in the audio level display allow you to adjust every output individually. ... See also Sum level.
- The peak level is indicated by small markers on the dB scale. Reset them by clicking on the audio level bars with the mouse. The peak level must be no means by above zero dB. ..See also Determining the sound track peak level

Sum level

The sum level is more or less the output volume of all objects played back by a sound card. Every output channel has a sum level control and a master control in addition to it, which controls all outputs jointly . As the highest level is zero dB, this value should not be exceeded. Otherwise, sound information may get lost or even sound errors may creep up.

- In the Project Explorer, click on tab **Audio level**. There is an audio level display and a control (... small triangles) for every output channel. Normally, there are two for stereo sound, but some projects with multi-channel sound may also have distinctly more than that (e.g. for surround sound, multi-language shows, etc.). In addition to this you will find the Master Control on the right (double triangle) which affects all outputs equally.

  Please note that the volume of objects on asynchronous audio tracks cannot be changed using the audio level controls. See also Asynchronous audio playback.

- You can adjust the sum level by grabbing and moving one of the little triangles with the mouse. This works even during playback. By double-clicking a triangle, the control can be set back to zero dB.

- The peak level is indicated by small markers on the dB scale. Reset them by clicking on the audio level bars with the mouse. The peak level must be no means exceed zero dB. When the K-System has been activated the peak bars turn yellow once zero dB have been exceeded. See also The K-System - Checking volume and dynamics.

Adjusting the sum level of all outputs jointly or separately

Per default, the sum level controls are grouped into stereo pairs. Below you can see how grouping can be changed so as to allow joint or independent setting:

- **All controls:** Press the **Shift key** while adjusting them. This causes all controls to be adjusted to the same value.

- **Individual controls**: Press the **Ctrl key** while adjusting them.

Using slider controls

Many dialogs allow volume and effect parameter settings via slider control. Usually, this is done by grabbing the control with the left mouse key and moving it correspondingly. However, there are also other ways of operating the control:

- Click above or below the pointer to move it up or down by exactly 1 dB.
- By turning the mouse wheel you can adjust the control in steps of 0.1 dB. As an alternative, you can use the cursor keys ↓ and ↑. In both cases, however, you have to select the control first by clicking it.
- By clicking on the numeric field below the control you can set it to 0 dB.
- Some dialogs allow adjustments to be performed jointly for all controls while pressing and holding the **Shift** key. In the equalizer, for instance, you can set all controls to zero this way by clicking on 0 dB.
- Many slider controls work in real time, i.e. you will hear the effect while you are setting the controls. Click *Which slider controls have a real time effect on sound?* to found out more.

Info Some of these explanations do not apply to the controls in the level display.

Cutting comments

This particular topic is explained in detail in the workshop. You will find information on audio recordings as well as an exercise in sound cutting.

In the following topics you will find some general information applicable for sound cuts.

Cutting objects

Extending objects

Aligning objects

Exporting sound objects

Changing playing speed and pitch

This function requires the Pro or Multidisplay License. See Licenses and functions.

In order to adjust music, comments and other sounds to videos and picture sequences, you may have to stretch or compress the sound, i.e. change it in length. This affects the playing speed, which in turn has an influence on the pitch. You may be familiar with the "mickey mouse" effect, which is caused by an audio track being played at too high a speed. With AV applications, changes in the pitch are usually undesirable. This is why Wings Platinum offers the option of changing speed and pitch entirely independently of each other.

- Musicians talk about **timestretching** if the playing speed changes, i.e. audio objects are expanded or compressed, while the pitch stays the same.
- **Pitchshifting**, on the other hand, means that the playing speed or the length of an audio object, respectively, stays the same and only the pitch is changed.

By means of these two methods Wings Platinum offers maximum flexibility in designing your AV show; depending on the application you can use the more favorable effect.

Changing the speed without affecting the pitch

This is the most frequently used method. It is used for adjusting the length of the audio to videos or picture sequences without this being particularly noticeable.

- Enable tool **Stretch objects** by keeping the **W** key pressed and drag the beginning or the end of an object with the mouse to extend or shorten it. Any nodes will change their position proportionally.
- When you play the object, the sound is either faster or slower, but sound quality or timbre remain the same. As long as the speed factor

ranges between 0.8 and 1.3 (shown in the object info line) the audio should sound "normal".

- **Important:** As timestretching at high quality requires a lot of computer performance, playback in real time is only at prelistening quality. To maintain optimum quality and save computer power, you should export the object after editing as a new file. See Exporting sound objects. If the enable option **Replace original objects by exported audio file**, the old object is automatically replaced by the new one.

Changing pitch and playing speed at the same time

If you want to change playing speed and pitch likewise, proceed a follows:

1. Right-click the object and select **Properties**.
2. In the Properties Dialog under **Speed factor / Pitch factor** place a checkmark next to **Enable settings** and **Pitch factor** = **Speed factor**.
3. Close the dialog by clicking **OK**.
4. Enable tool **Stretch objects** by keeping the **W** key pressed and drag the beginning or the end of an object with the mouse to extend or shorten it.

When you play the object, the pitch will be different. The timbre will therefore be altogether higher or lower, depending on whether the object was shortened or extended. As the pitch corresponds to the playing speed, this method requires only little computer performance and can be run in real time.

Free editing of playing speed and pitch

Of course, it is also possible to change playing speed and pitch independently of each other. This may be necessary if beat and pitch need to be adjusted individually for a piece of music. This way the effect of the music can be changed drastically.

1. If you require a speed factor exceeding **1**, i.e. increased playing speed, you start by shortening the object correspondingly. Right-click the object and select **Cut right part**.
2. Right-click the object and select **Properties**.

3. In the Properties Dialog under **Speed factor / Pitch factor** place a checkmark next to **Enable settings**.
4. Now enter the corresponding correction factors:
    - **Speed factor** ...changes the playing speed and the possible object length. A factor of **0.5**, for example, causes a reduction in speed by half and allows double the object length. The beat is also reduced by half. A factor of **2**, in contrast, results in double the speed; a factor of **1** stands for the original speed.
    - **Pitch factor** ...affects pitch and timbre. A factor of **0.5** reduces the pitch exactly by one octave, which corresponds to the audio frequencies being reduced by half. A factor of **2** increases the pitch exactly by one octave, which corresponds to a doubling of the audio frequencies; factor **1** corresponds to the original pitch.
    - Button **Default settings** allows you to reset speed and pitch.

Close the dialog by clicking **OK** and test the settings.

Info **Important:** As timestretching at high quality requires a lot of computer performance, playback in real time is only at prelistening quality. To maintain optimum quality and save computer power, you should export the object after editing as a new file. See Exporting sound objects. If the enable option **Replace original objects by exported audio file**, the old object is automatically replaced by the new one.

Asynchronous audio playback

This function requires the Pro License or higher. See Licenses and functions.

Asynchronous loop playback allows audio to be continued even if the Locator stops at a pause marker. This way some music or other sounds can be continued in Speaker Support Mode while the presenter is speaking. Asynchronous sound can also run in a loop, i.e. it starts from the beginning again and again. This very convenient if you do not know exactly how long the break will be.

Info Asynchronous audio playback requires a sound card with "multi-client" capability and WDM drivers (...ASIO drivers cannot be used). While

the normal, up-to-date stereo sound cards usually have "multi-client capability", whereas professional sound cards and interfaces usually don't.. If you want to use a professional multi-channel sound card, you need to use a separate stereo output for asynchronous playback. This allows synced soundtrack and asynchronous interval sound to be mixed externally.

And this is how it is done:

1. For asynchronous playback you need an audio track to be output asynchronously. Right-click the track head of an empty audio track and select **Properties**. Add a new audio track if no empty track is available. See Adding tracks.
2. Add a checkmark next to **Asynchronous mode for presentation** and close the dialog by clicking **OK**. The symbol in track head will change as an indication for asynchronous mode.
3. Drag an audio file from the Medial Pool into the asynchronous mode track. Please note that a track in asynchronous mode does not allow any crossfades by shifting the objects on top of each other.
4. You can now start playback for the audio to be played back as usual. When you press the space bar and put Wings Platinum into Pause Mode, the audio on the asynchronous mode track continues playing. You can now start and pause playback as desired; the audio in the asynchronous mode track is continued until the end of the audio file.
5. Paused playback can also be achieved by setting pause markers. When the Locator stops at a pause marker, playback of all tracks is paused except for the sound on the asynchronous track.

Info

- It is possible to **Enable loop mode** for audio objects to ensure that asynchronous interval music continues to be played even during longer breaks. For this purpose, right-click the object, select **Properties** and place a checkmark next to **Loop**. Please note that always the entire media file is looped. If necessary, create a short, loopable file by cutting and exporting. See Creating a loop file. An object with Loop properties can be extended arbitrarily independently of the media file.

- The ramp band for the volume is also considered in asynchronous mode. If playback of an object is started on an asynchronous mode track, the volume is controlled in accordance with the visible ramp band. When the Locator stops (Pause Mode), the ramp band further along the object is considered. I.e. the **audio object** is **run entirely asynchronously**, independent of the current Locator position.
- If **Loop mode** is enabled, the **volume is controlled in sync** with the ramp band, while the sound is run asynchronously in a loop. This is a very practical method for Speaker Support as it allows the volume to be adjusted to the corresponding situation via the ramp band. This allows a smooth transition between synchronized soundtrack and interval music.
- Please bear in mind that audio objects on asynchronous tracks cannot be considered for level display. Also master level verification via "Peak Search" is not possible. The level of asynchronous audio objects can only be verified via the Properties Dialog. See Sound Object Properties.
- The volume of asynchronous audio cannot be changed using the level display controls. You can only do so via the Object Properties Dialog or by changing the ramp band.
- Currently, **ASIO** drivers cannot be used for asynchronous audio playback. The sound card must have multi-client capability and use a WDM driver. See also **Options** - **Global Options** - Sound cards WDM.

Muting tracks

Tracks can be muted during playback. This is a very useful feature if you want to analyze or compare certain passages, for example. Wings Platinum offers two modes:

- **Mute Mode** .... to mute playback of one or several tracks.
- **Solo Mode** .... to mute all other tracks and play one only.

Info As opposed to deactivating, muting of audio tracks does not save computer capacity. It only prevents the audio data from being played back ... See also Deactivating tracks.

Mute Function

The Mute function in the track head can be enabled via the loudspeaker symbol which also provides information about the current status.

- Click button in the track head to mute playback of an audio track. Status "Mute" is displayed in the button: . Muting is possible at any time for any other tracks as well and can also be enabled during playback.
- If you want to mute several tracks with one mouse-click, you need to mark the corresponding tracks before you can do so. ... See also Marking tracks.
- Once a track is muted you can reactivate playback by clicking button again. Following this, button stands for status "Playback". If several muted tracks are highlighted, they are reactivated as well.

Solo Function

The Solo function in the track head can be enabled by clicking the right button (up to the Advanced License) and by clicking the middle button (Pro License and higher). Whether Solo Mode is enabled can be recognized by the "Give way" symbol .

- To mute playback of all other tracks, click button in the track head of the corresponding track while holding the **Ctrl** key. Solo Mode is now active
- Playback of other tracks can be added to a track in Solo Mode by clicking
  button of these tracks while holding the **Ctrl** key.

- Terminate Solo Mode by clicking on .The Mute state prevailing before activating the Solo Mode will be resumed.

Exporting sound objects as files

You can export one or several sound objects as a new file. All editing steps, such as volume, cuts or sound manipulations are also saved along with the object. Excepted are changes in volume via the master control; the export volume can be specified independently in the Export Dialog. Editing steps in Wings Platinum are usually non-destructive. However, exporting is a destructive process as all editing steps are included in the file and can no longer be altered or reversed.

When is it useful to export a file?

1. Right-click an sound object and select **Export**... If you want to export several sound objects together, you need to mark them first.
2. Select the required settings for Sampling rate and Resolution.

   Info A resolution of **32 Bit Float** means that the data are provided with a huge dynamic range, which protects from data loss due to an incorrect audio level and ensures in any case best possible quality. If you want to export to another program or particular medium you may have to change the values, e.g. **16 Bit** and **44,100 Hz** for an audio CD. In this case you should start out be checking the peak level of the objects to be exported and change the volume if necessary. To do so click **Export volume ...**.
3. The default **Mode** is **Stereo**. If you want to export audio files in mono, select one of the mono modes, depending on which stereo channels need to be considered.

   Info If you need a stereo file with a signal in one channel and silence in the other, do as follows: Before exporting, set the Sum level for one channel to the minimum and select Export **Stereo**. This is a

good solution if you want to output language only to the right or to the left channel and do not have the Pro or Multidisplay License.

4. Select the required file format. With **MP3**, the data are compressed and you can later select the encoder and the data rate.

5. Click on **Select file name** and enter the required target directory and file name. Confirm by clicking on **Save**.

6. If the exported file is to replace marked original objects in the timeline, click on and tick **Replace original objects by exported audio file**. This item can only be selected if the objects to be exported are located on the same track without any other objects between them.

7. Click on **OK** to start exporting. With a format selection of **MP3**, you will be presented with the dialog box **MP3 options** to select encoder and data rate.

   Select an MP3 encoder (**Lame DLL** recommended) and a **data rate**. Usually, 128 kbit/s should be sufficient for CD quality. If you are not satisfied with the quality try to improve the result by choosing a higher data rate. **Differences between Encoder (direct) and Encoder (via wave file).**

   The encoders listed under **Encoder (direct)** will generate MP3 files without saving any temporary data on hard disk. **Encoder (via wave file)** causes the sound track to be temporarily saved as wave file on the hard disk, which is then used to produce MP3 files and the wave file is finally deleted again. You only need to make sure that the drive of the FlashCard directory has enough memory capacity. You can change the location of the FlashCard folder under **Options** - **Global Options** - Save.

Info When exporting, volume alterations caused by the sum level controls are not taken into consideration.

Export usage duration to text file

The names of the audio files and the corresponding time they are used for can be exported to a text file and printed. This may be useful for settling the royalties payable for the use of music rights.

1. In the Media Pool highlight the corresponding files.
2. Right-click one of the highlighted files and click **Export usage duration to text file.**.
3. In the dialog box, enter name and target directory for the text file and click on **Save**. Following this the list will be displayed in the text editor linked up with it.

Info In order to distinguish between Gema-free music and music subject to Gema fees and sort the samples accordingly go to column **Comment** and enter "Gema" in the appropriate line. By clicking on the column title **Comment** you sort the samples as required. See also Sorting contents.

Multi-channel sound

Projects with multi-channel sound require the Pro License or the Show Control Module. A multi-channel project is created in two steps:

Assigning sound card outputs

Assigning output channels to the audio tracks

Output of multi-channel sound can be effected via a computer with the corresponding multi-channel sound cards (up to 24 channels) or as a WMV format video with 5.1 or 7.1 channel mode. See also Producing a Windows Media video.

Assigning sound card outputs

First of all, you need to assign the outputs of your sound cards to Wings Platinum.

1. Click **Options** in the tool bar below the main menu or **Extras** and **Options** in the main menu and select **Sound cards** in the left field of

the Options dialog. If this entry is not visible, click on the plus sign next to **Global Options**.

Note: In most cases the choice of **ASIO sound cards** will be appropriate, as ASIO drivers allows multi-channel sound even with standard sound cards or onboard sound chips, provided they have several outputs. You only need to install software tool **ASIO4ALL** which is available on the web at www.asio4all.de.

Sound cards ASIO

2. For **Driver type** click **ASIO** and, next to **ASIO device** select your sound card. If the tool **ASIO4ALL** is installed and you want to use WDM sound cards select **ASIO4ALL**.
3. Under **Outputs / channels** click and select the first output of your sound card. On the right you enter the number of channels you want to use.
4. Close the Options Dialog.

Sound cards WDM

5. Next to **Driver type** click **WDM**. Now click on below it and assign the stereo outputs of your sound cards to the stereo outputs in Wings Platinum. You can use several standard sound cards or multi-channel sound cards.
6. By clicking one of the fields next to the outputs, you can select the background colour for the level display. In order to display the individual background colors, deactivate Use standard colors in the Options Dialog *Audio Level*.
7. Close the Options Dialog.

Attention! When using several standard sound cards, playing back may become asynchronous, as every sound card has its own time clock which makes differences unavoidable. The longer the running time, the more will deviations and tolerances become audible. Really synchronous playback can only be achieved with multi-channel sound cards.

Info If you want to temporarily play back a multi-channel sound-

track as mixdown at a stereo output you can allocate this output several times. However, there are a few sound cards, that do not support this feature and will cause problems.

Assigning output channels to the audio tracks

Every audio track in Wings Platinum usually has a stereo output for signal output assigned to it. However, it is also possible to assign the signals on one audio track simultaneously to several outputs.

Assigning the audio track to a stereo output:

1. Right-click the track head and select **Properties**.
2. Under **Audio output** select the required stereo output for the track.
3. For field **Name** you can enter a designation to be visible in the track head, e.g. front, rear, center...

Info

- Channel assignment for WMV videos with multi-channel sound in 5.1 or 7.1 mode must be in accordance with a certain pattern. See also Producing a Windows Media video.
- You can also chose a color background for the audio level display, ... See **Global options** – Audio Level.

Assigning an audio track to several stereo outputs:

1. Right-click the track head and select **Properties**.
2. Place a checkmark next to **Enable multi-channel assignment**, followed by clicking on **Multi-channel settings**.
3. In the following dialog you can select up to 24 output channels, by preselecting the range of visible channels on the left. To enable a channel, you place a checkmark at its top and click field **-inf** (...or the db value) to set the slider to zero dB. Of course it is also possible to enter any other output level.

Info Please bear in mind that an audio track outputs two different signals for stereo files: **Stereo left** can only output to channels with odd number, while **Stereo right** can only be output to channels with even numbers.

4. Close the dialog by clicking **OK**. For field **Name** you can enter a designation to be visible in the track head, e.g. front, rear, center ...
5. Close the dialog by clicking **OK**. As a sign for multi-channel output the track head will show three loudspeaker symbols.

Info

- You can directly call up dialog **Multi-channel settings** by holding the **Ctrl** key while clicking (audio effects in the track head). In addition to this, the slider controls can also be adjusted during playback.
- If you want to play back a multi-channel soundtrack as mixdown on a stereo output you can allocate this output several times. However, there are a few sound cards, that do not support this feature and will cause problems. See **Options** – **Global Options** – Sound cards.

Playback of coded AC3 data streams

In addition to classic multi-channel playback with multi-channel soundcards or interfaces, coded AC3 data streams can be played via the SPDIF output. This data stream is fed directly to the surround receiver, which in turn does the decoding and playback.

Note: Click here if you are looking for a solution for extracting AC3 video sound.

Attention! **The following restrictions and limitations apply!**

6. Wave files (*.***wav**) are only supported when they contain AC3 coded files and when they are compliant with IEC 61937 standard. The AC3 format with the file suffix *.***ac3**, which are frequently used by other systems, is not supported by Wings Platinum and needs to be con-

verted. This can be done by means of the AC3 tool **spdifer**. This shareware can be found on the Internet at http://www.ac3filter.net.

7. The volume must not be changed at any location. This destroys the AC3 file.
8. An object with AC3 sound must not be mixed with other sound objects. I.e. there must only be one sound object at a time.
9. Sound editing as for standard sound files is not permitted.
10. For AC3 output the corresponding sound card output must be selected and option **SPDIF/AC3** be enabled. See **Global Options** - **Sound cards.**
11. For the project, the output must be set to 16 bits and a sampling rate of 48 kHz. See **Project Options** - Output.

Playback of AC3 data streams will only be possible when all the above conditions are fulfilled.

Determining the peak level for sound objects

For digital sound, volumes above zero dB cannot be reproduced. This is why you have to make sure that the audio level is set correctly. While editing sound in Wings Platinum, wrong settings will not result in a data loss because Wings Platinum has a greater dynamic range than audio CDs. However, if you need to output audio data for use by other media, the audio level must be correct.

Tip Please see also the information about how to deal with volume and audio level and The K-System - Checking volume and dynamic range.

Peak level for individual audio files and sound objects

Right-click a sound object and select **Properties**.

- Under **Peak level** and **Sample** you can see the highest value for the complete audio file.

- If you want to determine the **peak level** for an **object**, click on . The peak level determined such considers all editing steps as well, e.g. cuts, volume control settings in the Object Properties, ramp band, possible sound effects, but not the sum level controls. When the sum level controls deviate from zero dB, the output signal is modified by this amount.

Peak level within several sound objects

If you want to search for the peak level within several objects, which may also be mixed and edited with effects, proceed as follows:

1. Mark the required objects in the timeline. ...Marking objects
2. Right-click one of these objects and select **Special Functions** – **Change volume**.
3. Now click on **Peak Search**. After searching the peak level the Locator jumps to the location of the peak level. The maximum values for every channel are displayed as Peak level or RMS level. The Peak Level is the decisive factor for a numerically correct audio level. The RMS Level, on the other hand, measures the power and can very well be used for judging the loudness.
4. The volume of all selected sound objects can now be altered by means of the slider control. ... If you want to reset the highest volume to zero, simply click on **Normalize (Peak).** The volume changes are applied to all objects concerned after clicking **OK**.

Attention! The procedures for determining the peak level mentioned above consider all volume influences, except for the sum level controls. If the sum level controls deviate from zero dB, the output signal is modified by this amount. You can adjust the overall soundtrack volume by means of the sum volume controls when the audio level is too low.

Determining the sound track peak level

Before transferring the soundtrack of your show for a different medium, e.g. audio CD, CF card or video, you should check and correct the audio level of the complete soundtrack. This is how it is done:

1. Open your show and, in the main menu, click **Output** &endash; **Audio Peak Search**.
2. Select the required timeline under **Timeline and Portion**. The preset **Timeline1** may only need to be changed when there are several timelines.
3. Select **Complete timeline**. If you want to search in a particular portion only, select **From current locator position** or **Only selected portion of timeline**. The latter is only available when a portion is marked. ...Marking a portion.
4. Now click on **Start**. Following this, the volume of the complete soundtrack incl. all editing steps is determined. The highest values for every channel are displayed as Peak level or RMS level. The Peak Level is the decisive factor for a correct audio level. The RMS Level, on the other hand, measures the power and can be easily be used for judging the loudness. Under **L Stereo R** the stereo sum peak level is displayed, i.e. it includes all active channels. For multi-channel soundtracks you can select the corresponding peak level displays in groups of four under **Show outputs**. This works even during the peak search. Click **Cancel** to stop peak level search at any time.
5. Once the search is completed, you can normalize the peak level to zero dB. There are two buttons available:
    - **Normalize (Master)** ... normalizes the highest level of all channels to zero dB via master control. The volume balance of all sound objects and channels remains unchanged.
    - **Normalize (Individual)** ...normalizes the highest level of every individual channel to zero via the output channel sum level control. This means that the volume balance of the output channels

changes relative to each other. That's why this variant can only be used in special cases.

6. Click **Cancel** to close the dialog.

Info There are two cases where you should not use the Normalize function:

- ...if there is a message saying that the audio level is too low and that normalize via this function is not possible.
- ...if you are using several timelines in your project. The sum level controls refer to all timelines. Therefore, you need to highlight all objects in one timeline and use **Special functions** - **Change volume...** from the sound object context menu. See also Adjusting the volume.

Sound effects

Wings Platinum Pro Licenses and up feature a so-called DirectX-interface which allows you to incorporate all sorts of sound effects in your shows. These DirectX sound effects (PlugIns) permit extensive digital manipulations of your sound track. Sound effects are in fact "software plug-ins" (as the name suggests), which are applied to the audio signal path. This is why we tend to use the word "PlugIn" more than "Sound effect" in this documentation. 17 DirectX PlugIns are included, but, of course, you can also use any other compatible PlugIns by other producers in the music sector. See PlugIns from other manufacturers.

At the moment Sound PlugIns can only be used for a certain track. At a later time, there will also be Effect Objects to be placed on an effect track.

The Effect Manager

The Wings Platinum Pro Licenses and higher feature a so-called DirectX-interface which allows you to add all sorts of sound effects to the sound-track of your show. The Effect Manager is used for managing and using **track-selective sound PlugIns**, i.e. they always **take effect on all objects on one track**. 16 DirectX PlugIns are included, but, of course, you can also use any other compatible PlugIns by other producers in the music sector.

Info Please note that the explanations in this topic apply to DirectX PlugIns only. Usage of more up-to-date **VST PlugIns** is explained here.

Selecting and opening PlugIns

1. Before you can use DirectX PlugIns you need to enable the port. Click on **Options** in the tool bar below the main menu and select **Project Options** - **Output** on the left. For **Audio Effects** select entry **DirectX (= Wings Platinum 3)** and close the Options Dialog. Please note that usage of VST PlugIns will no longer be possible for this project.

2. Open the Effect Manager by clicking the **Effect** key in the head of the corresponding audio track.
3. In the field **PlugIns** right-click an empty entry field and **select** the required PlugIn. When calling up a PlugIns for the first time, it may take some time for the context menu including all PlugIns to be displayed.
4. Now you can see the settings dialog of the corresponding effect. Most of the effect settings can be adjusted while playing back to make the result immediately audible. Information on the individual PlugIns is available by pressing key **F1** with the particular settings dialog for this PlugIn being open and active.
5. Once an effect has already been selected and is visible in field **PlugIns**, the settings dialog can be **opened** or activated at any time by double-clicking the effect entry. In the bottom section of the Effect Manager you can find keys for opening or closing all effects in one go.
6. Use the tabs in the Effect Manager to switch over to the effects contained in other sound tracks.

Activating/deactivating PlugIns

- Activate a PlugIn by checking the box in front of the field **PlugIns**.
- Deactivate it by unchecking the box. A deactivated PlugIn takes no effect on the sound any longer and does not require any computer capacity when playing back.
- In the bottom section of the Effect Manager you can find buttons for opening or closing all effects at once.
- The yellow effect button symbol in the track head will show you, even when the Effect Manager is closed, whether the effects for this track have been activated.

Changing the order of PlugIns

For every sound track you can use up to 20 PlugIns simultaneously. All the PlugIns are applied to the audio signal in the order they are listed. But you can also change this order:

- Click an entry and drag it to a different location in the PlugIn list. As soon as you release the mouse key, the PlugIn entry is moved to that location. When there is already another PlugIn at that location, the two PlugIns change places.

Removing PlugIns

- In the Effect Manager, right-click the selected PlugIn entry and select **Remove**.
- In the bottom section of the Effect Manager you can find buttons for opening or closing all effects at once.

Using Effect Presets

If you want to reuse settings that you have found suitable, it is advisable to save them as Presets (presettings) so that they are available for all shows.

Every PlugIn has a separate Preset page for this purpose. This is the last tab (on the very right) on the PlugIn user interface. When such a Preset page is selected for the first time it does not contain any entries.

Info Information on the individual PlugIns is available in the Online Help topics. Press key **F1** while the particular settings dialog for this PlugIn is open and active.

Creating individual Presets

1. Open the corresponding Effect dialog by double-clicking the PlugIn entry in the Effect Manager and adjust the sound parameters as required.
2. Following this, click on tab **Presets**.

3. Enter a new and possibly meaningful name. Click on button **Add**. The Preset has now been saved and appears in the Preset list.

Activating Presets

1. Open the corresponding Effect dialog by double-clicking the PlugIn entry in the Effect Manager and click tab **Presets**.
2. Click and select the required Preset so that is highlighted in blue. Now click on **Activate**. The Preset is activated and the name is displayed in the text field above the Preset list.
3. As an alternative, you can also activate a Preset by clicking and selecting the required preset in the Effect Manager.

Modifying Presets

If you want to modify a previously defined Preset you proceed as follows:

1. Open the Effect dialog and activate the required Preset.
2. Change the PlugIn settings in the Effect dialog as desired. Once you are satisfied with the settings, change over to the PlugIn Preset page and click button **Overwrite**.
3. After confirming the warning message the Preset is available with its new settings.

Renaming Presets

1. In order to rename an existing Preset , select this Preset in the Preset list. Now click on button **Rename**. In the pop-up dialog enter a new name for this Preset.
2. Confirm with OK and the Preset will appear under its new name in the Preset list.

Deleting Presets

1. In order to delete an existing Preset , select this Preset in the Preset list. Now click on button **Delete**. A warning message will appear.
2. Confirm with "Yes" and the Preset is definitely deleted.

Using fixed ROM Presets

Many PlugIns contain a number of useful Presets programmed by the producer. When a PlugIn has got such internal Presets, button **ROM Presets** is displayed on the Preset page. "ROM" stands for "Read Only Memory". This means that these Presets can only be read but not overwritten.

1. Open the corresponding Effect dialog by double-clicking the PlugIn entry in the Effect Manager and click tab **Presets**.
2. Now click on button **ROM Presets** . After doing so, the internal Presets will be available in the Preset list in addition to any existing Presets.
3. In order to distinguish internal Presets from your individual Presets, their name always starts with **(ROM0)**, **(ROM1)**, etc. These Presets can be activated just like your individual Presets.

Attention! If you want to change such a ROM Preset you should rename it. This is because after clicking **button ROM Presets** the next time, all Presets with the same name are once again replaced/overwritten by the internal PlugIn Presets.

Video editing

Depending on the Wings Platinum License installed, you can also use SD or even HD videos for your AV shows (HD with the Advanced License and up). In principle, video objects can be edited just like any other objects. There are, however, a few special features, e.g. video picture and audio are placed into two different tracks. Editing is always in real time, while lower-resolution display data can optionally be used for low-performance computers.

Creating video files

Wings Platinum cannot be used to transfer video material onto your computer. This requires some other software. We recommend the following capture tools which are available on the Internet as shareware or freeware:

- A most recommendable and inexpensive capture tool for **DV videos** is **Scenalyzer Live**, which automatically detects scenes and copies them onto hard disk as individual files. It offers a certain degree of convenience and a scene preview. By the way, DV video files have the extension ***.avi***. Further information can be found in the Internet at www.scenalyzer.com/d/main.html.
- For **HDV videos** the simple capture tool **HDV split** is a good choice. It also features scene detection and saves the scenes as individual files but does not have a scene preview. HDV videos, imported via HDV SPLIT have the file extension ***.m2t***. Further information can be found on the Internet at http://strony.aster.pl/paviko.

Once the video files are available on your hard disk they can be added to the Media Pool in a variety of ways. See Adding media files.

If, however, you would like to produce a video file for your show, refer to Methods for creating a video for more information.

Display quality for videos in the screen window

Wings Platinum plays display data-based videos in the screen window at very high preview quality. In Presentation Mode, the videos can optionally be played at full quality or at preview quality. This is set via a button in the track head.

Selecting display modes for videos

Wings Platinum offers three modes for display of videos on the screen. Change over between the different modes by clicking the button in the track head. The active mode is always displayed on the button. This means that the display mode can be selected individually for every video track. The type of display mode, however, also depends on the playback mode **Preview** or **Presentation**.

...display always on the basis of display data. During video creation, low-resolution display data are created as well. Therefore, this mode should only be used in special cases.

...during scrolling and editing as well as playback in Preview Mode display is based on the display data. In Presentation Mode the video is played at the original resolution, either based on original data or on intermediate video data.

Info The presentation of a **picture sequence** (...video consisting of many individual image files) is always based on Intermediate Video Data as a standard PC would definitely be unable to load and display, for instance, 30 images per second at full resolution.

Optimization through Intermediate Video Data

Wings Platinum is able to produce intermediate video data from videos or picture sequences which can be played without resorting to the installed codecs and by passing Windows routines. This ensures that even extreme videos can be played without any problems. Output optimization through pre-rendered intermediate video data has the following advantages:

- Direct playback at high performance without Windows routines
- Fast locating and opening of files
- Optimization with regard to size, portion, frame rate and deinterlacing
- The picture size of intermediate video data can be freely defined, which is important for high-resolution picture sequences from DSLRs and 4k-videos produced by Red-cameras. This allows media with an extremely high resolution to be directly output from the timeline at the necessary output quality.
- Very high content security; intermediate video data can only be played with Wings Platinum
- The EXE presentation contains only intermediate video data. The codecs of the original video are no longer required for playback.

Intermediate video data are created together with the display data, unless you have deactivated this option when setting up the project. Intermediate files with the suffix ***.wpiv*** (**W**ings **P**latinum **I**ntermediate **V**ideo) are pre-rendered video data at original size, i.e. at full resolution and frame rate. During intermediate video data creation Wings Platinum immediately performs any deinterlacing that may be necessary, i.e. intermediate video data always use progressive pictures. For multidisplay applications intermediate video data are split for the slaves.

The following steps will be covered in this topic:

Global activation or deactivation of intermediate video data creation

Enabling or disabling intermediate video data for individual videos

Changing the properties of intermediate video data

Global activation or deactivation of intermediate video data creation

Usually, creation of intermediate video data is activated. Subsequent changes can be made by clicking **Options** in the toolbar below the main menu and selecting **Project Options** - **Display data** on the left. Under **Video** you can deactivate creation of intermediate video data:

- If box **Create intermediate video data** is checked, Wings Platinum additionally creates also intermediate video data when clicking **Create display data** and activates usage of intermediate video data when adding the videos to the Media Pool. For videos that are already contained in the Media Pool usage of intermediate video data may have to be activated manually. See Video Properties.

- If box **Create intermediate video data** is unchecked, clicking on **Create display data** does not create intermediate video data and their usage is not activated when the videos are added to the Media Pool. Playback of videos that are already contained in the Media Pool and for which usage of intermediate video data has already been activated is based on intermediate video data.

See also

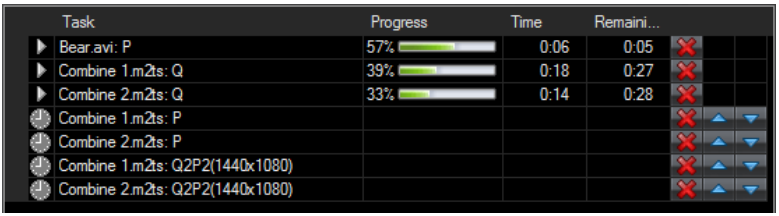
Creating display data for media files

Enabling or disabling intermediate video data for individual videos

1. In the Media Pool on the left click on category **Video** and, if appropriate, the corresponding folder below it and videos will be listed on the right.
2. Right-click the corresponding video and select **Properties**.
3. Place a checkmark next to **Create intermediate video data** if playback is to be based on intermediate video data. If this is not the case remove the checkmark.
4. Click **OK**. If **Create intermediate video data** has been activated but no intermediate video data are available yet, Wings Platinum is preparing these data in the background. Depending on length and size of the video this may take a second or two.

Info

- Since creation of display and intermediate video data may take a long while tab **Tasks** in the preview window offers very precise status control information:



  This list shows all the media data to be processed. If a progress bar is visible, the task is currently being processed. The clock symbol signalizes that a task is waiting. The letter behind the file suffix signifies the type of tasks: **Q** means Quick Preview, **P** means Preview and **Q...P... (.... x ....)** means Intermediate Video Data. They are always processed in accordance with their priority. Click to delete the task. Click to move the task to the top position where it is the first to be processed. Click to move the task to the end of the list. Further functions are available via the context menu. See Task list.

- The number of tasks in the task list to be processed simultaneously depends on the number of available processor cores of your processor. Usually, at least one core will be available for other tasks. However, you can increase the burden on the processor and accelerate processing of tasks by right-clicking the task list and selecting **Maximum performance**. Dual Core and Quad Core processors without hyper-threading make use of all available processor cores, i.e. parallel tasking does no longer make sense. Processors with more than four cores or quad cores with hyper-threading (e.g. Intel i7) normally use 50 percent of the threads or 75 percent of the threads when **Maximum performance** was chosen, i.e. parallel tasking is still an option in that case.

- Please note that creation of display data can be enabled and disabled. If you click **Create display data** in the tool bar, display data creation is enabled. In such a case the button is selected and provided with

a gray background . Clicking the button again disables display data creation, the button is deselected .

- Whether intermediate video data are available or whether they are activated is indicated in the Media Pool in column **Optimization**. **Yes** indicates that creation of intermediate video data has been activated and **(file)** that intermediate video data are available.
- The properties of intermediate video data are indicated in the Media Pool column **Intermediate video data**. The first parameter refers to the quality, the second to seeking and the other parameters to the resolution. An example: **NM (1280 x 720)** refers to a quality of "normal", seeking of "medium" and a video image size of 1280 x 720 pixels.
- Creation of intermediate video data can also be initiated manually for individual videos by right-clicking a video object and selecting **Special functions** ▸ **Recreate intermediate video data**.

Changing the properties of intermediate video data

When videos are added to the Media Pool, Wings Platinum analyses their properties and uses the appropriate parameters for intermediate video data creation. However, it is also possible to define the properties yourself if you have special requirements or find out that some parameters are not really suitable.

1. In the Media Pool on the left click on category **Video** and the videos will be listed on the right.
2. Right-click the corresponding video and select **Properties**. Under **Intermediate video data** you can change the settings for **quality** and **seeking**:

   Quality ... defines the quality of video images. The better the quality, the lower the compression and the larger will the files be. The following options are available:

   - **Best (Q1)** ... compression is very low and quality very high.
   - **High (Q2)** ... compression is low and quality high.
   - **Normal (Q3)** ... compression and quality are well-balanced.

- **Low (Q4)** ... compression is high and quality low.

Seeking ... defines the speed at which a position within a video can be found. This setting affects the keyframe interval, i.e. the distance between keyframes with the entire image information. Between two keyframes only the difference from the previous image is stored, which results in a low data volume at a nearly equally high quality. Long keyframe intervals require relatively high computer capacity as the first keyframe must be seeked and the image be reconstructed at the desired location based on the information from the images between the keyframes.

- **Fast (P1)** ... the locations are found very quickly as there is one keyframe every 10 pictures available. This results in a higher data volume.
- **Medium (P2)** ... the locations are still found very quickly, by the data volume is lower than above as there is only one keyframe every 20 images.
- **Slow (P3)** ...the positions are not found so quickly because there is only keyframe for every 300 images available. However, the data volume is distinctly reduced while the quality is virtually the same. If you play the video from the beginning to the end during the presentation and have not included any jumps you can choose this setting.

3. Make sure **Create/use intermediate video data** has been enabled and click **OK**. Wings Platinum will then start creating intermediate video data with the changed properties in the background, which may take a while depending on video length and size.

Media Pool column **Intermediate video data** shows the properties of the intermediate video data. The first letter stands for the quality, the second for seeking and other parameters refer to the resolution. In example **Q3P2 (1280 x 720)** refers to a quality of "normal", seeking of "medium" and a video image size of 1280 x 720 pixels.

See also Tips for video rendering.

Performance test for videos

HD videos make high demands to the computer. This is why Wings Platinum offers a performance tests to find out about problem videos.

This is how you find out about the playback performance of a video:

1. In the Media-Pool, right-click the corresponding video file and select **Performance Test**. Following this, the corresponding dialog box will open up.
2. Click **Start** and the computer will start decoding the video internally at its maximum speed. Below **Performance** the current frame rate will immediately be shown at **Current**. After completing the performance test the frame rates displayed below **Performance** can be interpreted as follows:
    - **Maximum** ...indicates the highest frame rate. This value is of minor importance for performance.
    - **Average** ...indicates the mean or average frame rate. It should possibly be 20 to 30 % above the video frame rate. (...See **Frame-rate** at the top of the dialog under **Properties**).
    - **Minimum** ...indicates the lowest frame rate achieved during the test. This value should be higher than the video frame rate or at least only very little below it.

If the frame rates are too low the video may be jerky during playback. In such a case you can transcode the video into intermediate video files that Wings Platinum can play while bypassing Windows routines. This ensures optimum playback provided the computer is basically capable of running HD videos.

Close the dialog and click **Cancel**.

See also

Performance test for complete timelines

Deinterlacing of videos

When using video material based on interlaced images, deinterlacing should definitely be activated. Otherwise, comb filter effects may cause nasty, frayed contours for moving objects. See also *Better quality through deinterlacing*. For deinterlacing in Wings Platinum, consider the following:

In the Media Pool, the video properties show whether deinterlacing is to be performed or not.

Intermediate video data are virtually always based on deinterlaced material. Only if the video is not identified correctly could this result in the intermediate video data being interlaced. In such cases deinterlacing can be enabled at a later time.

When Deinterlacing is enabled, it is definitely performed when the video is exported. For MPEG videos, deinterlacing via the MainConcept decoder will be in real-time even during playback .

Activating deinterlacing

1. Click one Media Pool category **Videos**.
2. Right-click the required video file and select **Properties**.
3. Next to **Deinterlacing** choose the corresponding option:
    - **Off (progressive)** ...no deinterlacing is applied
    - **Top field first** ...deinterlacing is applied starting with the top field first (standard setting for deinterlacing).
    - **Bottom field first** ...deinterlacing is applied starting with the bottom field.
4. Click on **OK** to close the dialog.

Info

- For direct output of DV videos or other interlaced videos at their original size, i.e. 1 : 1 without any changes in size, the video material should not be deinterlaced, otherwise quality problems may come up due to faulty line build-up.
- How to enable Screen display at full quality, can be found at Display quality for videos in the screen window.

Frame-accurate cutting of videos

For frame-accurate cutting of videos the individual video pictures can be displayed in the Preview Window. This is how it is done:

Grab the edge of a video object and drag it, following which the cutting location will be shown on the screen or in the preview window.

- For fine adjustments you should stretch the timeline. See Expanding/compressing the time axis
- The time indication and the timeline resolution can be matched with the frame rate of the videos to be edited in order to simplify video cuts. See Changing time display and timeline resolution.

Cropping video pictures

Videos very often show black borders which are particularly nasty when you want to use the video as an insert . This is how you crop the edges:

1. Click on Media Pool category **Videos**.
2. In the line of the corresponding video, in column **Cropping,** click on the field **---** . If it contains values, entries could be **L=6, O=5, R=10, U=9**, for example.
3. Now specify by how many pixels the original video picture is to be cropped. The values are arranged clock-wise around the picture:

   left, top, right, bottom

   Please note that the values are always rounded up/down to even numbers by Wings Platinum. This is necessary due to a graphics card limitation.
4. After confirming with **Enter** the cropped area will be visible on the screen, provided the screen is open and the Locator is pointed to the corresponding video.

See also

Cropping the border of a live/video image

Insert with screen field clipping

Producing transparent areas via masks

These functions require the Pro License as a minimum. See Licenses and functions.

In order to display certain parts of the video transparent you can provide it with a transparency mask. For this purpose you create an image using the correspond mask in the alpha channel and allocate it to the video. Alternatively, you can also use red, green, blue channel or gray scale from images as information for the transparent areas. This way you can create any shape of videos or videos with soft edges.

Attention! This type of video masking cannot be combined with realtime effects. Once you enable realtime effects for a video objects any assigned masks turn ineffective. In such cases you can use mask tracks. See Dynamic transparency masks.

1. Create the corresponding mask in the alpha channel using your image editing software. **Important:** The mask must be in the first alpha channel and the RGB picture area must not contain any transparency, i.e. the background (checkerboard pattern) must not be visible.
2. Import the picture with the mask into the Media Pool and drop it onto the corresponding video object. **Tip:** Alternatively, you can also drag and drop it directly from the Explorer onto the video object.
3. During playback evaluation of transparency masks is usually deactivated in order to save computer power and graphics memory. Enable this function in **Options** - **Project Options** - **Output**. Place a checkmark next to **Enable masks for visual tracks**.
4. When playing back this video, the masked areas are displayed transparent. If the picture is not displayed as required (e.g. when the mask is negative) Wings Platinum offers a number of options. Right-click the video object and select **Properties**. Under **Alpha Mask** you can select the following options:
    - Remove the checkmark next the image file to deactivate image file evaluation for the mask.

- On the left next to **Alpha channel** you can choose the channel for transparency control.
- The transparent areas can be inverted by placing a checkmark next to **Invert mask**: Anything that was visible will turn transparent and what was transparent will turn visible.
- Click **Display pool object** to have the image file displayed which is linked up with it in the Media Pool.
- Click button **Remove mask** to remove the link between image file and mask.

Info

- If an image file contains several alpha channels, it may not be displayed properly. In such a case you may have to remove superfluous alpha channels from the image file.
- If the transparent areas differ entirely from the mask, the image file may contain transparency in the corresponding picture area. To eliminate this transparency, fill it with any color so that the background (checkerboard pattern) is no longer visible. If this does not apply, check the video object properties to see whether the **Alpha channel** has definitely been selected and not a color channel.

See also

Transparent areas through Chroma keying

Transparent areas through Luma keying

Producing transparent areas through Chroma keying

These functions require the Pro License as a minimum. See Licenses and functions.

The Chroma or Luma Keying function allows video elements on a plain colored, bright or dark background to be removed from this background. You may have heard the term Blue Box. This means that a speaker is filmed in

front of a blue background, which is later displayed transparent. The speaker separated such from the background can then be placed in front of any other background. It needn't necessarily be a blue box, as the color to be displayed transparent can be matched with the video. The fact that Wings Platinum is able to do chroma keying in real time is a highly interesting feature for live video imports during a presentation.

And this is how it is done:

1. Open the screen and highlight the corresponding video or picture object so that the parameters are displayed in the Properties Table and the picture or video to be removed from the background is displayed on the screen.

2. On the Properties Table select tab **Picture**, **Video** etc. and place a checkmark next to **Realtime effects** below **Output** for tab **Effects** to be displayed.

3. Click the plus sign next to **Effect 1** (or before the next free effect) and then field **--No Effect--** for the select button to appear. Click on and select **ChromaKey** following which four more entries will appear.

4. Choose the color that is to be made transparent. To do so click the color field on the very right of line **Color** and the color selection dialog will appear.

5. The correct color value is most easily selected by means of the pipette. Click the pipette followed by clicking the color on the screen that is to be made transparent. The effect is immediately visible on the screen, so that it is quite easy to choose the correct setting. The color can also be modified via the control elements in the color selection dialog. **Details on color selection**. Finish by clicking **OK**.

   - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a befo-

re/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the **pipette** and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window. If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:
- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

6. Use parameters **Range** and **Softness** (edges) to optimize the settings if the default settings do not achieve satisfying results for the transitions between object and backdrop. By clicking the right part of the numeric field a slider control for adjusting the setting will appear.

See also

Transparent areas through Luma keying

Transparent areas via masks

Other visual effects

Editing video sound

Basically, video sound, too, can be edited using all features of Wings Platinum. For this purpose, the sound is extracted from the video and put into an audio track as a sound object.

Extracting audio data

1. Click one Media Pool category **Videos**.

2. Now drag the corresponding video from the Media Pool into an **audio track.** This causes the audio data to be extracted, the display data to be rendered and a corresponding sound object to be created. On the hard disk and in the Media Pool an audio file is created.
3. This sound object can be edited as desired. See Sound editing.

Info

- If you start by dragging the video from the Video Pool into an empty space of the timeline below the last track, Wings Platinum will automatically create a new video and audio track, extract the audio from the video and place both in perfect synchrony in the corresponding location. Moreover, both objects are then grouped.
- If you are having problems using extracted sound you can have it extracted again by right-clicking the video object and selecting **Special Functions** - **Extract audio file again**.
- Any multi-channel or surround sound that may be available (e.g. for MPEG-2, VOB or WMV videos) is not considered and will only be extracted in stereo.

Synchronizing audio data with the video picture

1. Cut the sound object roughly to match the length of the video object and move it to the approximate location in time of the video.
2. Mark the video object. Right-click the pertaining sound object and select **Special Functions** &endash; **Align content**. Following this, picture and sound will be in perfect synchrony.
3. Length as well as fade-ins and outs of video and sound objects can be edited further. Before moving them, both objects must be marked.

Info

- In order to be align the object contents the object must be shorter than the media file, i.e. it must be trimmed.
- However, also the video pictures can be synchronized with sound. To do so, mark the audio file, followed by right-clicking the video object and choosing **Special Functions** &endash; **Align content**.

- You can modify the sound in length and adjust it to video scenes via timestretching. See Changing playing speed and pitch.

Efficient cutting of video and sound

Wings Platinum is no real video editing program and does not pretend to be one. However, looking through the footage and a rough cut of the video material can be performed quite effectively via Wings Platinum, if you use the available functions appropriately.

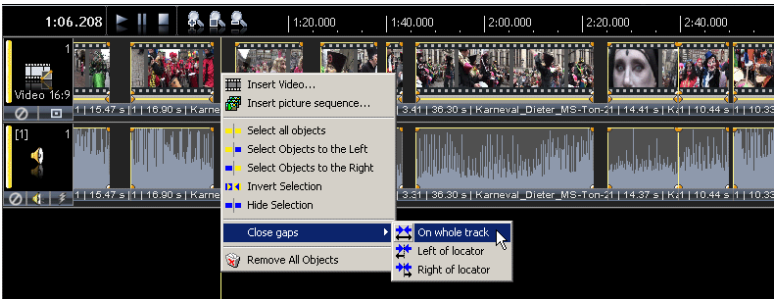
1. Transferring the material into the computer should best be done via software with scene detection, which produces separate small files for every scene instead of one huge file, e.g. using software **Scenalyzer Live** for DV format or **HDVSplit** for HDV format. See also Creating video files. Following this, these files can be dragged into the Wings Platinum Media Pool. See also Adding media files.

2. Click on category **Videos** in the Media Pool. Sort the video files chronologically by clicking the column header **File date**.

3. Highlight all video files by pressing keys **Ctrl** + **A**. Now drag all videos in one go into some free space below the last track. Following this, two new tracks will be created: one containing the videos and one containing the synchronized sound. Depending on the number and types of videos added this may take a while. Once the progress dialog has disappeared, you can start editing; creation of display data will continue in the background. See also *Placing objects*.

4. Now you can start looking through the scenes. Cut off any parts that are not needed. This can be done by right-clicking the object and selecting functions **Cut left part**, **Cut right part** or **Divide**. As the video and sound objects are always highlighted together as a group, they are always cut together. Work through the whole video. The cut needn't be perfect. It's only meant to be a rough cut, which can still be optimized at a later time.

5. Once you are finished, the resulting gaps can easily be removed. Highlight both tracks as explained above. Right-click into a gap and select **Close gaps** ▸ **On whole track**.



6. Now take a look at the rough cut. If you want to rearrange individual scenes and establish a different order, you should remove grouping before you do so. You'd better open a second timeline for the new montage to copy and paste the objects into. You can cascade both timeline windows to make editing easier for you.

Processing VOB files from video DVDs

VOB files are MPEG-2 videos from a video DVD. Basically, it is possible to process them in Wings Platinum but it may cause problems. Please note the following:

- Adding such files to the Media Pool, which are usually 1 GB, requires time-consuming opening of files. This is displayed in a dialog and may take up to several minutes. If necessary, you can cancel this process. See Adding media files.
- An MPEG-2 or VOB file can also be cut via suitable shareware tools and saved as several smaller files without requiring the video to be recompressed. This requires a tool which is capable of GOP level cutting, e.g. **Mpg2Cut2**.
- Any multi-channel or surround sound that may be available will not be considered. If the VOB file does not contain stereo sound you should extract the multi-channel sound as wave file in stereo using a program which features a corresponding decoder, e.g. Shareware **DVD2AVI**.
- Some VOB files contain errors that prevent import and processing in Wings Platinum.

- If despite all this, VOB files cannot be imported, you can still play the video DVD on a DVD player, record the corresponding scenes via a DV-CAM and transfer the scenes as DV video via firewire to your computer. Although this method is to a certain extent lossy, DV videos can be well processed in Wings Platinum. See also Creating video files.

Adding a sequence of pictures to a video track

Sequences of pictures, e.g. the individual pictures of a 3D animation or of an HDTV can be added on a video track and edited just like a video. Also recordings in fast motion produced with a digital camera can be incorporated in a show this way.

1. All pictures of a sequence must be contained in one folder and the individual picture files must be numbered consecutively, e.g. ***Animation0001.tga***, ***Animation0002.tga*** ...to ***Animation0375.tga***. This sequence with 375 individual pictures, for example, would be 12.5 seconds long at 30 frames per second.

2. In the Media Pool click on category **Videos**. Open the folder containing the picture sequence pictures and drag the first picture of the picture sequence from the folder to the Media Pool, e.g. picture ***Animation0001.tga***.

3. The dialog popping up will show you which picture is the first and which is the last of the sequence, which allows you to make changes. Under **Frames/s** enter the speed to play the sequence of pictures and click on **OK**.

4. In the Properties Dialog under **Intermediate video date** place a checkmark next to **Create/use intermediate video data**. With very high-resolution picture sequences from DSLRs you should adjust the picture size for the intermediate video data to allow the picture sequence to be played in real time. Instead of **Original size** enter the presentation output size, e.g. a width of 1400 pixels for a data projector with a resolution of 1400 x 1050 pixels and click **OK**.

Note: If the properties dialog is not displayed automatically when adding the picture sequence, right-click the picture sequence in the Media Pool and select **Properties**.

You can now drag the picture sequence from the Media Pool and drop it into the video track. The frame rate is set to 30 frames per second by default. This value can be changed in the video object properties. See Video Properties.

After Wings Platinum has finished rendering the display data, the sequence of pictures appears as a video object. Now you can dissolve or edit the sequence of pictures just like a video. ... See also Editing objects and Editing videos.

Info

- The presentation of a picture sequence is always based on Intermediate Video Data as a standard PC would definitely be unable to load and display, for instance, 30 images per second at full resolution.
- Display data for picture sequences are limited in size to 640 pixels (normal) or 1280 pixels in width (if higher quality for HD videos is enabled) to avoid overtaxing the computer with high-resolution images from DSLRs.
- For backups of picture sequences the functions in the **Extras** menu are not yet be considered! A corresponding message will be displayed when producing a backup copy.

Asynchronous playback of video loop

This function requires the Pro License or a Multidisplay License. See Licenses and functions.

Asynchronous loop playback allows a video to be continued even if the Locator stops at a pause marker. This way it is possible to realize moving backgrounds or permanently animated logos.

And this is how it is done:

1. Right-click the video object to be looped and select **Properties**.

2. Under **Render properties** place a checkmark next to **Loop** and **Asynchronous**.
3. Close the dialog by clicking **OK**. You can now extend the video as desired, as Loop Mode is enabled.
4. Start playback and the video starts playing as usual. When you press the space bar and put Wings Platinum into Pause Mode, the video continues playing independently of the Locator. You can then continue playback and pause it again as desired. The video is played as long as the Locator is located on the looped video object.

Info

- Paused playback can also be achieved by setting pause markers. When the Locator stops at a pause marker, playback of all tracks is paused except for the sound in the asynchronous track.
- Please note that always the entire media file is looped. If necessary, create a loopable file by cutting and exporting. See Creating a loop file. An object with loop properties can be extended arbitrarily independently of the media file.
- The transparency is defined by the ramp band at the Locator position, i.e. it can be controlled in sync and allows harmonious transitions to the other media.

Live video/TV import

The Pro License of Wings Platinum and up allows import of video sources to a show, i.e. the signal of a video camera or a TV program. This requires an ATI TV/graphics card "All in Wonder" with integrated TV tuner or a video input card with WDM or "Video for Windows" driver.

The live video / TV image is placed as an object onto a Live video / TV track. Similar to a picture or video it can be integrated in the image blend and even be provided with effects. Video cards with WDM driver do not burden the main processor as they supply the data via the PCI bus directly to the graphics card.

Inputs or TV channels are changed over by means of triggers which can also be placed in the Control Panel as buttons.

Live video / TV import via objects

These functions require the Pro License or up. See Licences and functions.

This type of live video / TV import allows full integration of a live video / TV image into a show. Similar to picture or video objects, live video / TV objects can also be integrated in your show and edited likewise. For animations you can use the full range of effects.

Info

- These functions require installation of the **Live Video / TV Module** and an **ATI Radeon All in Wonder** graphics/TV card or a video input card with WDM or "Video for Windows" driver.. You should only perform the next steps after you have successfully tested the card functions via the ATI Multi Media Centre or the Windows Movie Maker.
- If you are running TV programs for the first time, you should find out about which TV station corresponds to which TV channel. See Selecting TV channels.
- For Multidisplay presentations all slaves used for displaying live video on their displays must be equipped with video input cards to which the

same video signal is applied. The master requires no video input card although it would facilitate programming.

- For dual display presentations on one computer live video is not possible.

Enable Live video / TV

First of all, configure the live video / TV inputs and enable live video/TV playback for your project.

1. Click on **Options** in the function bar below the main menu. Then click the plus sign on the left next to **Global Options** - **Video input.** Select the corresponding input and the dialog will open on the right.
2. Place a checkmark next to **Activate** and select the corresponding **driver type** and below it, the **video hardware** used. Settings for some commonly used video input/TV cards can be found here.
3. If you know the Capture format (RGB/YUV color space, etc.) and the picture size you can specify it under **Capture format**, e.g. **YUY2** and **768** x **576** for standard PAL import. If you don't know them leave the default setting **None** and **0** x **0** pixels, Wings Platinum will attempt to make appropriate settings.
4. For **Video standard** choose the corresponding standards, such as PAL, NTSC, Secam, etc. in accordance with the video input. For Europe, **PAL B** is usually the correct setting.
5. For **Video source** enter the corresponding source **Composite**, **S-video** or **TV tuner**. If you have chosen **TV tuner**, you can also choose the program at **TV channel**. This TV channel is active upon loading the project but can be changed at any time later on via trigger.
6. For **Input** you select the input to which the video signal is applied. If you have no idea about the numbering of the video card inputs you may need to try it out.
7. During playback you will see whether your video/TV input requires **Deinterlacing** or **Cropping**. If necessary, these functions can be enabled at a later time. See also **Options** - **Global Options** - Video input.
8. Configure all the existing inputs of your video input cards likewise and close the dialog by clicking on **OK**.

Info If your computer has enough capacity and is equipped with suitable input cards you can use up to a total of eight video inputs.

Importing live video / TV into the timeline

Now add tracks and objects for live video / TV playback as follows:

1. Right-click a track head or some free area in the timeline and select **Insert track ▶Live video / TV**. Following this a new track is created.
2. If you use several live inputs you need to enter the required video input in the track properties. Double-click the track head and, next to **Video input**, enter the input that you want be played. Close the dialog by clicking **OK**.
3. Now right-click this track and select **Insert Live video / TV**, and a Live video / TV object will be created. This object can be edited just like a video object, i.e. it can be changed in length, faded in /out by changing the transparency via the ramp band. See also Editing objects. In addition to this, all key-frame controlled effects, such as motion, rotation or Chroma/Luma keying are also available. See Visual effects. Crossover on one track is not possible though.
4. You can now play the live video / TV object, which means that the active program or the video import, respectively, will appear on the screen. When you stop playback, the last live picture freezes on the screen while it continues running in Pause Mode.
5. TV channels are changed over by means of triggers, which can also be placed in the timeline as markers (..trigger markers require the Show Control Module). For information on how to change over between TV channels refer to Selecting TV channels.

Info

- When there is no live video / TV image on the screen, close the screen and open it again. If this does not prove successful close the video input and open the screen again. This may be necessary after a signal change. There is a trigger action for closing a video input. See Trigger actions.
- Two live video / TV objects cannot be dissolved by shifting them on top of each other. Therefore, no crossfade is possible.

- The duration of a new live video / TV object or the corresponding default control tracks can be entered at **Options** - **Global Options** &endash; **Objects** - **Live video/TV**.
- Many video input cards support editing of the video image in terms of brightness, contrast and color. See Editing the live video / TV picture.
- If you want to play live video on slaves, every slave computer needs to be equipped with a video input card and the same signal be applied to it. In the Global Options the same ID, e.g. **1** must be entered for each of these cards. A live video track must then be added to the master project and configured for this input. See Live video/TV tracks.

Selecting TV channels

This functions requires the Pro License or up. See Licenses and functions.

TV channels can be enabled or changed via the trigger action **Select TV channel**. When using the **All in Wonder graphics card** a first time, the TV tuner will have searched for available programs. Unfortunately, the list in the Multi Media Center is a list with consecutive numbers which does not correspond to the actual TV channels. Therefore, you need to find out yourself, which programs are available in which TV channels.

We will show you how this can be done most easily:

1. Click on **Options** in the function bar below the main menu and select **Project Options** &endash; **Live video / TV** on the left.
2. Unless this has already been done, remove the checkmark next to **Hardware rendering for Live video/TV**. Close the dialog by clicking on **OK**.
3. To start the display, you need to create a trigger with the corresponding action. Click category **Trigger** in the Media Pool.
4. Right-click some free space in the right Media Pool section and select **Add trigger** for the Properties Dialog to pop up.
5. For **Category** select **Live video / TV** and for **Action** item **Display in window**. In the right field choose **TV tuner** as video source.
6. Enter **1** for **F key** and click on **OK**.

7. The same way, create a trigger with action **Select TV channel** but do not assign a function key.
8. Start the video image by pressing **Shift** and **F1**. You can terminate it by pressing **Esc**.
9. Right-click the trigger with Action **Select TV channel** created last and select **Execute now** for the corresponding TV channel to appear. If no program appears, double-click the green trigger symbol and select the next TV channel.
10. Name the trigger in accordance with the TV program by clicking the field in column **Name**.
11. Now right-click the last trigger and select **Add trigger**. The dialog settings have already been made and all you need to do is increase the TV channel number.
12. Right-click the trigger and select **Execute now**. Following this, name it in accordance with the program being shown.

This is how you can work your way through the TV channels. You will end up with a list of triggers in the Media Pool providing information about TV channels and programs. You can enlarge the Media Pool window, produce a screen shot and print it.

Now you have sufficiently practiced how to change over between TV channels. For starting triggers, however, there are also some other interesting options, which are explained in detail at Executing triggers.

Handling of video / TV sound

The video signal sound is output as analog stereo signal at the **All in Wonder** graphics card. Currently, there are two ways of further sound editing:

- You supply it to the line input of your sound card as recommended by the graphics card manufacturer, so that you can add it to the sound track of your show or mute it, etc. via the Windows Mixer.
- For an installation, you should provide for the video / TV sound to be supplied via a serially controllable mixer. Such a mixer allows sound control via the corresponding command markers in the timeline.

See also

Programming serial commands

Live video / TV as an object

Editing a live video/TV picture

Several live video/TV cards allow editing the video image in brightness, contrast, color and partly other parameters.

This is how you proceed:

1. Open a project which contains a live video/TV object in a track. See also Live video/TV as an object.
2. Import a signal and open the screen.
3. Right-click the screen and select **Video input settings** for a dialog to appear. This dialog, which may have several tabs and controls, allows you to make the picture settings provided your input card supports this.
4. For the video image to be displayed, start playback in Wings Platinum at a location where there is a live video/TV object and change to Pause Mode immediately after pressing the space bar. The video image is now running and you can make and evaluate the settings without ruffle.
5. Finally, close the dialog by clicking on **OK** and disable Pause Mode by clicking on **Esc**.

Info For live video/TV input contrast can be increased by adjustment of tonal values. See **Options** - **Global Options** - **Video input**.

Transparency functions Chroma Keying and Alpha Masks

Chroma / Luma Keying and Alpha Masks can be used for Live Video / TV objects just like for video objects. For further information refer to:

Transparent areas via chroma/luma keying

Transparent areas via masks

Settings for commonly used video input/TV cards

These functions require the Pro License or up. See Licenses and functions.

In order to be able to use video input/TV cars you need to set the corresponding parameters at **Options** - **Global Options** - **Video input**. For some cards we have already found out about the settings:

ATI Radeon X600/X800

ATI Radeon X850_Pro/XT VIVO

AVerMedia

Datapath Vision RGB

nVIDIA FX5950 Deluxe

TerraTec Cinergy 250 PCI

ATI Radeon X600/X800

Driver used for the tests: Catalyst 5.4

Driver type: **Windows Driver Model (WDM)**

Capture format: **YUY2** or **UYVY**, **720x576** pixels

Video standard: **PAL B**

Video source: **S-Video** or **Composite**

Input: **1**

Deinterlacing: -

Cropping: not necessary

ATI Radeon X850 Pro/XT VIVO

Driver used for the tests: ATI Rage Theater Video Capture from Catalyst 5.9

Driver type: **Windows Driver Model (WDM)**

Capture format: **UYVY**, **720x576** pixels

Video standard: **PAL B**

Video source: **S-Video** or **Composite**

Input: **1** (always)

Deinterlacing: is possible

Cropping: not necessary

Latency is low and increases slightly with deinterlacing.

AVerMedia (connexant capture card)

Treiber-Typ: **Video For Windows Driver (VFW)**

Capture format: **none**, **0 x 0** pixels

Video standard: **--**

Video source: **S-Video** or **Composite**

Input: **1**

Deinterlacing: **No deinterlacing**

Datapath Vision RGB

Driver used for the tests: unknown

Driver type: **WDM**

Capture format: **RGB565** (best performance) or **RGB32**

Capture size: **640 x 480, 800 x 600, 1024 x 768, 1280 x 1024, 1600 x1 200 pixels**

Video standard: **RGB**

Video source: **RGB**

nVIDIA FX5950 Deluxe

Driver used for the tests: unknown

Driver type: **Windows Driver Model (WDM)**

Capture format: **UYVY**, **720x576** pixels

Video standard: **PAL B**

Video source: **S-Video** or **Composite**

Input: **1**

Deinterlacing: -

Cropping: **12,4,14,4**

TerraTec Cinergy 250 PCI

Driver used for the tests: Version 3.80

Driver type: **Windows Driver Model (WDM)**

Capture format: **YUY2**, **768x576** pixels

Video standard: **PAL B**

Video source: **S-Video** or **Composite**

Eingang: **1**

Deinterlacing: -

Cropping: **1,0,16,2**

See also

Live-Video/TV import via objects

Text functions

These functions requires the Starter License or sometimes even higher versions. See Licenses and functions.

Wings Platinum features a number of text functions which can be used for show titles, news tickers or as internal information within a project.

Text objects on picture tracks are used for displaying information within the show and offers the following options:

- Just like picture objects they also have a ramp band for transparency control. Virtually all effects are available. See Visual effects.
- The text has a transparent background and can also be combined with any other any image and video.
- The font quality is very high and can be enlarged without any problems. The text can be edited in the Text Object Properties dialog. Any changes will immediately be visible on the screen.

For information in how to display text on the screen can be found in **Displaying titles and text in a show**.

Ticker objects on ticker tracks are used for displaying current information on the screen and offers the following options:

- Just like picture or video objects they also have a ramp band for transparency control and can be used like a picture or video within a show. The text has a transparent background and can also be combined with any other images and videos.
- Virtually all key-frame controlled effects, such as motion, rotation and color control are available. However, scaling of text via keyframes is not possible.
- The text can be edited and formatted to a certain extent in the Ticker Object Properties dialog. Any changes will immediately be visible on the screen.
- Both animated text in horizontal and vertical direction and a Loop function for ticker loops are available.

- Ticker objects can read information from text files during the presentation and update them, e.g. for news tickers. See Displaying current information from a text file.
- Information from text files can also be retrieved via triggers. See Retrieving information from a text file via trigger.
- Information from text objects can also be displayed in additional screen windows. This is an interesting feature for implementing a prompter function with scrolling text. See Displaying text in additional screen windows.
- Compared to text objects on picture tracks, however, text quality and format functions are restricted.

For information in how to display text on the screen can be found in **Displaying text via ticker objects**.

Note objects in universal tracks can be used as follows:

- As a note within a project. See Adding note objects.
- Display of information in up to four notes windows, e.g. for messages and keywords during a show. See Displaying text in notes windows.
- Transfer of test and preview pictures to the Stumpfl Iseo and display on the touch panel interface, e.g. for a prompter. See Interaction with Iseo.
- The text in note objects can be exported into a text file.
- *Information from text files can also be retrieved via triggers. See Retrieving information from a text file via trigger.*

Displaying titles and text within a show

The basic functions are available with the Basic License and up,the special effects, such as 3D contour, shadow and bicolor with the Advanced License and up. See also Licenses and functions.

It is quite easy to add a title or some text information to your show by adding text objects to a picture track. The text can be formatted comprehen-

sively and be provided with effects. Twenty text presets are included and can be used by a mouse click. See also Creating and using text presets.

And this is how you can add text to your show:

1. Right-click a picture track and select **Add text object.** Open the screen window so as to be able to judge the title design better.
2. Right-click the text object, select **Properties** and the dialog will appear. Enter the required text information in field **Text** and it will immediately be visible on the screen.
3. Under **Font** you can largely influence the text display:
    - **Aspect ratio of text area** ...determines the aspect ratio of the area for displaying the text or for word wrap. E.g. if you want to run multi-line closing credits on the screen you should choose portrait format, e.g. **1 : 2**.
    - **Font** ...for selecting the desired font. The chosen font need not be installed on the presentation computer.
    - **Font height** ...defines the font height as a percentage of the screen height. **Note:** For text arranged in an arc the font height depends on the length of the text.
    - **Spacing** ...defines the space between the individual letters. **Note:** This option is not available for text arranged in an arc.
    - **Width** ...influences the letter width, i.e. the letters are distorted.
    - **Height** ...influences the height of the letters, i.e. they are also distorted.
    - **Skew horiz.** ...allows skewing of the letters, i.e. they are displayed in italic.
    - **Skew vert..** ...allows skewing of the letters in vertical direction.
    - **Rotation** ...rotates the letters around the Z-axis. **Note:** This option is not available for text arranged in an arc.
4. Section **Paragraph** allows you to take an influence on the text flow:
    - **Line spacing** ...varies the space between the lines. **Note:** This option is not available for text arranged in an arc.

- **Alignment** ...affects alignment and position of the text within the text area. **Note:** This option is not available for text arranged in an arc.
- **Auto-wrap** ...ensures automatic word wrap within the specified text area if the lines get too long. **Note:** This option is not available for text arranged in an arc.
- **Render as** ...**Text lines** is the default setting. If you choose **Arc** the text is arranged in an arc, which can be defined by **Radius**, **Angle** and **Segment**.

5. The last column allows selection of interesting effects provided you have an Advanced License. The configuration is explained further below. The supplied presets give you an overview over the available options. See Creating and using text presets.

   Notes for users of Basic and Starter Licenses: By default the text appears in white. If you want to use colored text you can do so via the keyframes in color control tracks. See Color control tracks.

   Under **Fill** placing a checkmark next to **Fill** offers the following options:

   - **Color** ...allows you to choose the color for the font fill. Click in the field next to it to open the color selection dialog. **More on color selection**.

     - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
     - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Alpha** ...defines the opacity of the font fill. 100% means full opacity and 0 percent full transparency.
- **Effect** ...allows selection of various effects for text display, such as Blur, Shadow and Contour. The parameter next to it determines the intensity of the effect.

6. If you place a checkmark next to **Outline** the text will be provided with a border line which can be edited independently of the font fill:

   - **Color** ...allows selection of the border line color. Click the field next to it to open the color selection dialog. **More on color selection**. The outline color affects transparent effects.

     - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
     - Selection of colors is particularly easy via the pipette. Click the pipette and the

mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Alpha** ...determines the opacity of the outline. 100% means full opacity while 0 percent means full transparency.
- **Width** ...determines the width of the outline. If you checkmark box **Dashed** the border line is dashed and the division can be determined by the percentage entered.
- **Effect** ...allows selection of various effects for text display, such as Blur, Shadow and Contour. The parameter next to it determines the intensity of the effect.

7. If you place a checkmark next to **Shadow** the text is provided with a shadow which can be edited as follows:

   - **Color** ...allows selection of the shadow color. Click the field next to it to open the color selection dialog. **More on color selection**. The shadow color affects transparent effects. If you don't want any transparent effects, enable black shadow with 100 % opacity without offset.

     - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of

the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Alpha** ...determines the shadow transparency. 100% means full opacity and 0 percent full transparency.

- **Angle** ...determines the direction of the shadow.
- **Offset** ...defines the offset of the shadow.
- **Extent** ...defines the amount by which the shadow is to be larger than the text.
- **Blur** ...defines the softness of the shadow edge.

8. After font configuration has been finished click **OK**.

Info

- The settings of the properties dialog can be saved as text presets and applied to other objects later on. There are twenty presets available which you can use for testing the effects. See Creating and using text presets.
- The full font and effect quality, however, will only be visible in presentation mode.
- The effect parameters will automatically be adjusted to the output resolution so that an effect looks the same all the time. A combination between extremely large font and very high output resolution may cause the effect to become unrenderable as the effect parameters have reached their limits. You may have to find out in individual cases.

Creating and using text presets

Text objects can be formatted extensively and provided with effects as explained in topic Displaying titles and text within a show. Once you have created a title you can save this configuration as a text preset. There are also a few presets included which you can use easily and quickly. Every preset can be modified and adapted at a later time.

Creating a text preset

In the Text Object Properties Dialog set up the title as desired. See also Displaying titles and text within a show.

Under **Presets** in the bottom right corner enter the name of the new preset and click on **Save**. Following this it will be available as part of the preset selection.

Info

- You should find a suitable name for the preset which allows structuring of the presets in alphabetical order. Just look at the names of the supplied presets to get an idea.
- The text preset is saved as a text file which can be edited with a text editor. The text presets can be found by clicking **Extras** - **Open Folder** ▶**Presets**.

Applying text presets

Right-click a picture track to add a text object and open the Properties Dialog.

Under **Presets** click and select the corresponding preset. Moving the mouse point across the selected preset will display additional information on the preset.

In order to use the preset, click **Apply selected preset** and its effect will become visible on the screen.

Info

- Depending on the preset some parameters may not be set. Under **Schatten, weich** only the shadow is configured. If the font is important it will be configured in the supplied presets. However, it will only works if the font is available on the computer.
- Every preset can be modified and adapted at a later time.
- The full font and effect quality, however, will only be visible in presentation mode.
- The effect parameters will automatically be adjusted to the output resolution so that an effect looks the same all the time. A combination between extremely large font and very high output resolution may

cause the effect to become unrenderable as the effect parameters have reached their limits. You may have to find out in individual cases.

Displaying text via ticker objects

Ticker objects are most suitable for displaying current text information in a show. They can be controlled in their transparency and support most keyframe effects.

Info If you want to output your show on **Video DVD**, you should use text objects or image files for text integration. The text in ticker objects is usually distorted on video DVDs (...wider) and keyframe control does not work properly. Moreover, text display does not work for dualdisplay shows. See Panorama and stereo shows with one PC. In both cases, text can be displayed via text objects or image files with transparent background, e.g. in TIF or PSD format, as these formats allow the text layer to remain editable.

And this is how it is done:

1. In the Media Pool click on the plus sign next to category **Screens** and select the corresponding screen following which the screen fields will appear on the right.
2. Right-click some free space in the right Media Pool section and select **Add ticker field**. Following this, a new ticker field for the corresponding screen is created and the Properties Dialog is displayed. Format the text as necessary. If you have no idea about the format yet, use the default settings. However, there should be enough contrast between font color (default setting is white) and planned background picture. Finally, click on **OK**.
3. Right-click a track head or some free area in the timeline and select **Insert track Ticker**. Following this, a ticker track is created which is automatically linked with the first ticker field. When several ticker fields are to be used, you can **change the link** for output to a different ticker field.

- Right-click the text track head and select **Properties**.
- Next to **Ticker field** click on and select the corresponding ticker field. Clicking on **Settings** allows you to view and modify the text field properties.

4. Right-click the ticker track and select **Insert Ticker Object...**. In field **Text** enter the corresponding text, followed by clicking on **OK**.
5. The ticker object created can be used just like a picture or a video. Drag the ticker track to the top until it is located above the picture or video object the text is to be used for. By moving the Locator across the ticker object, the text becomes visible in the screen window. Modifying the ramp band allows you to influence transparency and fade the text in or out. See Editing the ramp band.
6. Text format, such as font, size, properties bold, italic, etc. can be chosen in the Text Field Properties. In the Media Pool click the plus sign next to category **Screens** and **Screen 1**. In the right Media Pool portion right-click the ticker field and select **Properties**. Make the basic settings and click on **OK**.
7. Deviating from the basic settings, a few font formats can be chosen in the Ticker Object Properties. Right-click the text object and select **Properties**. The following settings can be made by checkmarking the following checkboxes:
   - For **Alignment** you can choose **Left**, **Centered** or **Right**.
   - For **Motion** you can select **None**, **Horizontal** or **Vertical**. Optionally, you can also enable a **ticker loop** for continual repetition of the text.
   - The **Speed** of animated text is entered as a percentage of the screen per second.
   - In field **Comment** you can enter any designation to become visible in the object info line.

   Most modifications, i.e. also text corrections and line breaks are immediately visible on the screen.

Why no font can be selected in the ticker object.

This has been done for reasons of better performance. Just bear in mind that every letter is loaded into the graphics card as a small picture so as to enable all key frame-controlled effects and display of text from updated files.

Alternatively, text can also be displayed by means of text objects on picture tracks. They allow more options in terms of format and effect but do not offer any loop function or updating of the text via triggers. See Displaying titles and text within a show.

8. Text position and color can be adjusted for every object via control tracks and keyframes. See Visual effects.

Info

- **Important:** The larger the font, the more graphics memory is used up. A lack of graphics card memory may lead to problems in graphics output.
- Only **True Type fonts** can be selected. Other font types will be ignored and will not be available in the list of available fonts.
- If you want to present a project or an EXE presentation on another computer the fonts used in the show must be available on this computer. Otherwise substitute fonts are used automatically. It is useful to use standard Windows fonts, such as Arial or Times New Roman.
- Please bear in mind that the text cannot be scaled up by zooming in, it only changes the ticker field size. Too small a ticker field results in cropped text, which, on the other hand, can also be used for creative effects.
- Text objects in one track cannot be dissolved by shifting them on top of each other.
- The font height is automatically limited to the admissible values as soon as too high values are entered.
- The default color from the ticker field only takes effect if the ticker object does not have a control track for color. See Control tracks in objects. If necessary, remove the appropriate checkmark next to **Color**

under **Global Options** - **Objects** - **Text/Ticker,** for new objects to be created without control track.

Displaying text in additional screen windows

Information from text objects cannot only be displayed in the show but also in additional screen windows. Here, all options, such as movement, scrolling text, ticker loops, etc. are feasible. Contrary to notes windows, which can only display static text, additional screen windows require a higher graphics card performance.

Basically, display of text in a screen window is identical to display of text on the full screen as explained in Displaying text via ticker objects. However, you need to set up a second screen and link it up with another ticker track:

1. In the Media Pool click on category **Screens**.
2. Right-click some free area in the Media Pool and select **Add screen**. Following this, the Screen Properties of the new screen will appear.
3. Under **Fullscreen settings** place a checkmark next to **Windowed display only (no fullscreen display)** and click **OK**. This is necessary as basically only one fullscreen is possible.
4. Right-click **New Screen,** enter an appropriate name for the screen field, e.g. **Screen window 1**, and press Enter.
5. In the Media Pool click the plus sign next to category **Screens** and select the new screen. Following this the screen field will be displayed on the right. Right-click some free area in the Media Pool and select **Add ticker field**. In the popup dialog make the necessary text settings and close the dialog by clicking **OK**.
6. Right-click **Ticker field 1** and enter an appropriate name for the screen field, e.g. **Prompter**, and press Enter.
7. Now add a ticker track by right-clicking a track head, selecting **Insert track** ▶**Ticker**.

8. Double-click the track head of the new ticker track to open the properties dialog. For **Screen** choose **Screen window 1** and for **Text field** enter **Prompter**.
9. Now set up the text objects with the desired information in the new ticker track. See also Displaying text via ticker objects.
10. When you click **Display screens**, two screens will open up. If only one screen is visible, the second one is presumably located exactly behind it. Drag and drop **Screen window 1** onto the second monitor, so that both screens are located on different monitors or video projectors.
11. If you start the presentation by pressing the **F5** key, the show is displayed on the fullscreen and the information from the ticker objects on the ticker track **Prompter** in the screen window on the second monitor. It is certainly possible to adjust size and location of the screen window to suit your requirements. It is, however, important that it is located in its entirety on the second monitor and does not extend into the first monitor behind the full screen. This may be have an adverse effect on performance.

See also

Displaying text in notes windows

Changing text and format in ticker objects

Displaying date, time and time code on the screen

Displaying text in notes windows

Information from note objects can be displayed in up to four notes windows. This way, messages and keywords for live comments can be displayed statically in a window during the show. Scrolling text as in a ticker or prompter is not possible. For that purpose you should use a screen window. See Displaying text in additional screen windows.

Placing text in notes objects

1. Right-click a universal track and select **Insert notes**.... See also *Adding tracks*.

2. Enter the required information in field **Text** and check format **Bold** or **Italic**, if applicable.
3. Place a checkmark next to **Display in notes window**. If you want to use more than one notes window you need to enter the corresponding notes windows number (**1 .... 4**). An additional checkmark next to option **Keep display after object end** provides for the text to be displayed in the notes windows until some new text overwrites the old one.
4. Click **OK**. The same way, add further notes objects. The notes objects in the universal track can be moved in time and their length or duration be changed.

Enable the required number of notes windows as explained further below.

Enabling notes windows

1. In the toolbar click **Options** and select **Project Options** – **Notes windows 1...4**. If the required entries are not visible, click on the plus sign.
2. Place a checkmark next to **Display during playback / presentation**.
3. Choose the appropriate **Font** for the text in the notes window and enter the **Font height** in pixels.

Note: If you want to present a project or an EXE presentation on another computer the fonts used in the show must be available on this computer. Otherwise substitute fonts are used automatically. It is useful to use standard Windows fonts, such as Arial or Times New Roman.

4. Select colors for fonts and background by clicking on the fields next to **Text color** and **Background color**. **Details on color selection**

   - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

5. If applicable, enable other notes windows likewise and close the Options dialog by clicking **OK**.

Basic configuration of notes windows has now been completed and you can start playback in order to display the notes in the windows.

Displaying and positioning notes windows

1. When playback is started, the notes window is displayed. When the Locator moves across the corresponding notes object, the text becomes visible.
2. Now define size and location of the notes window. Start playback, followed by pressing the space bar to activate Pause Mode.
3. You can now grab the notes window in the title bar and drag it as is common in Windows. The size can be adjusted by dragging at the edges. Following these adjustments you can terminate Pause Mode at any time by hitting the **Esc** key. When you restart playback the notes windows are displayed at the corresponding size and location.

Info

- Please bear in mind that notes windows are always covered up in full-screen mode. It might be a good idea to extend the desktop to two

monitors or one monitor and one video projector so that one monitor is still available for displaying information for the speaker.

- Please note that notes windows cannot be displayed on slave computers.

See also

Exporting notes objects into a text file

Displaying title and text in a show

Displaying text via ticker objects

Displaying date, time and time code on the screen

Displaying current information from a text file

Current information from a text file can be displayed by means of ticker objects. For this purpose a ticker object is linked up with a text file. It allows creation of news tickers, which can be updated during a presentation by reading the current information from the text file before the text is actually displayed.

1. Start by creating a ticker field and a ticker track. Then create a ticker object as described in topic Displaying text via ticker objects.
2. In the Media Pool click on category **Texts**.
3. Right-click the empty space in the Media Pool on the right and select **Add text from file ...** and a dialog box will appear.
4. Select the required text file and click **Open**. Please note that only text files with the extension ***.txt*** can be selected.
5. Now drag the text file link from the Media Pool and drop it onto the corresponding ticker object.

If you start playback the current information from the text file will be displayed on the screen. After changing the text and saving the file the new text appears when the ticker object is displayed again. Alternatively, you can also control text display via triggers.

See also

Retrieving information from a text file via trigger

Displaying text via ticker objects

Changing text and format in ticker objects

Displaying date, time and time code on the screen

Visual effects

Retrieving information from a text file via trigger

This function is only available with a Pro License or up. See Licenses and functions.

Usually, the information to be displayed on the screen is contained in the Text Object Properties. It is also possible to use information contained in text files and send it to the corresponding ticker field via triggers. As there are many different ways of executing a trigger, e.g. via Control Panel, time-controlled or via serial commands, there is a wide range of different options for controlling such information. See also Executing a trigger.

Start by preparing the text files for the information you want to be displayed. The file should be unformatted and saved as ***.txt** file. Any possible page breaks are ignored when playing the ticker.

In the Media Pool click the plus sign next to category **Screens** and select the required screen below it, following which the screen fields will be displayed on the right.

1. Right-click some empty space in the right Media Pool section and select **Add ticker field**. Following this a new ticker field is created and the corresponding Properties dialog pops up.
2. Format the text as appropriate. Lay down font, font height and attributes. Other formatting steps, such as color and alignment can alternatively be done in the text objects.
3. If the text is to run as a ticker, you need to enter the corresponding **Motion** and **Speed**. For text that is to be run several times place a

checkmark next to **Ticker loop**. In such a case you can also enable option **Update display of altered text files automatically**. This option causes the text files to be checked for modifications at the end of every loop and to be reloaded, if necessary. Finish by clicking **OK**.

4. Provide the ticker field with a remote index. In the Media Pool, scroll to column **Remote index**, click the line of the corresponding text field and enter the appropriate free remote index (**1...250**).

5. Now create a ticker track and link it up with the prepared ticker field. Right-click a track head or some free area in the timeline and select **Insert track ▶Ticker**. Following this a ticker track is created which is automatically linked with the first ticker field. With a number of ticker fields you should drag the prepared ticker field from the Media Pool and drop it on the ticker track head.

6. Right-click the text track and select **Insert Ticker Object...** There is no need to enter any text in field **Text** as the text will be provided by text files. You may want to make entries in fields **Motion**, **Alignment** or **Speed**; these will apply independently of the entries in the text field. Click **OK**.

7. The ticker object created such stands for the time window for displaying the text within a show. It is also used for controlling transparency (ramp band), position, rotation and color control (control tracks with keyframes). If you want to extend the ticker object you just right-click the object and select **Change duration**. See also Changing the object duration via an entry dialog.

8. Now all you need is to create the triggers for retrieving the corresponding texts. Click category **Trigger** in the Media Pool.

9. Right-click some free space and select **Add trigger** for the Properties Dialog to appear.

10. Enter an appropriate name for the trigger. For Category select **Text field** and for Action select **Display text**.

11. In the right field next to **Ticker field** enter the remote index of the prepared text field. Select the required text file by clicking **Select file names**.

12. Next to **Spare text file** and **Spare text** you can specify an additional text file and an "emergency" text. This text will be displayed when the actual text file is not available. Finish by clicking **OK**.
13. The same way create further triggers for displaying other text files. This is done most easily by right-clicking the trigger you have just created and selecting **Add trigger**. Following this the set up is copied and you only need to change name and text file.
14. Now drag the trigger into the Control Panel and you will be able to retrieve the texts for first tests. At the bottom of the Audio Level window click tab **Control Panel**.
15. Drag the triggers individually into the Control Panel for the corresponding control panel fields to be created. By clicking on Action button the trigger can be executed. Further options for trigger execution can be found in topic Executing triggers.
16. When you start playback and the Locator runs across the ticker object the text selected via the trigger is displayed. While playback is on, it is also possible to retrieve some new text via a trigger which is immediately displayed on the screen.

Info

- For controlling text some other triggers are also available. See Trigger actions for text fields.
- The same triggers can also be used for displaying text in notes windows. See Trigger actions for notes windows.

See also

Displaying text via ticker objects

Displaying text in additional screen windows

Displaying text in notes windows

Executing triggers

Time-related conditions

Adding text fields

Text fields are used for text output within a show. This is how you can add a ticker field to a screen:

1. In the Media Pool click on the plus sign in front of category **Screens** and select the corresponding screen following which the screen fields will appear on the right.
2. Right-click the corresponding screen and select **Add ticker field**. Following this, a new ticker field for the corresponding screen is created.
3. Link up the ticker field with ticker tracks by dragging it from the Media Pool and dropping it onto the appropriate tracks. Alternatively, you can also create a new track by dragging & dropping the ticker field into the empty space below the timeline tracks.

Info

- The Ticker Field Properties allow you to enter different fonts, etc. for text output. See Ticker Field Properties.

See also

Ticker Field Properties

This is how you open the Ticker Field Properties:

1. In the Media Pool click category **Screens** and select the corresponding screen below it. Following this the screen and ticker fields will be listed on the right.
2. Right-click the corresponding ticker field and select **Properties**.

The dialog popping up allows you to specify the basic properties for text output of one or several text tracks.

- Any **Fonts** selectable in the system can be used.

- The **Font size** is entered as a percentage of the screen height so that the proportions always remain the same even at a different output size. **Important:** The larger the font, the more graphics memory is used up. A lack of graphics card memory may lead to problems in graphics output.
- Selectable **Attributes** are **Bold** and **Italic** as well as **Left aligned**, **Centered** and **Right aligned**. The line alignment can also be chosen in the Text Object Properties. See Ticker Object Properties.
- The field next to **Default color** shows the font color. Click on color field next to it to open the color selection dialog. **Details on color selection**.

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
  - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

  If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

  - Select a color so that it becomes visible in field **Old / New color** on the right.
  - Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
  - All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

Info This color only takes effect if the ticker object does not have a control track for color. If necessary, remove the appropriate checkmark under **Global Options** - **Objects** - **Text/Ticker**, for new objects to be created without control track.

- For **Motion** you can select **None**, **Horizontal** or **Vertical**. When the Multidisplay License or the Show Control Module is installed, you can also enable a **Ticker loop** for continual repetition of the text.
- The **Speed** of animated text is entered as a percentage of the screen per second.
- The option under **Display of text files** only becomes available upon when the **ticker loop is enabled**. If you place a checkmark next to **Update display of altered text files automatically** the text files are checked for modifications before they are displayed.

Changing text and format of ticker objects

Text and to a certain extent the format can be changed in a ticker object. Font, type size and typeface, on the other hand, are defined in the Ticker field properties. See Ticker field properties.

1. Right-click the corresponding ticker object and select **Properties**.
2. In field **Text** you can change the information.
3. Deviating from the basic settings, a few font formats can be chosen here. The following settings can be made after placing checkmarks next to the following checkboxes:
    - For **Alignment** you can choose **Left**, **Centered** or **Right**.
    - For **Motion** you can select **None**, **Horizontal** or **Vertical**. Moreover a **ticker loop** for continuous repetition of the text can be enabled.
    - The **Speed** of animated text is entered as a percentage of the screen per second.

- In field **Comment** you can enter any designation to become visible in the object info line.

Most modifications, i.e. also text corrections and line breaks are immediately visible on the screen.

Why the font cannot be selected in the Ticker Object

This has been done for reasons of better performance. Just bear in mind that every letter is loaded into the graphics card as a small picture so as to enable all key frame-controlled effects. There are certain rules that recommend graphic designers to use only three different fonts within one document. We think that it should also be possible for AV users to live with that restriction.

4. Close the dialog by clicking **OK**.

Info Text position and color can be adjusted via control tracks and keyframes for every object provided the basic color is white. See Visual effects.

Displaying the time, the date or timecode on the screen

In addition to text you can also use ticker objects to display the current date and time in a show. In addition to this, it is also possible to display the current project time on the screen, which is actually the time code at the Locator position.

1. Right-click the ticker object to be used for displaying date and/or time and select **Properties**. Unless a ticker object is available, create one as explained in Displaying text in a show.

2. Under **Display date / time / timecode** click on and select the corresponding type of display.

   - **Disabled** ...no display of date and time
   - **Date only** ...displays the current date only

- **Time only** ...displays the current time only
- **Date + time** ...shows both
- **Special formatting** ...allows different, also international, date and time formats as well as combinations with text in the entry field next to it. **Syntax for date and time display format**.

The following format characters produce the following information:

%a ...for weekdays, abbreviated, e.g. **Fr** for Friday

%A ...for weekdays, e.g. **Friday**

%b ...for month, abbreviated, e.g. **Jul** for July

%B ...for month, e.g. **July**

%c ...for date and time in local format, e.g. **23.07.2004 11:09:58**

%d ...for the day of a month as a decimal figure (01 - 31)

%H ...for hours in 24-hour format (00 – 23)

%I ...for hours in 12-hour format (00 – 12)

%j ...for the day of a year as a decimal figure (001 - 366)

%m ...for the month as a decimal figure (01 - 12)

%M ...for the minute as a decimal figure (00 - 59)

%p ...for marking mornings/afternoons in accordance with local format, e.g. **A.M.** / **P.M.**

%S ...for seconds as a decimal figure (00 - 59)

%U ...for the calendar week as a decimal figure, with Sunday being the first weekday (00 - 53)

%w ...for weekdays as a decimal figure (0 – 6, Sunday is 0)

%W ...for the calendar week as a decimal figure, with

Monday being the first weekday (00 - 53)

%x ...for the date in local format, e.g. **24.07.2004**

%X ...for the time in local format, e.g. **11:37:49**

%y ..for the year without century as a decimal figure (00 – 99), e.g. **04**

%Y ...for the year including century as a decimal figure, e.g. **2004**

%Z ...for the time zone (only possible if the time zone is known by the system), e.g. **Western European Standard Time**

%% ...for display of the percent sign in the text

The additional character **#** allows you to enter the date in extended form, examples:

%#x ...for **Friday, 23 July 2004**

%#c ...for **Friday, 23 July 2004 11:52:08**

This option is not available for all date formats.

- **Locator position in timeline** ...displays the current time in the timeline; reference is the time bar in the timeline.
- **Locator position in object** ...displays the current time relative to the text object, i.e. the reference 0:00 is the beginning of the text object.
- **Countdown to object end** ...counts the time within the text object back to zero; reference is the object end. During an event, this function can be used to display the remaining time in the break.

Info For the last three types of representing the Locator Position the following options are available:

- When the fractional digits of the timeline time display are set to **frames**, the same format will also apply to the display on the screen. See also Changing time display and resolution of the timeline.

- Next to **Timecode offset** you can enter an offset between the displayed time and the actual Locator position.

3. Under **Comment**, enter a name for the object, e.g. **Date + Time** or **Timecode**. Click on **OK**.

Any other editing steps, e.g. positioning, motion, effects, etc. can be performed in the ticker objects just like for normal text. See Displaying text in a show.

Adding notes objects

Notes objects come in handy when you want to enter general comments in the timeline and are used as text source for notes windows. They are placed in a universal track and can be used for supplying information on a particular event or as "cheat paper" for live comments. If you want to fade in text as a show title, for example, you use text objects.

1. With the right mouse key, click into a universal track and select **Insert notes** in order to add text. See also ... Adding or removing tracks.
2. In the field **Text** enter the required information and select format **Bold** or **Italic**, if necessary.
3. Click on **OK**.

The note object can be moved in time within the universal track. Just like any other objects, it can also be changed in its length.

Info

- Notes objects, too are organised in the Media Pool under **Texts**.
- The contents of notes objects can be displayed in a notes window. See Displaying text in notes windows.
- Texts in notes objects can also be exported. See Exporting notes objects into a text file.
- You can also display text in a show, e.g. as a title, see Displaying texts via ticker objects.

Exporting text and notes objects into a text file

Any important information or live comments you may have written into text or notes objects can be exported into a text file to be used for other purposes or for printing. The order of texts within the file corresponds to the chronological order of the notes objects in the timeline.

This is how it is done:

1. Mark the required text or notes objects in the timeline.
2. Right-click one of these objects and select **Special Functions** &endash; **Export**.
3. Enter a target directory and a file name and click on **Save**. The file is now saved and displayed in a text editor.

Visual effects

For creative design of your show, Wings Platinum offers a number of visual effects which can be applied both to picture and video objects and to text and live video / TV objects. In addition to static effects there are also key-frame-based effects.

Basic information on editing effects in the **Properties Table** can be found here.

Basic information on the creation of effects via **keyframes** can be found here.

Info

- All effects listed here are executed in real time. Some effects, however, require a graphics card that supports Shader Model 3, which is usually the case for the more current graphics cards. Graphics card produced before 2005 usually support only Shader Model 2 and therefore only some but not all the effects listed.
- Those effects that are labeled "Base effect" or "Geometry effect" are located at the beginning of the effect pipeline, i.e. there can only be one base effect and one geometry effect for every image or video. From the other effects up to seven can be used for each image or video.
- For some effects there are **sample projects** available. If the sample projects can't be opened you may need a higher license. However, the sample projects can be opened with a Demo version by adjusting the Pro License. The easiest way to find sample projects is to click **Extras** - **Open folder** ▶**Sample projects**. The necessary media can be searched for in the following folder:

  Paths in Windows XP

  ...Documents and Settings ***User**\My Documents\AV Stumpfl\Media Samples

  Paths in Windows Vista or Windows 7

...Users***User***\Documents\AV Stumpfl\Media Samples

Alternatively, you can also have the entire drive C:\ searched, which, however, takes distinctly longer.

The following effects are available:

- **AddColor** ...adds a selectable color to the image. This way, images can be colored without them getting any darker. Color corrections are possible, too.
- **AlphaWipe** ...transition effect in the form of a wiping fade. The image is first provided with a transparent mask and becomes visible by moving an internal mask. **AlphaWipeLinear** only differs from AlphaWipe in the semi-transparent soft edge.
- Animated background ...ideal as standby layer or as background for the presentation of media with varying aspect ratios.
- **Backdrop_1** ...color animation with soft progression
- **Backdrop_2** ...color animation with line patterns
- **Backdrop_3** ...color animation with soft, oval rings
- **BlueToAlpha** ...turns the blue channel into an alpha channel. For combination with other effects.
- **Bluebox** ...for removing an object placed against colored background.
- **Blur** (Base effect) ... blurs an image (similar to a Gaussian blur).
- **ChromaKey** ...for transparency control by color separation, which allows objects to be removed from their background via the so-called "blue-box effect".
- **ColorAnimation** ...the picture is displayed in animated pseudo-colors.
- **Color control** ...keyframe-based effect which is added to the picture just like a color filter.
- Color keying ... for removing an object placed in front of colored background.
- ConvertToHSV ...converts from RGB to HSV. Combined with ConvertToRGB it allows manipulations in HSV color space.

- **ConvertToRGB** ...converts from HSV to RGB. Combined with **Convert-ToHSV** it allows manipulations in HSV color space.
- **CubicBlocks** (Base effect) ... ...structures an image into cubes.
- **Default YUV** (Base effect) ...corrects the tonal values of videos. This effect is required if graphics card do not interpret YUV values correctly, thus resulting in dull and low-contrast videos in Presentation Mode.
- **DepthOfField** (Base effect) ... applies unsharpness to the image, with the extent of unsharpness being partially controlled by a texture. This effect can be in sample project **Effects Pro - Focus shift**.
- **DepthOfFieldAlpha** (Base effect) ...as above, but applies unsharpness to the alpha channel of an image; the extent of unsharpness can be controlled. This effect can be seen in sample project Effects Pro - **Focus shift**.
- **Desaturate** ...changes the color saturation resulting in a black-and-white picture.
- **Distort** (Geometry effect) ... uses a texture to deform the image, e.g. to create a "heat haze" in the distance. This effect can be seen in sample project **Effects Pro - Heat haze**.
- **Drop** (Geometry effect) ... the picture is provided with a concentric undulation, e.g. formed by a drop falling into water.
- Dynamic transparency masks ...allow composite pictures to be masked. In addition to this, several masks can be combined and animated independently of pictures and videos.
- **EffectMaskAlpha** ...uses a mask texture (alpha channel) to mask an effect so that it does not affect the entire image.
- **EffectMaskRed** ...uses a mask texture (red channel) to mask an effect so that it does not affect the entire image
- **FadeToColor** ...fades the picture to a defined color.
- **Flag** (Geometry effect) ...the picture is animated like a flag fluttering in the breeze.
- **Frame** and FrameScaled (Base effect) ...allows a frame to be put around a picture or video. This may be useful for "picture-in-picture" effects. The **FrameScaled** effect is more favorable for objects whose

size is changed dynamically as it allows proportional scaling of the frame width.

- **Frame around images or videos** ...this makes small images or videos stand out from the background, which may be useful for "picture-within-picture" effects.
- Gamma ... changes the gradation of the image to the specified value.
- **GreenToAlpha** ...converts the green channel to an alpha channel; to be combined with other effects.
- **HueSaturation** ...is used for influencing the colors in the HSV color model, i.e. of hue, saturation and brightness.
- **IgnoreAlpha** ...alpha channel of the image is ignored.
- Improve contrast ...can be achieved by means of tonal value adjustment.
- **InvertAlpha** ...inverts the alpha channel. Attention: If there is no alpha channel the picture will remain invisible.
- **InvertColor** ...inverts the colors of the picture.
- **InvertColorAlpha** ... inverts colors and alpha channel. Attention: If there is no alpha channel the picture will remain invisible.
- **LED** (Base effect) ... makes the image look like a LED wall.
- **Levels** ...adjusts the tonal values for lights and shadows (tonal value adjustment), e.g. in order to improve contrast.
- **LumaKey** ...for transparency control based on brightness.
- **LuminanceToAlpha** ...uses the luminance of an image to produce an alpha channel, which is then applied to the image.
- Masks ...allow transparent masking of composite pictures. In addition to this, several masks can be combined and animated independently of pictures and videos.
- **Monochrome** ...converts the color and changes the image into a gray-scale image.
- **Motion and Zoom ...**keyframe-based effect, e.g. for camera movements and zooming into individual image portions.

- **MultiplyColor** ...multiplies the color values of an image by a selectable color. The effect can be compared to a filter.
- **Picture in picture** ...keyframe-based effect for placing small pictures in front of a background picture
- **OldMovie** (Base effect) ...makes an image or video look like an aged film. This effect can be seen in sample project **Effects Pro - Old photos and movies**.
- **OldPhoto** ...applies sepia toning to the image.
- **Pixelate** (Base effect) ... changes the image from fine to rough pixels.
- **Posterize** ...reduces the color palette of an image in accordance with the set values.
- **PosterizeVariabel** ...as above, but the minimum and maximum number of steps can be set between which the animation is to take place .
- **RedToAlpha** ...converts the red channel to an alpha channel; to be combined with other effects.
- **Rotation in all three axes** ...keyframe-based effect for rotation and tilting of pictures
- **Scharr** (Base effect) ...causes the hard edges to be displayed in white and the rest transparent. Being a graphic effect it can easily be combined with other images.
- **ScharrDirectional** (Base effect) ...causes the edges to be displayed transparent and the rest dark. The image is located below it and becomes visible at the transparent edges. The offset angle between edge mask and image can be selected.
- **SeparateColorPlanes** (Base effect) ...divides the picture's RGB channels into individual rectangles with a defined offset, thus resulting in color fringing.
- **Sepia** ...changes the picture slowly into monochrome sepia colors.
- **Sharpen** (Base effect) ...sharpens the image before it is output. Be cautious with this effect, i.e. settings between 5 and 15 should do. Any other settings may lead to extreme effects that are seldom appropriate.

- **Sobel** (Base effect) ...causes the hard edges to be displayed in white and the rest transparent. Being a graphic effect it can easily be combined with other images.
- **SobelDirectional** (Base effect) ...causes the edges to be displayed transparent and the rest dark. The image is located below it and becomes visible at the transparent edges. The offset angle between edge mask and image can be selected.
- **Solarization** ...changes the picture slowly into negative colors.
- **Text effects** ...allows numerous variations, such as 3D contours, arcs or shadows. See Displaying titles and text in a show.
- Transparency masks ...allow masking of composite pictures. In addition to this, several masks can be combined and animated independently of pictures and videos.
- **Tunnel** (Base effect) ...ingenious tunnel effect with rotation and zoom.
- **Vignetting** ...applies vignetting to the image.
- **Water** (Base effect) ... turns the image into a moving water surface. This effect requires two effect textures. This effect can be seen in sample project **Effects Pro - Water**.
- **Wobble** (Geometry effect) ...causes a partial distortion and wave-like animation of the image.

Editing effects in the Properties Table

It is possible to enable realtime effects for nearly all sorts of visual media, such as pictures, videos or even live video input. Due to its uniform structure, editing of various effects in the properties tables is very similar to parameter management. For this reason we will give some general information on how to work with effects in principle. This topic provides information on the following:

Activating effects for an object

Selecting and editing in the Properties Table

Selecting and configuring effects

Effect parameters

Activating effects for an object

Before you can actually select an effect you need to activate the effects for an object.

1. In the timeline, highlight the corresponding object following which its parameters will be displayed in the Properties Table.
2. Right-click the object and select **Enable/display effects** and tab **Effects** will be displayed in the Properties Table.

Selecting and editing in the Properties Table

For easy and fast editing in the Properties Table note the following:

If you want to change parameters in a field click on it and further control elements may appear:

Buttons for certain tasks, such as selecting and removing files.

Button for opening selection menus.

Sliders for adjusting values, which, however, can also be entered numerically.

Tip: You can save one click by clicking the area where you think the control element could be.

Selecting and configuring effects

Tab **Effects** has a lot of categories, the contents of which can be displayed or hidden by clicking the plus or minus sign. All activated effects are applied to the object one after the other from the top to the bottom. The categories are explained below:

Properties

Here you can activate or deactivate the effects chosen afterwards by placing or removing the checkmark. This is helpful if you want to deactivate effects temporarily without actually deleting the effect configuration.

Effect textures

Here you can enter up to four textures to be used by the effects. To select a texture click the field on the right next to **Texture 1** followed by clicking . Click to remove it again.

- **Geometry** ... the specified texture is used for the selected geometry effect.
- **Texture 1 + 2** ...these textures can be used or effects 1 to 7.
- **Effect Mask** ...the specified texture is used for the effects **EffectMaskAlpha** and **Effect MaskRed**.

Info

- Whether a texture is necessary for an effect can be seen in Line **Comment** directly below **Effect**.

For live video objects effects cannot be selected as these effects are unsuitable for live video.

- The effects of an object including effect textures can be copied and pasted to other objects. See Copying and pasting effects.
- The object info line shows the number of effects assigned to the object, e.g. two effects are shown as **Fx2**.

Geometry

Here you define whether and by how much the picture is to be changed geometrically.

For **Effect** the following options can be chosen:

- **Default** ...the picture is not modified.
- **Distort** ...uses a texture to deform the image, e.g. to create a "heat haze" in the distance.

- **Drop** ...the picture is provided with a concentric undulation, e.g. formed by a drop falling into water.
- **Flag** ...the picture is animated like a flag fluttering in the breeze.
- **Wobble** ...causes a partial distortion and wave-like animation of the image.

Every effect has a number of different parameters that are described further below in the topic. See Effect Parameters.

Base effect

Here you will find the effects which, due to their effect architecture, need to be applied first.

The following options can be chosen next to **Effect**:

- **Blur** ...blurs the picture.
- **CubicBlocks** ...structures an image into cubes.
- **Default** ...the picture is not modified.
- **Default YUV** ...corrects the tonal values for YUV videos for RGB from 16...235 to 0...255.
- **DepthOfField** ...applies unsharpness to the image; the extent of unsharpness can be controlled.
- **DepthOfFieldAlpha** ...applies unsharpness to the alpha channel of an image; the extent of unsharpness can be controlled.
- **Frame** ...allows a frame to be put around a picture or video.
- **LED** ...makes the image look like a LED wall.
- **OldMovie** ...makes an image or video look like an aged film.
- **Pixelate** ...gives a pixelation effect to the picture.
- **Scharr** ...causes the hard edges to be displayed in white and the rest transparent. Being a graphic effect it can easily be combined with other images.
- **ScharrDirectional** ...causes the edges to be displayed transparent and the rest dark. The image is located below it and becomes visible at the

transparent edges. The offset angle between edge mask and image can be selected.

- **SeparateColorPlanes** ...divides the picture's RGB channels into individual rectangles with a defined offset, thus resulting in color fringing.
- **Sharpen** ...sharpens the image before it is output.
- **Sobel** ...reduces the picture to hard BW solarization with edge enhancement.
- **SobelDirectional** ...causes the edges to be displayed transparent and the rest dark. The image is located below it and becomes visible at the transparent edges. The offset angle between edge mask and image can be selected.
- **Tunnel** ...ingenious tunnel effect with rotation and zoom.
- **Water** ...turns the image into a moving water surface. This effect requires two effect textures.

Every effect has a number of different parameters that are described further below in the topic. See Effect Parameters

Effects 1...7

Here you can choose effects to perform various tasks. It is possible to combine several effects which are applied one after the other and take effect on the picture or video.

The following options can be chosen next to **Effect**:

- **AddColor** ...adds a selectable color to the image. This way, images can be colored without them getting any darker. Color corrections are possible, too.
- **AlphaWipe** ...the picture receives a transparent mask and is turned visible by moving the mask which has a soft edge. See Wipe transition effect via Alpha Wipe.
- **AlphaWipe Linear** ...as before but the transparency of the mask is linear
- **Backdrop_1** ...color animation with soft progression
- **Backdrop_2** ...color animation with line patterns

- **Backdrop_3** ...color animation with soft, oval rings
- **BlueToAlpha** ...turns the blue channel into an alpha channel. For combination with other effects.
- **ChromaKey** ...for transparency control by color separation, which allows objects to be removed from their background via the so-called "blue-box effect". See Producing transparent areas via Chroma Keying.
- **ColorAnimation** ...the picture is displayed in animated pseudo-colors.
- **ConvertToHSV** ...converts from RGB to HSV. Combined with **ConvertToRGB** it allows manipulations in HSV color space.
- **ConvertToRGB** ...converts from HSV to RGB. Combined with **ConvertToHSV** it allows manipulations in HSV color space.
- **Desaturate** ...changes the color saturation resulting in a black-and-white picture.
- **EffektMaskAlpha** ...uses a mask texture (alpha channel) to mask an effect so that it does not affect the entire image.
- **EffektMaskRed** ...uses a mask texture (red channel) to mask an effect so that it does not affect the entire image
- **FadeToColor** ...fades the picture to a defined color.
- **Gamma** ...changes the gradation of the image to the specified value.
- **GreenToAlpha** ...converts the green channel to an alpha channel; to be combined with other effects.
- **HueSaturation** ...is used for influencing the colors in the HSV color model, i.e. of hue, saturation and brightness.
- **IgnoreAlpha** ...alpha channel of the image is ignored.
- **Invert** ...inverts colors and alpha channel. **Attention:** If there is no alpha channel the picture will remain invisible.
- **InvertAlpha** ...inverts the alpha channel. **Attention:** If there is no alpha channel the picture will remain invisible.
- **InvertColor** ...inverts the colors of the picture.
- **Levels** ...for adjusting the tonal values for light and color depths. See Improved contrast via tonal value adjustment.

- **LumaKey** ...for transparency control based on brightness. See Transparent areas via Luma Keying.
- **LuminanceToAlpha** ...uses the luminance of an image to produce an alpha channel, which is then applied to the image.
- **Monochrome** ...converts the color and changes the image into a grayscale image.
- **MultiplyColor** ...multiplies the color values of an image by a selectable color. The effect can be compared to a filter.
- **OldPhoto** ...applies sepia toning to the image.
- **Posterize** ...reduces the color palette of an image in accordance with the set values.
- **PosterizeVariabel** ...as above, but the minimum and maximum number of steps can be set between which the animation is to take place .
- **RedToAlpha** ...converts the red channel to an alpha channel; to be combined with other effects.
- **Sepia** ...changes the picture slowly into sepia colors.
- **Solarization** ...changes the picture slowly into negative colors.
- **Vignetting** ...applies vignetting to the image.

Every effect has a number of different parameters that are described further below in the topic. See Effect Parameters.

Output Mode

Here you can define whether and which alpha channel is to be considered for output. You should only change the settings if you have good reasons to do so.

For **Mode** the following options can be chosen:

- **AddNoAlpha** ...Addition Mode, alpha channel is not considered
- **AddUseAlpha** ...Addition Mode and alpha channel is considered
- **DefaultNoAlpha** ...alpha control and alpha channel is not considered
- **DefaultUseAlpha** ...alpha control and the first alpha channel of the picture is considered (default setting).

- **DefaultUseAlpha2** ...alpha control and special alpha channel which is automatically considered internally

Effect parameters

Click on the corresponding parameters below. Mind that there is often another term in front of the parameter it refers to, e.g. ***Position* - Base** or ***Animation* - Ramp type**.

Base

Brightness

Color Mode

Minimum / Maximum

Range

Reverse

Softness

Ramp type

Width

Cycle time

Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The Intensity of the effect can be entered, i.d. **0** = no effect and **100** full effect.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle**

time. This makes the speed of the effect independent of the object duration.

- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appro-

priate if several objects in the timeline are to be provided with an effect with the same time basis.

- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

Brightness

At **Brightness** you can choose the brightness percentage starting from which picture areas are to be displayed transparent, e.g. for Luma Key. See also Transparent areas via Luma Keying.

Color Mode

At **Color Mode** you choose the way or the color parameters for defining the colors:

Color Picker ...selection via the color dialog, which features a pipette that can pick a color from somewhere within the program, e.g. for Chroma Key. See also Transparent areas via Chroma Keying.

RGBA values ...specifies the base colors red, green, blue and the transparency (alpha)

HSBA values ...specifies color hue, saturation, brightness and transparency (alpha)

Depending on the chosen parameter more entry fields will appear below.

Minimum →0 / Maximum →255

Here you enter the degree of color depth and light reduction to improve contrast. You enter which tonal value is to be set to black and which one to white. The default values are as follows:

- Minimum →0 = 16 = black
- Maximum →255 = 235 = weiß

These values are derived from the TV standard ITU-R BT.601. Of course you can enter any value between zero and 255. By clicking on the field on the right a slider shows up. See also Improving contrast via tonal value adjustment.

Range

At **Range** you enter the tolerance range, e.g. for Chroma /Luma Key.

Reverse

Reverse allows reversion of animation motion. **False** means normal motion, **True** reverse motion.

Softness

At **Softness** you can enter the softness of the edge, e.g. for Chroma/Luma Key.

Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are possible:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop)
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Width

For AlphaWipe, width specifies the width of partial transparency as a percentage of the picture width, i.e. the softness of the edge.

Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

See also

Copying and pasting effects

Wipe transition effect via Alpha Wipe

Improved contrast via tonal value adjustment

Producing transparent areas through Chroma keying

Producing transparent areas through Luma keying

Animated background

External control of effect parameters

This function is only available with the Show Control Module. See Licenses and functions.

Usually, the time basis for realtime effects is provided by object or timeline portions, a time specification or the PC clock. However, it is also possible to control the animation of effects via external devices, e.g. audio level, slider, joystick, DMX, etc. The devices supported by Wings Platinum are listed in topic Using external input devices. Control elements, such as sliders, joysticks or audio levels are particularly suited for this purpose since they, as opposed to switches, have a control range.

Info Please note that external control of effect parameters in multidisplay shows is not available for networked slaves but only for multidisplay systems with one PC.

Let's illustrate this on the example of an audio level:

1. Configure the corresponding device in the Media Pool, e.g. **Audio Level**. In the Media Pool click on category **Devices**.
2. Right-click some free space in the Media Pool on the right and select **Add port ▶PC Hardware ▶ Audio Level**.

3. Following this, device port **Audio Level** is added, which is displayed after clicking the plus sign next to **Devices**.
4. Highlight device port **Audio Level** and the individual channels will be displayed as devices on the right, e.g. **Peak** and **RMS**.
5. Highlight the object whose effects need to be controlled. At the desired effect enter **Device** as time basis, e.g. **Device** for **Animation - Base** instead of **Display time**.
6. Now drag the corresponding device from the Media Pool and drop it into the Properties Table in the empty field next to **Device**. In our case drag and drop **Peak 01 (L)** into the empty field next to **Device**.
7. In the toolbar below the main menu click **Enable device ports** so that the button is provided with a gray background . This is actually not necessary for audio levels but for any other devices.
8. If you move the control of your external input device the effect should change. In our example you need to place an audio object parallel to the object containing the effect and then start playback.

See also

Editing effects in the Properties Table

Visual effects

Using external input devices

Wipe transition effect via Alpha Wipe

A transition effect via Alpha Wipe can be used very universally and looks good for virtually all motifs. The image is first provided with a transparent mask and becomes visible by moving an internal mask.

And this is how it is done:

1. Open the screen so that the image or video to be edited remains visible during editing.

2. Now move the first object node up for it to start at full opacity. Otherwise AlphaWipe and fade in will be superimposed.
3. Right-click the object and select **Enable/display effects** and tab **Effects** will be displayed in the Properties Table.
4. Click the plus sign next to **Effect 1** (or before the next free effect) and then field **--No Effect--** for the select button to appear. Click on and select **AlphaWipe** following which four more entries will appear.
    - **Position - Base** ...you can leave the setting **Fade in time**. For further info on this parameter refer to Base.
    - **Position - Ramp type** ...you can leave the setting **Sawtooth**. For further info on this parameter refer to Ramp type.
    - **Width** ...specifies the width of partial transparency as a percentage of the picture width. It defines the width of the soft mask transition. If you click the right part of the numeric field a small slider will appear which allows you to adjust the soft transition edge. To be able to see the immediate changes the locator needs to be placed between the first two object nodes beforehand.
    - **Direction**...defines the direction of movement for alpha wipes. At 0° movement is horizontal from left to right, at 90° from bottom to top, at 180° from right to left and at 270° from top to bottom. Intermediate values result in the corresponding diagonal movement.
    - **Inverse** ...inverts the internal mask. This way an image can be made invisible via AlphaWipe, which is a very suitable effect for fade outs.
5. Start playback to judge the effect. The effect duration can be defined by moving the second standard node.

Info

- For effect you can also use **AlphaWipeLinear** instead of **AlphaWipe**. The difference lies in the transparent transition in the mask.

- Various varieties of Alpha wipes can be seen in the sample project **Effects Starter - Alpha Wipes**. The easiest way to find sample projects is to click **Extras** - **Open folder** ▶**Sample projects**.

See also

Producing transparent areas through Chroma keying

Transparent areas via masks

Other visual effects

Improved contrast through tonal value adjustment

These functions require the Pro License or higher See Licenses and functions.

Effect **Levels** allows you to adjust the tonal values in order to improve the contrast. This way pictures and videos can be optimized.

And this is how it is done:

1. Open the screen so that the image content remains visible during editing.
2. Right-click the object and select **Enable/display effects** and tab **Effects** will be displayed in the Properties Table.
3. Click the plus sign next to **Effect 1** (or before the next free effect) and then field **--No Effect--** for the select button to appear. Click on and select **Levels** following which two more entries will appear.
   - **Minimum** ➔**0** ...here you enter the tonal value which is to be set to black (0).
   - **Maximum** ➔**255** ...here you enter the tonal value which is to be set to white (255).

Tip: If you click the right part of the numeric field a small slider will appear. It allows easy fine tuning of the picture as its effect will immediately become apparent on the screen.

Info

- For correction of videos that were inaccurately converted from YUV to RGB and appear to be rather dull you can use the base effect **DefaultYUV**. See Visual effects.
- If you tend to edit your pictures or videos via an editing program such as Canopus Edius or Adobe Premiere beforehand, your should also effect tonal value adjustment there and make use of the full range of tonal values when exporting the video.
- Adjustment of tonal values is now also available for live video/TV input. See **Options** - **Global Options** - Video input.

See also

Other visual effects

Dynamic transparency masks

This function requires the Advanced License or higher. However, a few restrictions apply to the Advanced License which are marked in the topic. See also Licenses and functions.

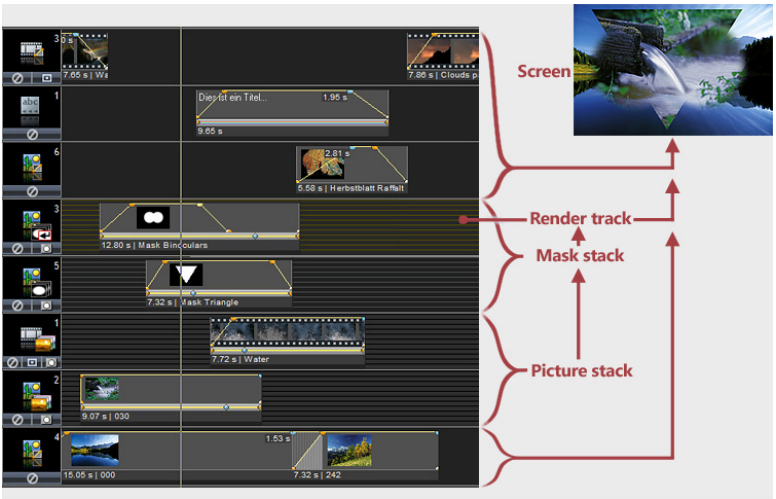
Wings Platinum offers an extensive range of functions for transparent masking of composite images. These masks can be animated via keyframes, i.e. moved, zoomed or rotated independently of the image contents. This topic covers the following items:

How does dynamic masking work?

Defining a routing for the tracks

How does dynamic masking work?

In order to understand the way dynamic masking works we will look at how the various functions are performed:



- Picture and video tracks to be masked are initially output to an internal, virtual **Picture stack**. The fact that the track contents are to be output to a picture stack can be recognized by the symbol in the track head and the black horizontal hatching in the track background.
- Masks are placed on tracks that output to an internal, virtual **Mask stack**. Such tracks can be recognized by the symbol and the gray hatching. Suitable masks are images with alpha channel or images with a color channel that is interpreted as an alpha channel. Also videos can be used for transparency control if an alpha channel was generated via Chroma or Luma keying. All alpha channels in the mask stack are added, with the total defining the transparent area:

In our example the white areas are displayed opaque, i.e. these are the areas of the picture stack that remain visible, while the other areas become invisible due to transparent masking. It is therefore the alpha information that decides whether a picture stack is visible or not. However, this means also that a mask object must be faded in be-

fore the alpha information becomes effective. The ramp band allows the picture stack to be softly faded in and out. If no "mask object" with alpha information is available, the picture stack remains invisible. Please note that mask objects cannot be crossfaded in a track. However, if you attempt to do so there will be a hard edge at the end of the first object.

- The top mask track has the additional task to **Render the picture and mask stacks** and send them to the screen. The location on the mask track defines the location where the masked composite image is added to the other composite images. **Important:** This render track must always contain a mask object in order for the picture and mask stacks to be rendered and output on the screen. Such a track can be recognized by the symbol and the yellow hatching. Alternatively, the mask stack can also be inverted and rendered, which can be recognized by the symbol . A mask track with render functions takes effect on all tracks located below it which output to picture and mask stacks. Only if a new mask track with render function is available further below is the validity area for picture and mask stacks over and new stacks begin. A timeline may contain several such stack units. They are always separated by a mask track with render function.

Defining a routing for the tracks

Picture and video tracks can only be used as described above the track after adjusting the output routing accordingly.

1. In the timeline, highlight the corresponding object and its settings will be displayed in the Properties Table.
2. At the bottom of the table click the plus sign next to **Routing / Masking**. Click **Screen Output** and and select the stack the track is to output to:
    - **Picture stack** ...is selected for tracks you want to mask and that output to the internal picture stack. This can be recognized by the symbol in the track head.

- **Mask stack** ...is available for the Pro License and higher. Choose this mode for tracks you want to place mask objects on and that output to the internal mask stacks. This can be recognized by the symbol in the track head.
- **Mask + Render** ...is only available for the Advanced License. Select this mode for a track that is to accommodate mask objects. This track masks the internal picture track and outputs on the screen. In this case item 3 does not apply as the render function is already contained in this mode, which can be recognized by the symbol in the track head.

3. For the first and top track that outputs to the mask stack you also need to activate the render function. In line **Screen output** click **No Rendering** and , followed by choosing the corresponding function:
   - **Render stack** ...renders the mask stack and outputs the entire set of composite images on the screen which can be recognized by the symbol in the track head.
   - **Render stack inverted** ...results in inverted, i.e. negative rendering of the mask track and output of the masked set of composite images on the screen. This can be recognized by the symbol in the track head.

   The simplest setup would include a mask track with render function and a track with output to the internal picture stack that is masked .

Info

- If the masks on the tracks do not work as expected, check whether the mask function has been enabled in the options. See **Options** - **Project Options** - **Output**.
- Please note that mask objects cannot be crossfaded in a track. However, if you attempt to do so there will be a hard edge at the end of the first object as the crossfade is not working.

- An alpha channel can be converted into an image file or a color channel can be used for transparency control instead of an alpha channel. See Picture Properties and the example in the Workshop.
- Chroma or Luma keying allow you to enter the tonal values of an image or a video, i.e. color or brightness, for transparency control. See Transparent areas through Chroma Keying and Transparent areas through Luma Keying.

Producing transparent areas through Chroma keying

These functions require the Pro License as a minimum. See Licenses and functions.

The Chroma or Luma Keying function allows video elements on a plain colored, bright or dark background to be removed from this background. You may have heard the term Blue Box. This means that a speaker is filmed in front of a blue background, which is later displayed transparent. The speaker separated such from the background can then be placed in front of any other background. It needn't necessarily be a blue box, as the color to be displayed transparent can be matched with the video. The fact that Wings Platinum is able to do chroma keying in real time is a highly interesting feature for live video imports during a presentation.

And this is how it is done:

1. Open the screen and highlight the corresponding video or picture object so that the parameters are displayed in the Properties Table and the picture or video to be removed from the background is displayed on the screen.

2. On the Properties Table select tab **Picture**, **Video** etc. and place a checkmark next to **Realtime effects** below **Output** for tab **Effects** to be displayed.

3. Click the plus sign next to **Effect 1** (or before the next free effect) and then field **--No Effect--** for the select button to appear. Click on and select **ChromaKey** following which four more entries will appear.

4. Choose the color that is to be made transparent. To do so click the color field on the very right of line **Color** and the color selection dialog will appear.

5. The correct color value is most easily selected by means of the pipette. Click the pipette followed by clicking the color on the screen that is to be made transparent. The effect is immediately visible on the screen, so that it is quite easy to choose the correct setting. The color can also be modified via the control elements in the color selection dialog. **Details on color selection**. Finish by clicking **OK**.

   - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
   - Selection of colors is particularly easy via the pipette. Click the **pipette** and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.
     If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:
   - Select a color so that it becomes visible in field **Old / New color** on the right.
   - Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.

- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

6. Use parameters **Range** and **Softness** (edges) to optimize the settings if the default settings do not achieve satisfying results for the transitions between object and backdrop. By clicking the right part of the numeric field a slider control for adjusting the setting will appear.

See also

Transparent areas through Luma keying

Transparent areas via masks

Other visual effects

Producing transparent areas through Luma keying

These functions require the Pro License or higher See Licenses and functions.

LumaKeying allows you to make those areas of picture or a video with a certain brightness transparent. The fact that Wings Platinum is able to do Luma keying in real time is a highly interesting feature for live video imports during a presentation.

And this is how it is done:

1. Open the screen so that the image or video to be edited remains visible during editing.
2. Right-click the object and select **Enable/display effects** and tab **Effects** will be displayed in the Properties Table.
3. Click the plus sign next to **Effect 1** (or before the next free effect) and then field **--No Effect--** for the select button to appear. Click on and select **LumaKey** following which three more entries will appear.

4. In line **Brightness** choose the brightness that is to be made transparent. By clicking the right part of the numeric field a slider for adjusting the brightness value will appear.
5. Use parameters **Range** and **Softness** (edges) to optimize the settings if the default settings do not achieve satisfying results for the transitions between object and backdrop. Here, too, the sliders are a very valuable tool.

See also

Producing transparent areas through Chroma keying

Transparent areas via masks

Other visual effects

Frame around images or videos

These functions require the Advanced License or higher. See Licenses and functions.

Effects **Frame** and **FrameScaled** allow a frame to be put around an image, a video or a live TV/video image. This is particularly suitable if a small images is to stand out from the background. Semi-transparent frames that look like shadows are also possible. Usually, it is more convenient to choose the **FrameScaled** effect, as it allows proportional adjustment of the frame width for changes in size.

And this is how it is done:

1. Open the screen and create a "picture-in-picture" effect, i.e. reduce the corresponding image or video in size so that a smaller image is located on top of a background image. See also "Picture-in-picture" effects.
2. Right-click the object in the timeline and select **Enable/display effects** and tab **Effects** will be displayed in the Properties Table.

3. Under **Base effect** click **Effect** following which the select button will appear on the right. Click on and select **FrameScaled** following which three more entries will appear.
4. The Pipette for color selection is enabled by default (Color Picker). Click the white color field on the very right of line **Color** and the color selection dialog will appear.
5. Click the **Pipette** followed by clicking the color on the screen that is to be used for the frame. The effect is immediately visible on the screen, so that it is quite easy to choose the correct setting. The color can also be modified via the control elements in the color selection dialog. **Details on color selection**. Following this click **OK**.

   - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
   - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

   If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

   - Select a color so that it becomes visible in field **Old / New color** on the right.
   - Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
   - All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

6. **Width** allows the width of the frame line to be adjusted. Just click in the right field and a slider will appear which can be used for adjusting the desired width.
7. Alternatively, the color can also be entered numerically. This is necessary if you want a transparent frame. Click on **Color Mode** and on on the right and select **RGBA values**. Following this eight more entries for color channels and alpha channel will be shown. The color that was previously selected with the Pipette will be used.
8. Towards the end of the list you will find **Alpha [%]**, where you can adjust the corresponding transparency using the slider on the right.

See also

Other visual effects

Animated background

Animated background, e.g. as standby layer or if you want to present media at different aspect ratios as inserts, can easily be created with a few mouse clicks only. As opposed to video loops animated background does not burden the main processor.

This is how it is done:

You need suitable effect textures to start with. Open your project, click **Extras** - **Open folder** ▸**Media Samples** and Windows Explorer will pop up where you can open folder **Effect Textures**.

1. Drag and drop picture **ColorClouds** into the Media Pool or directly into the timeline picture track and extend the object as desired.
2. Open the screen and expand the picture via In-Screen Editing if it does not fill the screen. See also In-Screen-Editing.
3. Right-click the object and select **Enable/display effects** and tab **Effects** will be displayed in the Properties Table.

4. Click the plus sign in front of **Effect 1** followed by clicking into field **--No Effect--** for the select button to appear. Click on and select **ColorAnimation** following which two entries will appear.
5. For **Animation - Basis** select a time basis for the effect animation. The best choice for a background is **System time - cyclic** as it is independent of the object length and the animation is also carried out when playback is paused. This is important for Speaker Support shows when the Locator stops at the pause markers.
6. For **Animation - Cycle time** choose, for instance, one minute **1:00.0** for one animation cycle.
7. At **Animation - Ramp type** choose **Triangle** or **Sine**, for the animation to run back and forth. With a sawtooth setting the animation is virtually looped and may start jumping since beginning and end of the animation pattern do not match.
8. When you playback the background will be animated but be very colorful. This can be changed, though.
9. Click the plus sign in front of **Effect 2** and field **--No Effect--** for the select button to appear. Click on , select **Desaturate**, enter a value of **100**and the picture will be displayed in black and white.
10. To apply the corresponding color, right-click the object and select **Control tracks**. Place a checkmark next to **Combined color tracks** and one in front of **Color** and click **OK**.
11. Double-click the new control track to set a key frame. Right-click it and select **Properties**. Below **Color** on the left click into the white field for the dialog **Select color** to appear. Choose the desired color, which becomes immediately visible in the screen. **Details on color selection**.

    - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a befo-

re/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

12. Close both dialogs by clicking **OK**. The animated background is now complete.

See also

Other visual effects

Effect properties

AddColor Properties

This effect adds a selectable color to the image. This way, images can be colored without them getting any darker. Color corrections are possible, too.

It can be chosen for **Effect 1** to **Effect 7**. The following settings are possible:

Info Since the colors are added, addition of bright colors may quickly result in too high values that cannot be displayed.

AlphaWipe and AlphaWipeLinear

This is a transition effect in the form of a wiping fade. The image is first provided with a transparent mask and becomes visible by moving the mask.

Various varieties of Alpha wipes can be looked at in the sample project **Effects Starter - Alpha Wipes**. The easiest way to find sample projects is to click **Extras** - **Open folder ▶Sample projects**.

This effect can be chosen for Effect 1 to Effect 7. The following settings are possible:

Position ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.

- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Width

...specifies the width of partial transparency as a percentage of the picture width. It defines the width of the soft mask transition. If you click the right part of the numeric field a small slider will appear which allows you to adjust the soft transition edge.

Direction

...defines the direction of movement of the Alpha Wipe. Entry is in degrees. At 0° the movement is horizontal from left to right, at 90° from bottom to top, at 180° from right to left and at 270° from top to bottom. Intermediate values result in the the corresponding diagonal movement.

See also

Wipe transition effects via Alpha Wipe

Backdrop_1...3

These functions require the Pro License or higher. See also Licenses and functions.

These effects allow color animations in various ways:

- **Backdrop_1** ...color animation with soft progression
- **Backdrop_2** ...color animation with line patterns
- **Backdrop_3** ...color animation with soft, oval rings

The only available parameter is **Time**, the **Base** of which you can select:

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle**

time. This makes the speed of the effect independent of the fade in time.

- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

BlueToAlpha Properties

These functions require the Advanced License or higher. See also Licenses and functions

This effect allows the blue channel in a standard image to be used as alpha channel. It can be chosen for **Effect 1** to **Effect 7**. It is primarily suitable for combination with other effects and has no own parameters.

See also

GreenToAlpha Properties

RedToAlpha Properties

LuminanceToAlpha Properties

ChromaKey Properties

LumaKey Properties

Other visual effects

Blur Properties

This function requires the Pro License or higher. See also Licenses and functions.

This is a blurring effect similar to a Gaussian blur. It can be selected for **Base effect**. Please note that only one base effect can be active. The following settings are possible:

Blur

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.

- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
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- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
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- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.

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- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
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- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Blur

...defines the intensity of the blur.

See also

Other visual effects

ChromaKey Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect is used for transparency control via particular colors, e.g. removal of objects from their background via the so-called "Bluebox" effect.

It can be chosen for **Effect 1** to **Effect 7**. The following settings are possible:

Range [°]

...is used for adjusting the tolerance range, i.e. the extent to which adjacent tonal values are utilized.

Softness [°]

...is used for optimizing the transition at the edge of transparency.

See also

Producing transparent areas through Chroma keying

Producing transparent areas through Luma keying

Other visual effects

ColorAnimation Properties

This effect applies colors to your image. It can be chosen for Effect 1 to Effect 7.

The only available parameter is **Time** the **Base** of which you can select:

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.

- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

ConvertToHSV Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect converts the colors in an image from RGB to HSV and has no further parameters. It is used in combination with other effects and, together with ConvertToRGB, allows manipulations in HSV color space. Example:

Effect 1 ➔ **ConvertToHSV**

Effekt 2 ➔ **MultiplyColor** (... only effective in HSV color space)

Effect 3 ➔ **ConvertToRGB**

See also

Other visual effects

ConvertToRGB Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect converts the colors in an image from HSV to RGB and has no further parameters. It is used in combination with other effects and, together with ConvertToRGB, allows manipulations in HSV color space. Example:

Effect 1 ➔ **ConvertToHSV**

Effect 2 ➔ **MultiplyColor** (... effective only in HSV color space)

Effect 3 ➔ **ConvertToRGB**

See also

Other visual effects

CubicBlocks Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect structures an image into cubes and is selected for **Base effect**. Please note that only one base effect can be active. The following settings are possible:

Blocks

... defines the size of the cubes.

Depth

... defines the spatial depth effect of cube representation.

See also

Pixelate Properties

Other visual effects

DefaultYUV Properties

This effect is used for tonal value adjustment of videos if the graphics card does not interpret YUV values correctly, which may result in dull, low-contrast videos in presentation mode. It can be selected for **Base effect**. Please note that only one base effect can be active.

Parameter settings are not possible. The tonal values are adjusted to the following RGB values:

16 to **0**

235 to **255**

Note: If this correction is successful videos may appear too high in contrast in Preview Mode.

See also

Other visual effects

DepthOfField Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect applies unsharpness to the image, with the extent of unsharpness being partially controlled by a texture. It can be selected for **Base effect**. Please note that only one base effect can be active.

The texture for controlling unsharpness must be entered under **Effect textures** and **Texture 1**. This texture must be appropriate for the motif. At the beginning the black texture areas are displayed sharp and later on those areas that are white. All shades of gray are intermediate positions. You may want to take a look at the sample project **Effects Pro - Focus shift**.

Info

- When you apply the effect **DepthOfFieldAlpha** the alpha channel is used for controlling unsharpness, otherwise the effect is identical to **DepthOfField**.
- The effect of focus shift can be looked at in the sample project **Effect Pro - Focus shift**. The easiest way to find sample projects is to click **Extras** - **Open folder** ▶**Sample projects**.

The following settings are possible:

Focus ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.

- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.

- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Blur

.....defines the intensity of the blur.

See also

Other visual effects

Desaturate Properties

This effect changes the color saturation of an image, i.e. it becomes black and white in extreme cases. It can be chosen for **Effect 1** to **Effect 7**.

This effect can be seen in sample project **Effects Pro - Old photographs and films**. The easiest way to find sample projects is to click **Extras** - **Open folder ▶Sample projects**.

The following settings are possible:

Desaturation ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the

effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.

- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Desaturation [%]

...defines the color saturation. **0** means full color saturation and **100** no color saturation, i.e. black and white.

Distort Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect uses a texture to deform the image, e.g. to create a "heat haze". It can be selected for **Geometry effect**. Please note that only one geometry effect can be active.

An example of this effect can be seen in sample project **Effects Pro - Heat haze**. The easiest way to find sample projects is to click **Extras** - **Open folder ▶Sample projects**.

The texture for implementing this effect must be specified under **Effect textures** at **Geometry**. Sample textures can be found by clicking **Extras** - **Open Folder ▶ Media Samples**, followed by opening folder **Effect Textures**.

The following settings are possible:

Time ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.

- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent

of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Distortion [px]

.... defines the intensity of image deformation. Values between **0** and **40** are possible.

Direction [°]

... defines the direction of deformation, e.g. of the haze.

See also

Other visual effects

Drop Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect provides the image with a concentric undulation. It can be selected for **Geometry effect**. Please note that only one geometry effect can be active. The following settings are possible:

Time ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle

time. This makes the speed of the effect independent of the display time.

- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after

the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Amplitude

... defines the height of the wave crests.

Center X

... defines the center of the undulation in the horizontal plane.

Center Y

... defines the center of the undulation in the vertical plane.

Scale

... defines the number of undulations.

See also

Other visual effects

EffectMaskAlpha Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect uses a mask texture saved in the alpha channel to mask an effect so that it does not affect the entire image. Therefore, it can only be used appropriately in combination with other effects.

This effect can be chosen for **Effect 1** to **Effect 7**. The image with the mask in the alpha channel must be specified under **Effect textures** at **Effect mask**. Further settings are not possible.

See also

EffectMaskRed

Other visual effects

EffectMaskRed

This function requires the Pro License or higher. See also Licenses and functions.

This effect uses a mask texture saved in the red channel to mask an effect so that it does not affect the entire image. Therefore, it can only be used appropriately in combination with other effects. The mask is actually an image with black background where those areas that are to be transparent have to be red. Dark red areas are therefore displayed semi-transparent.

This effect can be chosen for **Effect 1** to **Effect 7**. The image with the mask in the red channel must be specified under **Effect textures** at **Effect mask**. Further settings are not possible.

See also

EffectMaskAlpha Properties

Other visual effects

FadeToColor Properties

This effect fades the picture to a defined color and has a definable time basis. It can be chosen for **Effect 1** to **Effect 7**.

The following settings can be made:

Intensity ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.

- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

See also

Other visual effects

Flag Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect provides the image with an undulation that looks like a flag fluttering in the breeze. It can be selected for **Geometry effect**. Please note that only one geometry effect can be active.

The following settings can be made:

Time ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.

- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in

the timeline which have all been provided with an effect with the same time basis.

- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Amplitude

... defines the intensity of the fluttering or undulating movement.

Scale

... defines the number of undulations.

See also

Other visual effects

Frame Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect allows a frame with a fixed frame width to be put around an image or a video. This may be useful for static "Picture-within-picture" effects. **Note:** For dynamic objects you should use the **FrameScaled** effect instead as it adjusts the line width whenever there are changes in the size. See FrameScaled Properties.

It can be selected for **Base effect**. Please note that only one base effect can be active.

The following settings are possible:

Color Mode

At **Color Mode** you choose the way of or the color parameters for defining the colors:

Color Picker ...selection via the color dialog. Click the color field on the very right of line Color to open the color selection dialog. Selection of colors is particularly easy via the pipette. See also Color selection.

RGBA values ...specifies the base colors red, green, blue and the transparency (alpha). For each of these parameters a **base** for controlling the timing can be defined.

HSBA values ...specifies hue, saturation, brightness and transparency (alpha). For each of these parameters a **base** for controlling the timing can be defined.

Info Even after choosing a color via the color section dialog will it still be possible to change over to **RGBA values** and select a transparency additionally under **Alpha [%]**.

Width [px]

...defines the frame width in pixels.

Info

- The thickness of the frame on the screen depends, among other factors, on the size of the display data. A frame with a thickness of 10 pixels at display data that are 1000 pixels wide appears to be double the size compared to a 10-pixel frame at display data that are 2000 pixels wide. For static "picture-in-picture" it will usually do to have the display data size optimized by Wings Platinum in order to achieve uniform frame thicknesses. See Optimizing display data for pictures and text objects.

See also

Other visual effects

FrameScaled Properties

This function requires the Advance License or higher. See also Licenses and functions.

This effect allows a frame to be put around a picture or video. This may be useful for "picture-in-picture" effects. As opposed to the **Frame** effect the frame width is adjusted proportionally when the image or video is enlarged or reduced in size. This may be useful for the output of media in different

sizes. It can be selected for **Base effect.** Please note that only one Base effect can be active.

The following settings are possible:

Color Mode

At **Color Mode** you choose the way of or the color parameters for defining the colors:

Color Picker ...selection via the color dialog. Click the color field on the very right of line Color to open the color selection dialog. Selection of colors is particularly easy via the pipette. See also Color selection.

RGBA values ...specifies the base colors red, green, blue and the transparency (alpha). For each of these parameters a **base** for controlling the timing can be defined.

HSBA values ...specifies hue, saturation, brightness and transparency (alpha). For each of these parameters a **base** for controlling the timing can be defined.

Info Even after choosing a color via the color section dialog will you still be able to change over to **RGBA values** and select a transparency additionally under **Alpha [%]**.

Width

...defines the frame width.

See also

Other visual effects

Gamma Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect changes the gradation of the image, i.e. it makes it "softer" or "harder". It can be chosen for **Effect 1** to **Effect 7**.

For **Gamma** you enter a factor by which the current gamma of the graphics card is to be changed. Factor **1** would therefore mean no change, a factor below 1 would soften the image while a factor of 1 would make it harder.

See also

AddColor Properties

Levels Properties

Other visual effects

GreenToAlpha Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect allows the green channel in a standard image to be used as alpha channel. It can be chosen for **Effect 1** to **Effect 7**. It is primarily suitable for combination with other effects and has no own parameters.

See also

BlueToAlpha Properties

RedToAlpha Properties

LuminanceToAlpha Properties

ChromaKey Properties

LumaKey Properties

Other visual effects

HueSaturation Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect is used for influencing the colors in the HSV color model, i.e. of hue, saturation and brightness. It can be chosen for **Effect 1** to **Effect 7**.

The following settings can be made:

Hue...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.

- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Hue [°]

... shifts the colors in the color wheel and completely new colors are created.

Saturation [%]

... changes the color saturation.

Gain [%]

... influences the brightness. Highlights are more strongly affected than the shadows.

Offset

... influences the brightness but the highlights and shadows are also considered.

See also

Levels Properties

AddColor Properties

Other visual effects

IgnoreAlpha Properties

This effect prevents utilization of the alpha channel. It is meant for combination with other effects and can be chosen for **Effect 1** to **Effect 7**.

There are no further parameters available.

InvertAlpha Properties

This effects converts the alpha channel, i.e. transparent areas become opaque while visible areas become transparent. It is meant for combination with other effects and can be chosen for **Effect 1** to **Effect 7**.

There are no further parameters available.

If no alpha channel is available the picture will remain invisible.

See also

InvertColor Properties

InvertColorAlpha Properties

Other visual effects

InvertColor Properties

This effects converts the colors of the image into negative colors. It can be selected for **Effect 1** to **Effect 7** and has no further parameters.

See also

InvertAlpha Properties

InvertColorAlpha Properties

Other visual effects

InvertColorAlpha Properties

This effects converts the alpha channel, i.e. transparent areas become opaque while visible areas become transparent and inverts the colors of the image. It is meant for combination with other effects and can be chosen for **Effect 1** to **Effect 7**.

There are no further parameters available

If no alpha channel is available the picture will remain invisible.

See also

InvertAlpha Properties

InvertColor Properties

Other visual effects

LED Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect makes the image look like a LED wall. It can be selected for **Base effect**. Please note that only one base effect can be active.

Effect **LED** requires the texture**LEDBayer_square** (square LEDs) or **LEDBayer** (round LEDs), which must be specified under **Effect texture** at **Texture 1**. The textures are available in folder**...Media Samples\ Effect Textures**. Just click **Extras** - **Open folder** ▶**Sample media**.

The following settings are possible:

Scale

...defines the size of the LEDs.

Info If the image is too dark you can brighten it up using the additional effect **Levels** or **HueSaturation**.

See also

Other visual effects

Levels Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect adjusts the tonal values for highlights and shadows, e.g. in order to improve contrast. It can be chosen for **Effect 1** to **Effect 7**.

The following settings can be made:

Minimum ➔

... specifies the minimum value that is set to zero, i.e. black.

Maximum ➔ 255

... specifies the light value that is set to 255, i.e. white.

See also

AddColor Properties

Other visual effects

LumaKey Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect allows transparency control using the brightness of an image or video. It can be chosen for **Effect 1** to **Effect 7**.

The following settings can be made:

Brightness [%]

... defines the brightness that is to become transparent.

Range [%]

... is used for adjusting the tolerance range, i.e. the extent to which adjacent tonal values are utilized.

Softness [%]

... is used for optimizing the transition at the edge of transparency.

See also

Producing transparent areas through Luma keying

Producing transparent areas through Chroma keying

Other visual effects

LuminanceToAlpha Properties

This effect uses the brightness of an image to produce an alpha channel. Objects with this effect can be used as mask objects. It can be chosen for **Effect 1** to **Effect 7**.

The following settings are possible:

Gain [%]

... influences the brightness and thus the transparency areas. Highlights are more strongly affected than shadows.

Offset

... influences the brightness but the highlights and shadows are also considered.

See also

BlueToAlpha Properties

GreenToAlpha Properties

RedToAlpha Properties

ChromaKey Properties

LumaKey Properties

Other visual effects

Monochrome Properties

This effect changes the color saturation of an image, i.e. it becomes black and white in extreme cases. It can be chosen for **Effect 1** to **Effect 7**. No further parameters can be set.

See also

HueSaturation Properties

Other visual effects

MultiplyColor Properties

This effect multiplies the color values of an image by a selectable color. In its results it can be compared to a color filter. This effect can be seen in sample project **Effects Pro - Several objects with effects**. The easiest way to find sample projects is to click **Extras** - **Open folder ▶Sample projects**.

It can be chosen for **Effect 1** to **Effect 7**.

The following settings can be made:

Color Mode

At **Color Mode** you choose the way of or the color parameters for defining the colors:

Color Picker ...selection via the color dialog. Click the color field on the very right of line Color to open the color selection dialog. Selection of colors is particularly easy via the pipette. See also Color selection.

RGBA values ...specifies the base colors red, green, blue and the transparency (alpha). For each of these parameters a **base** for controlling the timing can be defined.

HSBA values ...specifies hue, saturation, brightness and transparency (alpha). For each of these parameters a **base** for controlling the timing can be defined.

See also

AddColor Properties

Other visual effects

OldMovie Properties

This effect makes an image or video look like an aged film. This effect can be seen in sample project **Effects Pro - Old photos and movies**. The easiest way to find sample projects is to click **Extras** - **Open folder ▶Sample projects**.

Effect **OldMovie** is selected for **Base effect**. Please note that only one base effect can be active. It requires the texture **OldMovie**, which needs to be specified under **Effect texture** at **Texture 1**. The textures are available in folder**...Media Samples\ Effect Textures**. Just click **Extras** - **Open folder ▶Sample media**.

The following settings are possible:

Time ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle

time. This makes the speed of the effect independent of the fade out time.

- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Speed

...influences the frequency of the jittering movement that simulates reduced image steadiness.

Jitter [px]

...specifies the image offset during the jittering movement.

Scratch ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.

- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (lo-

cation of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

LightFalloff

...defines the intensity of vignetting older film cameras and projectors used to have.

See also

OldPhoto Properties

Other visual effects

OldPhoto Properties

This effect applies sepia tones to an image. It can be chosen for **Effect 1** to **Effect 7** and requires no further settings.

Info

- Contrast can additionally be influenced via the effect **Levels**. See Improving contrast via tonal value adjustment.
- This effect can be seen in sample project **Effects Pro - Old photos and movies**. The easiest way to find sample projects is to click **Extras** - **Open folder** ▸**Sample projects**.

See also

OldMovie Properties

Sepia Properties

Other visual effects

Pixelate Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect divides the image into larger or smaller pixel blocks. It can be selected for **Base effect**. Please note that only one base effect can be active.

The following settings are possible:

Pixels

... defines the size of the pixels.

See also

CubicBlocks Properties

Other visual effects

Posterize Properties

This effect reduces the color palette of an image. It can be chosen for **Effect 1** to **Effect 7**.

The following settings are possible:

Levels

...defines the number of levels (colors).

See also

PosterizeVariable Properties

Pixelate Properties

Other visual effects

PosterizeVariable Properties

This effect reduces the color palette of an image also in an animated way. It can be chosen for **Effect 1** to **Effect 7**.

The following settings are possible:

Time ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.

- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent

of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.

- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent

of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

MinLevels

...defines the number of colors that are to be effective at the beginning of the animation.

MaxLevels

...defines the number of colors that are to be effective at the end of the animation.

See also

Posterize Properties

Pixelate Properties

Other visual effects

RedToAlpha Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect allows the red channel in a standard image to be used as alpha channel. It can be chosen for **Effect 1** to **Effect 7**. It is primarily suitable for combination with other effects and has no own parameters.

See also

BlueToAlpha Properties

GreenToAlpha Properties

LuminanceToAlpha Properties

ChromaKey Properties

LumaKey Properties

Other visual effects

Scharr Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effects causes the hard edges to be displayed in white and the rest transparent. Being a graphic effect it can easily be combined with other images. It can be selected for **Base effect**. Please note that only one base effect can be active.

This effect has no further parameters and is primarily suitable for combination with other effects and images.

See also

ScharrDirectional Properties

Other visual effects

ScharrDirectional Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effects causes the edges to be displayed transparent and the rest dark. The image is located below it and becomes visible at the transparent edges. The offset angle between edge mask and image can be selected. The effect can be selected for **Base effect**. Please note that only one base effect can be active.

The following settings are possible:

Direction ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.

- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent

of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Direction [°]

...specifies the direction in which the dark mask is moved.

See also

Scharr Properties

Other visual effects

SeparateColorPlanes Properties

This function requires the Pro License or higher. See also Licenses and functions.

This effect offsets the individual color channels with reference to each other in order to produce color fringing. It can be selected for **Base effect**. Please note that only one base effect can be active.

The following settings are possible:

RedAngle [°]

...defines the offset direction of the red channel.

GreenAngle [°]

...defines the offset direction of the green channel.

BlueAngle [°]

...defines the offset direction of the blue channel.

RedOffset [px]

...defines the offset value for the red channel.

GreenOffset [px]

...defines the offset value for the green channel.

BlueOffset [px]

...defines the offset value for the blue channel.

See also

Other visual effects

Sepia Properties

This effect changes the images into sepia colors, with the shades of colors for lights and shadows being individually definable. It can be chosen for **Effect 1** to **Effect 7**.

The following settings are possible:

LightColor - Mode

Here you choose the way of or the color parameters for defining the colors for the highlights:

Color Picker ...selection via the color dialog. Click the color field on the very right of line **LightColor** to open the color selection dialog. Selection of colors is particularly easy via the pipette. See also Color selection.

RGBA values ...specifies the base colors red, green, blue and the transparency (alpha). For each of these parameters a **Base** for controlling the timing can be defined.

HSBA values ...specifies hue, saturation, brightness and transparency (alpha). For each of these parameters a **Base** for controlling the timing can be defined.

LightColor

...defines the color for the highlights.

DarkColor Mode

Here you choose the way of or the color parameters for defining the shadow:

Color Picker ...selection via the color dialog. Click the color field on the very right of line **DarkColor** to open the color selection dialog. Selection of colors is particularly easy via the pipette. See also Color selection.

RGBA values ...specifies the base colors red, green, blue and the transparency (alpha). For each of these parameters a **Base** for controlling the timing can be defined.

HSBA values ...specifies hue, saturation, brightness and transparency (alpha). For each of these parameters a **Base** for controlling the timing can be defined.

DarkColor

...defines the color for the shadows.

Desaturation [%]

... specifies the saturation of the image.

Toning [%]

... defines the intensity of sepia toning

See also

OldPhoto Properties

OldMovie Properties

Other visual effects

Sharpen Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect sharpens the image before it is output, which is particularly interesting for videos. It can be selected for **Base effect**. Please note that only one base effect can be active.

The following settings are possible:

Sharpness ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.

- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.

- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Sharpness

...defines the extent of sharpening. Use this effect only very cautiously and select only values between 10 and 30. Above 40 you will get highly extreme effects which would only make sense in very special cases.

See also

Other visual effects

Sobel Properties

This effects causes the hard edges to be displayed in white and the rest transparent, which can easily be combined with other images. The effect can be selected for **Base effect**. Please note that only one base effect can be active.

This effect does not require any further settings.

This effect can be seen in sample project **Effects Pro - Several objects with effects**. The easiest way to find sample projects is to click **Extras** - **Open folder ▶Sample projects**.

See also

SobelDirectional Properties

Scharr Properties

ScharrDirectional Properties

Other visual effects

This effects causes the edges to be displayed transparent and the rest dark. The image is located below it and becomes visible at the transparent edges. The effect can be selected for **Base effect**. Please note that only one base effect can be active.

The following settings are possible:

Direction ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle**

time. This makes the speed of the effect independent of the fade in time.

- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Direction[°]

... defines the offset direction of the edge mask.

See also

Sobel Properties

Scharr Properties

ScharrDirectional Properties

Other visual effects

Solarization Properties

This effects converts the colors of the image into negative colors. It can be chosen for **Effect 1** to **Effect 7**.

The following settings are possible:

Solarization ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers

to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers

to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Solarization [%]

...specifies the degree of solarization, when **Constant** was chosen as base.

See also

Other visual effects

Tunnel Properties

This effect offers animation of distortion, rotation and zoom. It can be selected for **Base effect**. Please note that only one base effect can be active.

The following settings are possible:

LightColor Mode

Here you choose the way of or the color parameters for defining the light at the end of the tunnel:

- **Color Picker** ...selection via the color dialog. Click the color field on the very right of line **LightColor** to open the color selection dialog. Selection of colors is particularly easy via the pipette. See also Color selection.
- **RGBA values** ...specifies the base colors red, green, blue and the transparency (alpha). For each of these parameters a **Base** for controlling the timing can be defined.
- **HSBA values** ...specifies hue, saturation, brightness and transparency (alpha). For each of these parameters a **Base** for controlling the timing can be defined.

LightColor

...specifies the light at the end of the tunnel.

Time 1 ... (zoom) and **Time 2** ... (rotation)

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.

- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).

- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Center X

...defines the location of the center in horizontal direction.

Center Y

...defines the location of the center in vertical direction.

Scale 1

... defines the number of times the image is repeated in the depth as suggested by the length of the tunnel.

Scale 2

...defines the number of times the image is repeated in its circumference.

Falloff

... defines the intensity or the size of the light spot at the end of the tunnel.

See also

Other visual effects

Vignetting Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect applies vignetting to the image. It can be chosen for **Effect 1** to **Effect 7**.

The following settings are possible:

Falloff

... defines the size of vignetting.

See also

Other visual effects

Water Properties

This effect turns the image into a moving water surface. The effect can be selected for **Base effect**. Please note that only one base effect can be active. For the effect to work you need to load two textures under **Effect textures**. For **Texture 1** you load **water 1** and for **Texture 2 water 2**. These textures can be found by clicking **Extras** - **Open Folder** ▸ **Media Samples**, followed by opening folder **Effect Textures**.

The effect of a water surface can be looked at in sample project **Effects Pro - Water**. The easiest way to find sample projects is to click **Extras** - **Open folder** ▸**Sample projects**.

The following settings are possible:

Time ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.

- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
- **Display time - cyclic** ...the effect duration corresponds to the display time, but the duration of an effect cycle can be specified as Cycle time. This makes the speed of the effect independent of the display time.
- **Fade in time** ...the effect duration corresponds to the fade in time, i.e. the speed of the effect depends on the fade in time.
- **Fade in time - cyclic** ...the effect is only carried out during the fade in time, but the duration of an effect cycle can be entered as **Cycle time**. This makes the speed of the effect independent of the fade in time.
- **Fade out time** ...the effect duration corresponds to the object fade out time, i.e. the speed of the effect depends on the fade out time.
- **Fade out time - cyclic** ...the effect is only carried out during the fade out time, but the duration of an effect cycle can be entered as Cycle time. This makes the speed of the effect independent of the fade out time.
- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
- **Timeline time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and the start time for the first effect cycle is the beginning of the timeline. This causes an effect which is independent

of the object in terms of speed and start time. Effect animation, however, stops when playback is paused, e.g. when the locator is waiting at a pause marker. As the effect refers to one particular object it is only carried out as long as the object is played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.

- **System time - cyclic** ...the duration of an effect cycle is specified by the **Cycle time** and is controlled by the PC clock. It causes an effect which is completely independent in terms of speed and start time (location of the animation pattern). The animation continues even after the Locator has stopped at the pause marker. As the effect applies to objects it is only carried out as long as the objects are played.

- Cycle time

A **Cycle time** can be entered for cyclic effects, i.e. the effect progression is not dependent on other objects but can be freely defined.

- Ramp type

Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.

- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.
- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
- **Display time** ...the effect duration corresponds to the object display time, i.e. the speed of the effect depends on the display time.
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- **Timeline time** ...the duration of an effect cycle corresponds to the period from the beginning of the timeline to the end of the last object. I.e. The position of the last object influences the speed of the effect. Effect animation is stopped while playback is paused, e.g. when the locator is waiting at a pause marker. Since the effect refers to a particular object it is only performed while the object is being played. This setting is appropriate when there are several objects in the timeline which have all been provided with an effect with the same time basis.
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- Ramp type

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- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Reflection

... defines the intensity of reflections on the "water surface".

Highlight

... defines the intensity of the wave structure.

WaveImpact

... defines the swell, i.e. the intensity of the wave movement.

Detail

... influences the quantity and the size of the waves.

See also

Other visual effects

Wobble Properties

These functions require the Advance License or higher. See also Licenses and functions

This effect causes a partial and wave-like distortion of the image. It can be selected for **Geometry effect**. Please note that only one geometry effect can be active.

The following settings can be made:

Time ...

- Base

Base specifies the time-specific parameters for carrying out the effect. The following options are available:

- **Constant** ...the effect is permanently applied. The parameter intensity can be fixed between **0** and **100**.
- **Device** ...effect execution is controlled by a device, e.g. audio level, joystick, DMX etc. See External control of effect parameters.
- **Object time** ...the effect duration corresponds to the object length, i.e. the speed of the effect depends on the object duration.

- **Object time - cyclic** ...the effect duration corresponds to the object length, but the duration of an effect cycle can be specified as **Cycle time**. This makes the speed of the effect independent of the object duration.
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- Cycle time

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Ramp type defines the progression of the effect during a cycle. The following options are available:

- **Sawtooth** ...the effect starts again at the end of an effect cycle (loop).
- **Triangle** ...the effect runs forward and back again, i.e. several effect cycles cause alternating animations.
- **Sine** ...similar to "triangle", but the speed is not uniform but reduced towards the end of the effect.

Amplitude [px]

...defines the intensity of distortion.

Scale

...defines the number of distorting undulations.

See also

Flag Properties

Water Properties

Other visual effects

Keyframe controlled effects

Motion: Position - Zoom - Rotation

Media objects, such as picture, video, live video/TV or text objects allow keyframe control for dynamic positioning and modification of pictures and videos on the screen. This way "picture-in-picture" effects, camera movements, zoom effects or rotation of pictures can very simply be implemented. The following operations are possible:

- **Picture-in-picture** ...a smaller picture is located on top of a background picture. This works with videos, too. See also "Picture-in-picture" effects.
- **Cropping** ...when a pictures is not to be displayed in its entirety, an enlarged section can be chosen.
- **Motion and zoom effects** ...pictures and videos can be moved on the screen or changed dynamically in size. When the picture is larger than the screen, with only a section of it being visible, this is called camera movement.
- **Rotation of pictures** ...in all three axes. Can be used for rotating pictures in space and tilting them.

To find out about the Keyframe functionality, we have prepared a workshop. See Camera movement across still pictures.

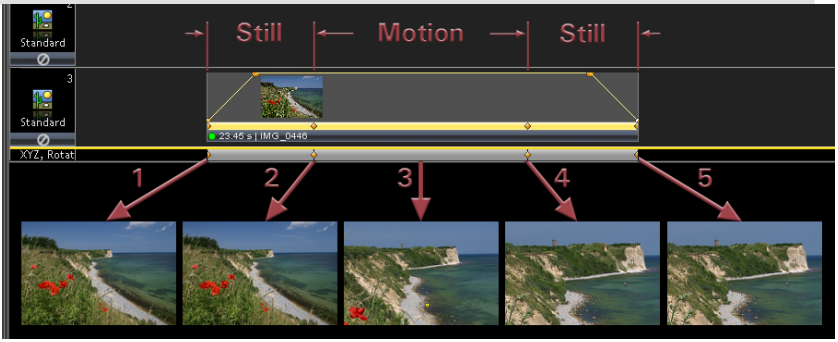
This topic covers the following items:

- In-Screen-Editing and the basics of a camera movement
- Numeric editing of keyframe properties

In Screen Editing

When images are edited in the screen, the corresponding object is automatically provided with control tracks and keyframes. Key frames are actually markers containing the values for manipulating image parameters, i.e. in this case for size, position, rotation of image or video. The area between two keyframes contains consecutive in-between values, which become visible as motion, zoom or rotation. **Example for the effects of keyframes.**

The keyframes in the control track define position and size of the picture. The image is located between (1) and (2), as both keyframes contain identical position parameters. The different locations are saved in the first (2) and next set keyframe (4); that's why the image moves and is expanding. The intermediate positions (3) are created consecutively. At the end, between (4) and (5), the image is still again.



When you use In-Screen Editing you need not enter the numerical values of keyframes. This is done automatically by Wings Platinum when the images are shifted in the screen. Of course, it is also possible to optionally change the value in the Keyframe Properties.

In creating and editing keyframes, strictly follow the steps below:

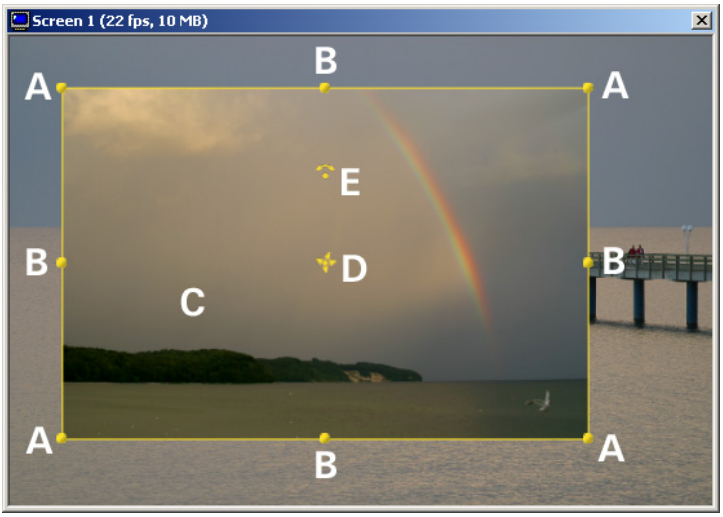
1. **Concept:** Please consider carefully what keyframes you require for your effect and where in time they need to be located.
2. **Time position:** Move the Locator to the location where a keyframe is to be created or to the keyframe you want to edit.

3. **Tools:** Activate the required tools. Use the temporary activation option by holding the corresponding keys during editing. This has the advantage that manual resetting of the tool is not required.
4. **In Screen Editing:** Only now should you editing the object in the screen.

Note: For information on numeric editing of keyframes go this section.

And this is how it is done:

1. In the vertical toolbar right-click the first button and select **Edit objects in timeline and screen** so that the following icon is displayed . As an alternative, you can also press the **S** key for In-Screen Editing to be permanently enabled.
2. Move the Locator to the corresponding location in time where you want to create a keyframe in the object.
3. In the screen, click the corresponding image or video, etc. so that it is displayed with a yellow frame which allows grabbing. **Tip:** If the wrong object is provided with a frame, right-click the object in the timeline and select **In Screen Editing** and it will be highlighted on the screen. Via the yellow frame, the object in the screen can be edited as follows:
    - **Size** ...by dragging the handles in the corners (A) you can change the size proportionally, i.e. the currently set aspect ratio is maintained. The handles at the side (B) effect a change in X or Y direction, i.e. the can be used for stretching and compressing the image. If you want to restore the original aspect ratio, you need to press the **Shift** key while dragging the corner handles (A).
    - **Position ...**grab the image within the frame (C) to move it.
    - **Rotation** ...grab the symbol in the center of the picture (D) to rotate it around the X and the Y-axis, use the handle above (E) it to rotate it around the Z-axis. It is important that you grab the dot in the center or below the symbol.



If you modify the image as explained above the keyframes are created immediately. If the object has control tracks for individual parameter objects, the Keyframe Editor open automatically. See also The Keyframe Editor.

4. The tools offer various options for In Screen Editing. **Important:** The tools must be enabled before you start editing. Temporarily enabling the function by holding the corresponding key while editing is quite a useful option, i.e. **Hold the key →Edit →Let go of the key.** Further information on handling the toolbar can be found in The Toolbar.

   - In the toolbar you will find various modes for keyframe creation in the fourth tool button. They will show if you right-click the button:

     Normal keyframes ...the values of a newly created keyframe are only effective at the location of the keyframe. Short cut via key **N**.

     Keyframes constant for object ...the values of a new keyframe are also copied and pasted to start and end frame, thus applying to the entire object. Shortcut via key **C**.

Keyframes constant from object beginning ...the values of a new keyframe are copied and pasted into the start frame. Thus, the same values apply from the object beginning to the newly created keyframe. Shortcut via key **B**.

Keyframes constant to object end ...the values of a new keyframe are copied and pasted also to the end frame. Thus, the same values apply from the new keyframe to the object end. Shortcut via key **E**.

- The ramp shape is influenced by the Keyframe Properties or nodes. The toolbar allows you to select the property for newly created keyframes:

Linear keyframes ...the parameter curve behaves like a thread and runs in a zigzag line from one keyframe to the other. Shortcut via key **I**.

Spline keyframes ...the parameter curve behaves like a steel wire and runs in a curve from one keyframe to the other. Shortcut via key **O**.

SmartMove Keyframes ...the parameter curve, starting from a horizontal curve, runs smoothly to the next keyframe and is ideal for movements that are softly accelerated and decelerated. It is a Bezier keyframe which is set up to adjust to object modifications. Shortcut via the **Z** key.

- For the handles to remain visible in the screen during editing, the display in the screen window needs to be adjusted, which is particularly the case when zooming into pictures. This is normally done automatically via the **Auto Zoom** function. The white rectangle marks the contents that are later displayed in the show. However, display of the screen contents can also be changed manually by activating the tool **Pan**. Shortcut via key **P.** Turn the mouse wheel to affect the size, grab and drag the handles to shift the contents. When the display is modified the screen border is marked by a white frame and the window title

bar shows its percentage. See Enlarging/reducing the screen content.

- The edited image or video, etc. can be displayed partly transparent to facilitate aligning with other objects. The degree of transparency can be controlled by pressing the following number keys during editing: 1 = 25 %, 2 = 50 %, 3 = 75 % and 4 = 100 % opacity. Entry of **0** gets the transparency based on the object ramp band.
- If the keyframes on a combined control track cannot be edited selectively enough you can convert the control track into individual parameter objects. Right-click the combined control track in the object and select **Convert into single tracks**. Turn the mouse wheel to affect the size, grab and drag the handles to shift the contents. Editing of ramps and nodes in the parameter objects is identical to that of other objects. See Editing the ramp band.
- To allow in-screen editing on a second monitor with full-screen display, you need to change the screen properties under **Full-screen settings** and place a checkmark next to **Display mouse cursor**.
- You can also take prepared keyframe effects from the control track pool and use them for objects, or copy control tracks from the Keyframe Editor and paste them into the Pool. See Using predefined keyframe effects.

Info

- During In Screen Editing opacity or brightness of a picture is set to 100%.
- For In Screen Editing, the snap radius for the handles can be changed. See **Options** - **Global Options** - **In Screen Editing**.
- Via In-Screen Editing you can program rotations of a maximum of +/- 360 degrees, i.e. one rotation into the one or the other direction. For several rotations you need to use the Keyframe Dialog or the Properties Table, respectively or parameter objects.
- When placing images and videos in the timeline they can **automatically be zoomed to original size** by pressing the **Alt** key when releasing the mouse button. The images are displayed pixel-accurately with

the reference being the currently set screen output size. See Screen Properties. Please bear in mind that the native size of images only takes effect after display data optimization.

- Screen option **Reset pan / zoom** gives you the chance to decide whether the Pan/Zoom settings are to be automatically reset during the Presentation (**F 5**) or not. See Screen Properties.
- You can now choose whether new objects are to be created with control tracks for keyframes or not. See **Objects** - **Global Options** - **Objects**.
- Optionally, keyframes in combined control tracks can also be edited via the Keyframe Editor. This may be an advantage if you frequently dissolve objects in one track. In that case, the keyframes located in the dissolve area can also be edited. This option can be selected under **Global Options** - **In Screen Editing**.
- The keyframes of the objects usually refer to the screen, i.e. they have absolute character. However, you can also use **relative keyframes** referring to the screen field. If you move the screen field or change its size, all objects with a control track for size and position output to this screen field are also modified in terms of size and position. See Properties of Picture tracks, Text tracks, Video tracks or Live Video/TV tracks.

Numerical editing of keyframes

If you do not want to create the effects via In-Screen Editing, you can also take a different approach. For control via keyframes you need to add a control track to an object which allows setting of keyframes. In the Properties Table you can make settings for image manipulation, i.e. for size, position, rotation of images or videos. The area between two keyframes contains consecutive in-between values, which become visible as motion, zoom or rotation. **Example for the effects of keyframes.**

The key frames in the control track define position and size of the picture. The image is located between (1) and (2), as both keyframes contain identical position parameters. In the first (2) and next set keyframe (4) different locations are saved, that's why the image moves and is expanding. The intermediate positions (3) are created consecutively. At the end, between (4) and (5), the image is still again.

Keyframe Properties can optionally be edited in the dialog box or in the Properties Table, with the table allowing numeric and graphic editing to be alternated.

Editing in the Table

The Properties Table shows all the parameters of a keyframe during In-Screen Editing. There is, however, one exception: The center of rotation can only be edited in the dialog box. If you have shifted the center of rotation via the dialog you should continue editing the keyframe via the dialog only.

After highlighting a keyframe, its parameters are displayed in the Properties Table. If a new keyframe is created via in-screen editing the values are immediately displayed in the Table. Please refer also to the basics on Editing in the Properties Table.

The following parameters can be edited in the Keyframe Properties Table:

Rotation

- **X angle** ... rotates the image around the horizontal axis, i.e. it tilts the image over to the front or the back.
- **Y angle** ... rotates the image around a vertical axis, i.e. the right edge of the image moves to the front or to the back.
- **Z angle** ... rotates the image around the depth axis, i.e. the image is tilted to the right or to the left.
- **Reset** ... after clicking **Reset** a button is displayed on the right which allows you to rest all three values to zero.

Position / Zoom

- **X position** ... moves the images to the right or left
- **Y position** ... moves the image to the top or bottom
- **X zoom** ... zooms into or out of the image in width
- **Y zoom** ... zooms into or out of the image in height
- **Reset** ... after clicking **Reset** a button is displayed on the right which allows you to rest all three values to zero.

Keyframe

- **Edit display** ... during In-Screen Editing the image is adjusted to the opacity set here.
- **Ramp type** ...defines the ramp characteristic. For softer camera movements choose **SmartMove** or **Spline**.
- **Smart factor L** ... for **SmartMove**, it defines the softness of deceleration. Choose 100 for maximal soft and zero for abrupt stopping.
- **Smart factor R** ... as above, but for acceleration, i.e. to the right of the keyframe.
- **Copy values** ... if you click **Copy values** three buttons will show for copying the keyframe values to the initial frame , to initial and end frame and to the end frame . **Important:** You need to highlight the keyframe whose values you want to copy.

  Info Please note that copying this function may change the chosen ramp property from **Spline** to **SmartMove** to avoid unwanted movement.
- **Clipboard** ...if you click **Clipboard**, buttons for copying to the clipboard and for pasting from the clipboard are displayed.

Editing in the dialog

1. If there is no control track available, right-click the object whose picture or video is to be controlled and select **Control tracks**.
2. In the dialog box, you can choose combined control tracks at the top. Add a checkmark next to **Size, position, rotation** and close the dialog by clicking **OK**.
3. The object has been provided with a combined control track which is marked by a yellow line. Double-click the control track to set a key frame. This keyframe can be grabbed and shifted, if necessary. If the screen is not open, open it now, e.g. by pressing **F10**.
4. Right-click the key frame and select **Properties**. When the dialog is opened, the brightness or opacity of the corresponding picture on the screen is set to 100%, which has proved to be a suitable value for adjustments. Under **Edit display** you can also selected other values.
5. In the dialog popping up you will find the areas **Rotation** and **Position/Zoom** with the corresponding parameters. Any alterations will immediately become visible on the screen. You can use rotation, positioning and zoom together. However, change only individual parameters to start with, to find out about their effects.

Rotation

- The most important settings for **Rotation** can be edited graphically with the mouse, by clicking the small cross arrow under **Angle** and dragging it in the corresponding direction. This is an extremely simple and intuitive way of creating rotations around the **X** and the **Y** axis.

  Tip You will be able to judge rotations better when you reduce the size of the picture via the zoom function.

- The other parameters can be altered numerically or by clicking the small arrow buttons. When you hold the mouse key while doing so, the value changes continuously and you can see the effects of the corresponding parameter on the screen. If you hold the **Ctrl** key additionally, the values change faster.
- Line **Center** allows the position of the rotational center to be changed, which is set to the picture center by default. It is represented by the black cross in the screen field.
- Line **Angle** defines the rotation in the three axes **X**, **Y** and **Z**. A full rotation is always by 360 degrees. If you enter higher values, several rotations are performed. Negative values reverse the direction of rotation.
- Click on **Reset** to set all rotation parameters to zero.

Info

- The opacity of the object image while editing the keyframes can be selected under **Edit display**: **50 %**, **75 %** or **100 %** are possible. **From object** takes over the ramp band value.
- Key frame values can be copied and pasted to other keyframes by right-clicking the keyframe and selecting **Copy values** and **Paste values**. Please bear in mind that the ramp shape type (Linear, Spline, SmartMove) is not copied.

You can make image movements softer and more harmonious if you use tool **SmartMove Keyframes** or select this property in the Properties Dialog under **Ramp type**, following which a smart factor will be enabled. Entry of values between **0** and **100** allows you to influence acceleration: With a value of **0** the movement starts abruptly and the speed remains constant, while with an entry of **100** movement starts very softly while the speed is accelerated markedly. SmartMove properties, however, cannot be selected for Start and End frames.

- Please bear in mind, that the text in a ticker object cannot be scaled by zooming in; it only changes the text field size. Too small a ticker field results in cropped text, which, on the other hand, can also be used for creative effects.
- When designing video DVD menus the graphics for button (images or videos) must not be keyframe controlled, otherwise their positions no longer correspond and the menu does not work.

Information on how to edit control tracks with parameter objects can be found in topic The Keyframe Editor.

- Find out about hiding and removing control tracks at Control tracks in objects.

Picture-in-picture effects

With a picture-in-picture effect, also called insert, a smaller picture is positioned in front of or above a larger background picture. The following pic-

ture-in-picture effects can be implemented via the keyframe control and via screen fields:

- **Static image at a fixed location in front of background** ...the small picture is at a fixed location in front of a background image or video. Show example.
  Further info

  Depending on your individual plans, the following two options make sense:

  For individual placement of pictures use a **combined control track** for positioning for the object. See Motion: Position - Zoom - Rotation.

  If several pictures of a sequence are always to be displayed at the same size and location, use a new screen field, which you position accordingly and link up with a track. All the objects you place on this track will automatically appear at the desired location. See items **1** to **7** further below in this topic at Insert with Screen field clipping.

- **Image is moving in front of the background** ...the small image is moving in front of the background image and may also change in size. Show example.
  Further info.

  For this variant you need a minimum of two key frames with smaller picture sizes and different locations. Information on how to do this can be found under .Motion: Position - Zoom - Rotation.

- **Static insert at a fixed location in front of some background picture with the image changing** ...the small picture is located in front of a background picture with only the insert content changing in size and position, with the size and location of the insert, however remaining fixed. Show example. See Insert with screen field clipping in this topic.

- **Insert and image can be changed** ...the small picture is located in front of a background picture with the image content changing and the insert content changing in size and location. Show example. See Insert with screen field clipping in this topic.

Insert with screen field clipping

In this case the location of the insert is static whereas size and position of the image can change, i.e. this corresponds to a camera movement within an insert.

1. First of all, add a new screen field. In the Media Pool click on the plus sign next to category **Screens** and highlight the corresponding screen below it for the contents to be shown.
2. Right-click the corresponding screen and select **Add field**. Following this, a new screen field is created.
3. Link the new screen field for the insert with the corresponding tracks by right-clicking a track head, selecting **Properties** and specifying the new screen field under **Field**.
4. Usually, the screen field for the insert is created at the same size as the screen. In column **Aspect ratio** enter the format for the insert, e.g. enter **4/3** for **4 : 3**. After confirming with **Enter** quotient **1.33** will be displayed.
5. Now enter the size of the insert screen field. Open the screen window and move the Locator to a position where an image or a video is to be output on the screen field to be adjusted. **Important:** The object whose picture is displayed on the screen for adjustment purposes **must not** have a control track for size, position and rotation!
6. In the Media Pool right-click the previously defined screen field and select **Position + Size** and a dialog will appear.
7. In this dialog reduce the screen field for the insert, which is displayed by a pink frame, to the desired size. To do so, grab one of the small squares in the corners with the mouse and drag it. Grabbing the square in the centre allows shifting of the whole screen field. As an alternative, you can also enter numerical values. The modifications will immediately become visible in the screen window. Finish by clicking on **OK**.
8. Right-click the object to be displayed as insert and select **Properties**.
9. There are two options for screen field clipping, which can be enabled by placing a checkmark next to them::

- **Enable screen field clipping** only ...position and rotation affect insert and image; zoom affects the image only.
- **Enable screen field clipping** combined with **Lock clip area** ...the insert is not modified; the parameters affect the image only.

10. After making the corresponding settings, close all dialogs by clicking **OK**.

Info

If the image is smaller than the insert screen field, it looks as though the insert screen field was smaller. This, however, is not the case. To check this, you can have the screen field frames on the screen displayed. See Displaying screen field frames.

- Whether screen field clipping is to be enabled automatically for new picture objects can be selected in the Options. This is very useful for designing a number of inserts with individual clipping areas or for camera movements in stereo shows. See **Options** - **Project Options** - **Pictures.**
- You can now choose whether new objects are to be created with control tracks for keyframes or not. See **Objects** - **Global Options** - **Objects**.

The keyframes of the objects usually refer to the screen, i.e. they have absolute character. However, you can also use **relative keyframes** referring to the screen field. If you move the screen field or change its size, all objects with a control track for size and position output to this screen field are also modified in terms of size and position. See Properties of Picture tracks, Text tracks, Video tracks or Live Video/TV tracks.

Color control

Media objects, such as picture, video, live video/TV or text objects allow **keyframe** control for dynamic color changes of the corresponding image information on the screen. Color control can be used for the following applications:

- **Correction** of images or videos

- **Color effects** caused by an extreme change of color values

Producing control track and keyframes

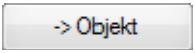
For control via keyframes you need to add a control track to an object which allows setting of keyframes. Key frames are actually markers containing values for image manipulation. In our case this is a color used for image filtering. The area between two keyframes contains consecutive in-between values which become visible as continuous color change.

And this is how it is done:

1. Right-click the object whose picture or video is to be controlled and select **Control tracks**. In the dialog box popping up, place a checkmark next to **Color (Red, Green, Blue)** and click **OK**.
2. Double-click the control track to set a keyframe.
3. If the screen is not open, open it now by pressing **F10**. Right-click the keyframe and select **Properties**.
4. In the Properties Dialog you will find fields for numeric entry of color values for **Red**, **Green** and **Blue**, as well as a field which displays the resulting filter color. By default it is white, i.e. without color manipulation, which is 255 in accordance with RGB values.
5. For color selection click the color field, which presumably will still be white. The following dialog will make color spaces **RGB** and **HSB** available for color selection.
6. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. If you want to correct an image, the HSB color space is the better choice. But, actually, this is a matter of opinion. The effect is immediately visible in the screen window. Once you have found the corresponding setting, click **OK**.

   The color white can be changed into any other color by applying filters. Therefore, you should design image elements (arrows,

writing, etc.) in the image file in white and then set the corresponding color by applying this function at a later time.

7. The filter color will now be visible in the color field. Click **OK** or if you want to use this sort of filter for the entire object, click 

Assign to whole object.
8. For dynamic and time-dependent color changes, add another keyframe (e.g. in the last third of the object) and enter a different screen field size and position.
9. When the object is played, the colors will change in accordance with the keyframes. Possibly, the standard settings will still apply to the beginning and the end of the picture. In order to solve this problem you can copy the values of the adjacent keyframe and paste them into start and end frame.

Info

- The opacity of the object image while editing the keyframes can be selected under **Edit display**: **50 %**, **75 %** or **100 %** are possible. **From object** takes over the ramp band value.
- Key frame values can be copied and pasted to other keyframes by right-clicking the keyframe and selecting **Copy values** and **Paste values**.
- You can now choose whether new objects are to be created with control tracks for keyframes or not. See **Objects** - **Global Options** - **Objects**.
- You can make image movements softer and more harmonious if you use tool **SmartMove Keyframes** or select this property in the Properties Dialog under **Ramp type**, following which a smart factor will be enabled. Entry of values between **0** and **100** allows you to influence acceleration: With a value of **0** the movement starts abruptly and the speed remains constant, while with an entry of **100** movement starts very softly while the speed is accelerated markedly. SmartMove properties, however, cannot be selected for Start and End frames.
- The keyframes of the objects usually refer to the screen, i.e. they have absolute character. However, you can also use relative keyframes

referring to the screen field. If you move the screen field or change its size, all objects with a control track for size and position output to this screen field are also modified in terms of size and position. See Properties of Picture tracks, Text tracks, Video tracks or Live Video/TV tracks.

The Keyframe Editor

The Keyframe Editor is used for graphic editing of parameters for visual effects, such as position, size, rotation or color. For this purpose the objects must be provided with an appropriate control track with individual parameter objects. An object with a combined control track can be recognized by the yellow line. In such a case it can be converted. With In-Screen Editing enabled , click an object (image, video, etc.) in the screen and the Keyframe Editor opens automatically, provided the object has got an appropriate control track. See also In Screen Editing.

In addition to this, the Keyframe Editor can be handled like this:

- **Open** ...by clicking the control track of the appropriate object. Following this, the object is highlighted on the screen.
- **Close** ...by clicking in the empty space of a track above the yellow line of the Keyframe Editor.
- **Change location of the Keyframe Editor** ...by dragging the yellow line in vertical direction.

Info The Keyframe Editor usually opens automatically below the object to be edited. This behavior can be changed, i.e. it can be made to open always at the bottom edge of the timeline. See **Options** - **Global Options** - **In Screen Editing**.

Control tracks with parameter objects

If the desired effects cannot be implemented in combined control tracks, you can use control tracks with a number of parameter objects. In this case, you can use a ramp band for every parameter, which can be edited independently. Such control tracks can be set up in the object at the very be-

ginning or the available combined control track be converted into one with individual parameter objects at a later time.

- **Converting the combined control track** ...by right-clicking the combined control track in the Keyframe Editor and selecting **Convert into single tracks**. Of course, you can continue using **In-Screen Editing** and the keyframes will be automatically created in the appropriate parameter objects at the Locator position. **Important:** Control tracks with parameter objects can no longer be reconverted into combined control tracks!
- **Editing the ramp band of parameters** ...works the same way as for other objects. However, there are no nodes, but keyframes only, which can be edited just like nodes. Key frames are therefore set by double-clicking the parameter objects. See also Editing the ramp band.
- **Open/close control tracks** ...by double-clicking the track head of a control track. All the tracks of a parameter group, i.e. **position**, **zoom** or **rotation** will always close down together. If you want to open or close all control tracks, you need to hold the **Shift** key additionally while double-clicking. If you want to open the tracks of one parameter group only and close all the others, press the **Ctrl** key additionally.
- **Adjust the height of control tracks** ...by grabbing and dragging the separation line in the track head. To do this the control track needs to be open.

Info

- When converting combined control tracks into single tracks, no tracks for the rotation center are set up. Thus, you should not convert effects that require this parameter into single control tracks.
- Please note that enabled tools influence keyframe creation. They may cause values to be copied to other keyframes or enable different ramp properties. See Toolbar and In Screen Editing.
- During In-Screen Editing, the edited image or video, etc. can be displayed partly transparent to facilitate aligning with other objects. The degree of transparency can be controlled by pressing the following number keys during editing: 1 = 25 %, 2 = 50 %, 3 = 75 % and 4 = 100

% opacity. Entry of 0 gets the transparency based on the object ramp band.

- You can now choose whether new objects are to be created with control tracks for keyframes or not. See **Objects** - **Global Options** - **Objects**.
- Keyframes in combined control tracks can also be edited via the Keyframe Editor. In that case, the keyframes located in the dissolve area between two objects can also be edited. This option can be selected under **Global Options** - **In Screen Editing**.
- The keyframes of the objects usually refer to the screen, i.e. they have absolute character. However, you can also use **relative keyframes** referring to the screen field. If you move the screen field or change its size, all objects with a control track for size and position output to this screen field are also modified in terms of size and position. See Properties of Picture tracks, Text tracks, Video tracks or Live Video/TV tracks.

See also

Visual effects

Control tracks in objects

Several objects, e.g. picture and video objects allow control tracks to be enabled in order to perform additional functions, such as keyframe control or muting. Information about the actual functions can be found at

Visual effects

Muting / pulsing objects

Pulsing slides

Adding a control track

- Right-click an object and select **Control tracks**. In the dialog popping up, select the control tracks for the appropriate functions and click **OK**.

Info Individual control tracks for **Rotation**, **Position** and **Zoom** to be edited in the Keyframe Editor can only be selected if the corresponding checkmark next to **Combined control tracks** has been removed.

Copying/pasting all the keyframes of a control track

- Right-click some empty space of the control track you want to copy and select **Copy**.
- Right-click the control track you want to paste the previously copied keyframes into and select **Paste**.

Info

- If the object does not have a suitable control track you will have to add one before pasting the keyframes.
- Control tracks with keyframes can also be copied and pasted from the Media Pool. See Using pre-defined keyframe effects.

Removing a control track

- Right-click an object with a control track and select **Control tracks**. Remove the checkmark next to the control tracks you want to remove and click **OK**. This removes the appropriate control tracks including all their keyframes!
- By clicking **Remove all control tracks** all control tracks and keyframes will be deleted.

Using pre-defined key frame effects

It is possible to collect key frame effects in the form of control tracks in the Media Pool and use them for other objects. Pre-defined effects can be imported either when the project is created or at a later time. The following operations are possible:

Transfer effect to object ...in the Media Pool click category **Control tracks** and drag & drop the appropriate control track onto the object in the timeline. Any effects existing in the object will be completely removed.

Transfer only parameters to object ...as above, but press the **Ctrl** key additionally, when you let go of the mouse button. Only the parameters of the new effect will be transferred. The old parameters or control tracks are maintained if they are not comprised in the new control track.

Copy and paste the effect to the Control track pool ...highlight the control track of an object for the Key Frame Editor to open up. In the Key Frame Editor, right-click the control track or the parameter object, respectively and select **Copy to pool**.

See also

In-Screen Editing

Importing control track effects from templates

Importing control track effects from a template

Normally, prepared effects can already be imported when creating new projects. If you happen to have forgotten to do so, want to edit older projects or want to add additional effects you can do so as follows:

1. In the Media Pool, click category **Control tracks**.
2. Right-click the tab and select **Import from template...** and the file selection dialog for folder **Templates** will be displayed.
3. Select template **Default Pools** and click **OK**. Following this the folder ***Imported** is added.

Info From the file selection dialog you can also select other templates or projects and import the corresponding control track effects.

See also

Importing parts of a project

Using pre-defined keyframe effects

Visual effects

Panorama and stereo shows with one PC

The Wings Platinum Pro License allows two video projectors to be run via one graphics card with two outputs (dual head) for soft edge panorama and 3D stereo shows. This requires one PC only. In such a case, the highly complex multidisplay technology with networked master/slaves is not absolutely necessary. However, it should be clear that there are certain restrictions for a dual display solution with one computer as double the amount of image files need to be processed by one single graphics card.

Note: Dualdisplay technology is not suitable for multidisplay operation with several computers. Therefore, it is not possible to have one slave supply two displays or video projectors via dualdisplay technology!!

Creating a dual display project via a template

Dualdisplay projects to be presented on two video projectors via one graphics card require the Pro or Multidisplay License. See also Licenses and functions.

We have prepared project templates for panorama and stereo shows that can be used for shows with two video projectors connected to one graphics card. The following templates are available:

- **Panorama DS 2.35-1** ...for a panorama show in overlapping **softedge** technology to be presented with two **4:3 video projectors**. The screen has an aspect ratio of 2,35 : 1.The video projector resolution does not matter, proved the aspect ratio is 4: 3, e.g. this would be 1024 x 768 (display data setting **1900 pixels**) or 1400 x 1050 pixels (display data setting **2468 pixels**).
- **Panorama DS 3.33-1** ...for a panorama show in overlapping **softedge technology** to be presented with two **16:9 video projectors**. The screen has an aspect ratio of 3.33 : 1.The video projector resolution

does not matter, provided the aspect ratio is 16 : 9, e.g. 1280 x 720 pixels (display data setting **2400 pixels**).

- **Panorama DH 2.67-1** ...for a panorama show in **hardedge** technology to be presented with two **4:3 video projectors**. The screen fields are placed edge to edge for a screen with an aspect ratio of 2.67 : 1 to be produced. The video projector resolution does not matter, provided the aspect ratio is 4 : 3, e.g. 1024 x 768 pixels (display data setting **2048 pixels**) or 1400 x 1050 pixels (display data settings **2800 pixels**).
- **Stereo 4-3** ...for a stereo show to be presented with two video projectors on a 4 : 3 screen. The video projector resolution does not matter, provided the aspect ratio is 4 : 3, e.g. 1024 x 768 pixels (display data setting **2048 pixels**) or 1400 x 1050 pixels (display data settings **2800 pixels**). Screen fields and picture tracks are configured for **separate image files**, i.e. one image file each for right and left.
- **Stereo 4-3 combi picture** ...for a stereo show to be presented with two video projectors on a 4 : 3 screen. The video projector resolution does not matter, provided the aspect ratio is 4 : 3, e.g. 1024 x 768 pixels (display data setting **2048 pixels**) or 1400 x 1050 pixels (display data settings **2800 pixels**). The screen fields and picture tracks are configured for image files which contain both photos (right and left) as a **stereo montage**.

Info

- The template name gives you an idea about the template properties: **D** = dualdisplay, **H** = hardedge, **S** = softedge combined with the screen aspect ratio, e.g. **2.35-1** (unfortunately it is not possible to use a colon in the file name).
- Multidisplay projects for a number of networked computers and video projectors are set up via the Wizard for mixed media projects.
- Please bear in mind that text display via text objects does not work for dualdisplay shows. See also Text functions.

This is how you open a template:

1. In the tool bar below the main menu click on **New**... or in the main menu on **File** and **New...**.

2. On the left, click on **Project Templates** and, on the right, select the required template by double-clicking it. Select the template that matches your video projector resolution.
3. Now check whether the display data settings match your video projector resolution. In the Media Pool click on category **Screens**.
4. Right-click **Screen 1** and select **Properties**. Under **Presentation** (top right in the dialog box) and **Max. picture size** enter the display data specified in the template information for your video projector and closes the dialog by clicking **OK**.

Usage of such an empty project for this sort of show is identical with that for a standard single display show. Please note that playback at full quality is only possible in Presentation Mode started by pressing the **F5** key. See also Starting and stopping playback.

If you want to create a panorama show in soft edge technology, you need to set up the video projectors and the soft edge masks first. See Adjusting the softedge mask for seamless panorama shows.

Adjusting soft edge masks for seamless transitions

Dualdisplay projects to be presented on two video projectors via one graphics card require the Pro License or higher. See also Versions and Licenses.

For a soft edge projection, the video projector overlap areas must be provided with gray scale for a seamless transition. This is done by the graphics card during playback and can therefore be adjusted at any time via a ramp/curve.

And this is how it is done:

1. Start by accurately aligning the video projectors and images. To do so, project a test picture showing a grid or pattern, by positioning the locator on the picture object and starting presentation mode by pressing the **F5** key. It may take a little while until the picture appears on both video projectors.

Tip: Information on how to create **appropriate test charts** can be found in the Multidisplay workshop under Aligning video projectors and adjusting softedge masks items 1 to 6.

2. Press **Esc** to stop Presentation Mode and click category **Screens** in the Media Pool.
3. Highlight **Screen 1** by clicking it and gray scale and ramp band will be displayed in the properties table.
4. Now set a "Spline" node. Enable tool **Spline Keyframes** by holding the **O** key down and double-click the ramp band.
5. Check the exact image overlap once again. Move the node to the top left corner until gray scale disappears. Start Presentation Mode for the test picture to be projected. As the softedge masks are hidden, you can easily judge the alignment and correct it, if necessary. Cancel Presentation Mode by hitting the **Esc** key.
6. By moving the node, adjust the ramp until a homogenous overlap is displayed on the screen. To make the effect visible on the screen you need to place the locator onto a picture or video object and start presentation mode by pressing the **F5** key.
7. If the result is still not satisfying, press **Esc**, modify the ramp and start presentation mode again. Repeat this until the overlap is homogeneous. Use various motifs to judge the alignment, possibly showing homogenous surfaces and various brightnesses.

Info

- The homogeneity of the overlapping area can only be judged properly if the overlap of the pictures has been accurately aligned.
- For evaluating the overlap, you will find a few test images in the Wings Platinum program folder, which is usually located at **...\My Documents\AV Stumpfl\Media Samples/Test charts.**
- You can copy the softedge mask curves from existing projects and paste them into other ones. Right-click the Preview Window containing the mask and select **Copy** or **Paste.**

Multidisplay Shows

Multidisplay technology turns Wings Platinum into a scaleable presentation system, which, by using a number of video projectors or displays, allows you to implement highly unusual presentations, ranging from extreme panorama shows at very high quality to multimedia sculptures.

Multidisplay Technology - An Overview

In Wings Platinum a show can be presented on a number of video projectors or displays, thus implementing unusual and extraordinary presentations. It is therefore possible to produce extreme panorama formats in seamless soft edge technology at a quality that exceeds HDTV standard. Or, an arbitrary number of displays is arranged into highly interesting audiovisual sculptures, the contents of which are perfectly in harmony with each other.

Example for a soft edge projection

Three video projectors produce a seamless panorama. The soft edge masks in the overlap areas are produced in Wings Platinum and can be edited on site via ramp so as to achieve optimum adjustment to existing video projectors and conditions. Every video projector is supplied with the required image information by a separate computer.

Example for a display sculpture

For this display collage everything is perfectly in synchrony. Images and the light effects are accurately harmonized, turning this display collage into a changing, multi-media exhibit. All media can be arranged graphically and synchronized in Wings Platinum.

A multidisplay show is split up into three stages:

- Planning the screen format and creating the project
- Arranging media, effects and timeline functions
- Presenting the show

Info In order to find out about the Wings Platinum we have prepared sample projects on the Wings Platinum DVD with all the necessary media as well as short explanations and the links to the corresponding help topics.

Planning and creating the project

First of all you should think about the format of your presentation and the way the individual screen fields are to be arranged. In Wings Platinum the overall image is displayed on the screen and can be produced by a number of video projectors or displays. The area to be covered by a video projector or display is defined by multidisplay areas. For a soft edge projection you can allow about 20 % for the overlap of the multidisplay areas. Depending on the format you can have several video projectors arranged horizontally (panorama) or vertically (portrait format). Of course, it is also possible to assign the video projectors to both axes, so as to increase the resolution, for example. The Wizard for mixed media projects assists you in creating the projects and calculates the missing parameters, e.g. softedge overlap after you have specified a number of parameters. Of course, it is also possible to position every multidisplay area separately and individually on the screen. After that the presentation network is configured and the IP addresses of the corresponding presentation computers are allocated to the multidisplay areas. For soft edge projections you also need to adjust a ramp for the gray scale masks. This softedge mask is only added by Wings Platinum during graphics card output. This means that the media themselves do not need to be provided with a softedge mask thus considerably simplifying production. If you have got Wings VIOSO, it will allow automatic camera-based image calibration with regard to geometry and softedge masks.

Arranging the media

The difference between production of a multidisplay show and a normal show is very slight. They actually only differ in the output. You arrange the show on the master which transfers the media and project data to the slaves in the presentation network. Every video projector or display receives its individual image signal from the computer allocated to it. The number of slaves can be arbitrary. Audio playback is exclusively via the master which can output up to 24 channels via appropriate audio hardware. The master is also able to provide the image signal for up to four displays or video projectors. However, during production one graphics card output should be used for the control monitor as it allows more comfortable editing.

During production you can use hardware rendering for representation in real time as you would for a normal show. All computers on a presentation network immediately display any alterations upon a mouse-click so that the details of your show can very accurately be edited. If for some reason the

presentation hardware should not be available, e.g. when the slaves and video projectors are currently used for a different event, you can still continue to edit the show on the master and evaluate it on a smaller screen on the local monitor. If necessary, any sequences produced such can later be optimized via the presentation hardware.

Presenting the show

Presentation can either be via hardware rendering or in the form of a rendered video. The latter will be required, if a show contains a great number of simultaneously running videos which would no longer be played back without any problems via hardware rendering. Of course, it is also possible to control peripheral devices via an SC Net (Show Control network) as well. For live presentations, spontaneous dissolves via mix groups are also possible during playback - these can be pictures, video or sound. Even the integration of live video/TV signals across several multidisplay areas is no problem. However, every presentation computer involved needs to be supplied with the signal via a suitable video input card.

Multidisplay mode using one computer

The advantages of Wings Platinum, such as immediate playback and excellent quality, can also be used for multidisplay mode. Multidisplay shows using one computer are edited just like any other single display show. However, a few additional aspects need to be considered for multidisplay presentations:

1. Multidisplay Mode requires a Multidisplay License for each display to be controlled (up to four are possible). I.e. there may be more than just one dongle plugged into a computer if it is to supply show contents to several displays. Multidisplay dongles are available for one or for two displays.
2. Create a new project using the Wizard for mixed media projects. Doing so will clearly simplify screen configuration. See *Wizard for mixed media projects*.
3. Extend the desktop to cover all the displays used. We recommend planning one graphics card output for a control monitor. To prevent

the Windows desktop to appear when the screen is closed, choose black as background color.

4. Align the video projector by means of test images (e.g. grid pattern) which you can simply drag into the timeline. After pressing **F5** you can align the video projectors. Following this you can adjust the soft edge mask. See *Adjusting soft edge masks*. **Note:** If you are using VIOSO camera calibration have the automatic alignment performed. See Camera-based calibration of a multidisplay projection.
5. Start playback on all displays at full presentation quality by pressing the **F5** key, following which all screens are opened in full screen mode and **Pause** mode is activated. After this pressing the space bar will do to start playback.
6. If, however, you start playback in the timeline by clicking the mouse or pressing the space bar (... without **F5**), display is in lower preview quality so as to allow swift editing of complex sequences. The picture quality for the display data is specified in the *Screen Properties*.

Info

- In order to ensure stable display allocation after a power failure or when the displays are defective we recommend connecting Gefen Detective along the signal line between display and graphics output. Gefen Detective saves EDID and transmits it to the graphics cards even when the video projector is switched off, disconnected or defective. This keeps Windows from from changing the display allocation due to altered EDIDs.
- When there is an active video track in exclusive mode in the project, pressing **F5** causes full screen playback of the video. If necessary, deactivate such tracks.
- If you have programmed complex sequences and playback in presentation quality (started by pressing the **F5** key) is sometimes jerky, you should have the display data optimized. See *Optimizing display data for pictures*.

Multidisplay Mode using several computers

The advantages of Wings Platinum, such as immediate playback and excellent quality, can also be used for multidisplay mode. Multidisplay shows are edited on the master more or less just like any other single display show. However, a few additional aspects need to be considered for multidisplay presentations that may have a number of slaves:

1. Multidisplay Mode requires a Multidisplay License to be installed on both the master and all slaves. I.e. several dongles may be plugged into a computer. Multidisplay dongles are available for one or two displays.

   Important note: Please bear in mind that a slave PC currently can only supply one display.

2. Create a new project using the Wizard for mixed media projects. Doing so will clearly simplify screen configuration. See Wizard for mixed media projects.

3. If you are using several computers, set up the network of master and slaves as described in topic Configuring the presentation network.

4. Align the video projector by means of test images (e.g. grid pattern) which you can simply drag into the timeline. Before the images can be displayed on the slaves, you need to transfer the project and the required files to them. This is done by pressing **F7** or by clicking **Enable file transfer**. See also Transferring project to the slaves.

5. Enable Locate slave timelines by pressing **F6** and open the screens in fullscreen mode by pressing **Ctrl** + **F6**. Now you can align the video projectors. Following this you can adjust the soft edge mask. See Adjusting soft edge masks.

6. Playback on all displays and at full presentation quality is started by pressing the **F5** key following which all screens open up and **Pause** Mode is activated. Press the space bar after this to start playback.

7. If, however, you start playback in the timeline by clicking the mouse or pressing the space bar (... without **F5**), display is in lower preview quality so as to allow swift editing of complex sequences. The picture quality for the display data is specified in the Screen Properties. See Screen Properties.

Info

- When there is an active video track in Exclusive Mode in the project, pressing **F5** causes the corresponding video to be started in fullscreen mode. If necessary, deactivate these tracks.
- Display at full presentation quality can be enabled for the slaves by placing a checkmark in the Screen Properties under **Preview** next to **Slaves always use presentation quality**. See also Screen Properties.
- If you have programmed complex sequences and playback at presentation quality (started by pressing the **F5** key) sometimes is jerky, you should have the display data optimized. See Optimizing display data for pictures.
- Trigger action **Delete slave files** can be used for selective deletion of files in folder **Wings Platinum 4 Slave Sync**. A Trigger action for transferring files to the slaves is also available. See Trigger actions.

Multidisplay presentation with split videos

...this topic has not been revised yet!!

For very complex shows in particular, a mixdown of all media into a video is the only chance to present without any problems at high quality. A multidisplay presentation via video files requires the following steps:

- **Creating the project and the show** ...is in no way different from the usual procedure for multidisplay shows. If there are a few sequences that cannot be run in presentation quality, use Preview mode and reduce the display data for preview so that you can work properly. See Screen Properties.
- **Creating the split videos for the presentation** ...can be done in any format, although we recommend **MPEG-2** or **WMV** format. The latter has the advantage of being able to use a frame rate of 60 f/s even for high resolutions. See also MPEG-2 or WMV format?

The principle of video creation is explained in the corresponding topics. Below you will find a few pieces of specific information for multidisplay presentations.

Creating and transferring split videos

For your show to be played back at full quality without any jerks, split video files need to be created and transferred to the slave computers. The basic approach for creating a video is explained in topics Output of AVI videos, Output of MPEG videos and Output of Windows Media videos. All three methods can be used. But now we would like to talk about the facts that need to be considered additionally:

- For video rendering, on page **Timelines,** select the display you would like to create the split video for.
- On page **Video** you may have to choose a preset or profile and finally enter the total output size by clicking on . The pixel values normally correspond to the size of the screen. However, it is also possible to choose different values in the Screen Properties at **Video creation**, although this may have far reaching consequences for the multidisplay configuration, e.g. distortion, inappropriate overlap, etc.
- On page **Further actions** you should select **Insert as presentation into the current project** for the video to be automatically saved to a video track in Exclusive Mode in the project. In addition to this, Wings Platinum creates a new screen field with a suitable setup for position and target computer. If you create your presentation project manually, you need to make sure yourself that screen field and target computer are correctly allocated. See Video Track Properties.
- Now transfer the video files to the slaves. This requires the entire presentation network to be enabled. Press **F7** to start the file transfer.
- Now you can play back the show by pressing the **F5** key. For playback in Presentation Mode, all options, such as Speaker Support, remote control, show control, etc. are available. See also Presenting videos.
- If you want to continue editing your project, followed by playing it in Presentation Mode (**F5**) you need to disable the video tracks in Exclusive Mode. Otherwise, the topmost active video track in Exclusive Mode is played back.

Configuring the presentation network

A presentation network consists of a master and any number of slaves linked up via a network which serves for transferring the media files and the project configuration from the master to the slaves and for syncing playback.

Therefore, you should make sure that there is a functioning network connection between all presentation computers. For this purpose, the **Internet protocol (TCI/IP)** and the **Client for Microsoft networks** must be installed. In addition to this it is also important that the computers have a static IP address and the address is not obtained automatically. For information on how to verify or alter this, refer to Static IP addresses in the network.

In Wings Platinum make the following settings:

1. In the function bar below the main menu click on **Options** and select **Global Options** - **Network** on the left.
2. In the dialog displayed different settings must be made for master and slaves:

   For the master

   - Under **Mode** click **Master** and add a checkmark next to **Enable** under **Network connections**.

   For the slave

   - Under **Mode** click **Slave** and add a checkmark next to **Enable** under **Network connections**.
   - Click on **Select computer** and choose the master. The context menu will only show active computers, i.e. the master computer should be activated and be part of the network. Otherwise you can also enter the TCP/IP address manually. If one particular computer is not displayed, you can use button **Retrieve network configuration** to retrieve and update the configuration.
   - If you enable **Backup master**, you can optionally specify a second master as backup. Should the first master fail, the slaves will automatically link up with the back-up computer. This function may also be very useful for servicing an existing system: The master is disconnected from the network and the slaves automatically link up to the master of the service technician.

- Moreover, you also need to specify a drive for saving the media files transferred by the master. For this purpose a folder **Wings Platinum 4 Slave Sync** is created. **Important:** Make sure that the drive is cleared for network access.

Close the Options Dialog by clicking **OK**. For the slaves answer the question for the global program start options with **Yes**. Following this, the following settings are made in the **Global Options** - **Program start**:

- **Startup delay** ...no changes. Here you may want to make your own settings for automatic mode or joint starting of PCs.
- **No action** ...after program start no projects are loaded or selection dialogs displayed since the project is transferred from the master.
- **Ignore last autosave status** ...is enabled because the project is transferred from the master.
- Any other options for program start will be disabled.

These settings ensure proper multidisplay operation on several PCs.

Usually, the slaves are added and connected to the appropriate displays when the project is set up via the Wizard. Check this in the master's Media Pool in category **Devices**.

If no master or slave PC is visible...

...configure the corresponding PCs with their IP addresses in the device control system and assign the IP addresses of presentation computers to the displays.

1. Right-click some free space category **Devices** and select **Add master/slave PC**. Add a checkmark next to **Local masterPC** and close the message and the dialog by clicking **OK**.
2. Now add the corresponding number of slave computers. To do so, right-click some free space and select **Add slave**. Click on **Select computer** and choose the corresponding PC. If there is no network connection, you can also enter the IP address manually.
3. If you want to use the serial ports of the slave, you place a checkmark next to **Serial port** and enter the corresponding COM port of

the slave. This is very useful for video projector control as it requires no separate line.

4. Close the dialog by clicking on **OK**.

   After adding all the PCs you assign the corresponding presentation computers to the displays.

5. In the Media Pool click category **Screens**. Right-click the line of a display and select **Properties**.
6. Under **Assignment** specify the corresponding **display PC** for the display by clicking on and selecting the corresponding computer. **Important:** Please bear in mind that only one display must be assigned to a slave, i.e. every display requires its own computer.
7. Close the dialog by clicking **OK** and repeat this procedure for the other displays.

Info

- If one particular computer is not displayed, you can use button **Retrieve network configuration** to retrieve and update the configuration. See **Options** - **Global Options** - **Network**.
- Please bear in mind that only one display must be assigned to a slave, i.e. every display requires its own computer.
- Dialog **Statistics/Diagnosis** provides status information for all PCs within a presentation network (open it by pressing **Ctrl** + **D**). See Statistics and Diagnosis.
- In the Control Panel you can set up control panel fields for multidisplay computers which provide status information. See Show status of master and slaves.

Transferring project data to the slaves

For a multidisplay presentation the project and any other data required by master and slaves need to be transferred for a start, e.g. after you have finished programming the project on the master via the screen window. The

files are transferred to the slave computers via a file server and saved to the drive you specified under **Options** - **Global Options** - **Network**.

This is how you transfer the project and the corresponding files to the slaves:

1. Load the corresponding multidisplay project and make sure that the IP addresses of the corresponding slaves are assigned to the displays in category **Screens** in the Media Pool.
2. Provide for all slaves within the presentation network to be ready for use and for the buttons **Enable network** on all computers to be depressed or highlighted in gray.
3. On the master in the main menu click **Multidisplay** and **Transfer slave files**. Alternatively, you can also press key **F7** or click **Enable file transfer** in the function bar.

The file server has now been started on the master and the slaves request the necessary files. The files are transferred in the background and you could actually continue editing during the transfer.

Info

- Please note that after any modifications in the project you need to restart file transfer by pressing the **F7** key to provide the slave computers with the updated data. Any file transfer currently going in is interrupted by restarting the function.
- For the transfer to be interrupted, click **Enable file transfer** for the button to be deselected.
- The data to be transferred to the slave computer can be limited, e.g. to all or only the necessary ones. See **Options** - **Project Options** - Multidisplay.
- All the slave files are saved to folder **Wings Platinum 4 Slave Sync** on the specified drive in accordance with a file structure corresponding to that on the master.

- Trigger action **Transfer slave files** now also allows initiation of file transfer of the necessary files to the slaves by remote control. See Trigger actions.
- Trigger action **Delete slave files** can be used for selective deletion of files in folder **Wings Platinum 4 Slave Sync**. A Trigger action for transferring files to the slaves is also available. See Trigger actions.

Adjusting soft edge masks

For a soft edge projection, the video projector overlap areas must be provided with gray scale for a seamless transition. This is done by the graphics card during playback and can therefore be adjusted at any time via one single ramp or via individual display-specific ramps. As an alternative, gray scale can also be rendered into the videos, which may be necessary anyway when synced hardware players are to be used for playback, for example. See also Producing an MPEG video.

Using uniform softedge masks

When your project was created via the Wizard for Mixed Media Projects the overlap areas have already been defined and the soft edge masks activated. Now you can adjust the grayscale for all video projectors via one single ramp.

1. Start up your presentation network. The video projectors must be accurately aligned.
2. In the Media Pool click on category **Screens** for the available screens to appear on the right.
3. Click the corresponding screen on the right, following which the tabs for Softedge masks and Display Warp will appear in the Properties Table.
4. Click the corresponding tab **Softedge mask** for vertical or horizontal edges and the grayscale and ramp band will appear.
5. Set a "Spline" node by double-clicking the ramp band while holding the **O** key.

6. By moving the node, adjust the ramp until a homogenous overlap is displayed on the screen. **Tip:** By double-clicking the softedge mask header the window can be adjusted separately, i.e. it can be extended in size which facilitates adjustments. Double-click the header again to dock the window again.

Info

- If Live Update is rather slow during the adjustment, which depends on the network and the number of slave computers involved, you can suppress Live Update by pressing the **Shift** key additionally.
- Try using a number of different pictures with different brightness values and colors to evaluate the overlap. For this purpose you will find a few test images in folder **Test Charts,** which can be found easiest by clicking **Extras** - **Open Folder** ▶**Media Samples**.
- The softedge masks can be disabled and re-enabled on all slave computers via triggers. This is a very useful feature for adjusting overlapping screen fields or when executing the Auto Sync function (syncing up the video projectors with the input signal). You only need to create the appropriate triggers and drag and drop them into the Control Panel. See Trigger actions and Executing triggers via control panel fields.
- For heavily and individually warped display contents softedge mask accuracy can be improved by enabling **Warp softedge mask** in the *Display Properties*. See also Warping of screen and display contents.
- You can copy the softedge mask curves from existing projects and paste them into other ones. Right-click the Preview Window containing the mask and select **Copy** or **Paste**.

See also

Editing the ramp band

Importing a multidisplay configuration

Using display-specific and individual softedge masks

When your project was created via the Wizard for Mixed Media Projects the overlap areas have already been defined and the soft edge masks activated. An individual softedge mask can be created for every display or video pro-

jector. This sort of adjustment is very time consuming so you should only use this function if uniform softedge mask do not lead to the desired result. See also Using uniform softedge masks.

1. Start up your presentation network. The video projectors must be accurately aligned.
2. In the Media Pool click category **Screens**.
3. Right-click a display and select **Properties**.
4. Under **Softedge mask** remove the checkmark next to **Use softedge mask of screen** and close the dialog by clicking **OK**. If necessary repeat this procedure for the other displays as well.
5. Highlight the display following which a double grayscale is displayed in the area of the Properties Table.
6. Set a "Spline" node in the corresponding section (left or right) of the ramp band by double-clicking the ramp band while holding the **O** key. Repeat this for the adjacent display in the corresponding ramp section.
7. By moving the node, adjust both ramps until a homogenous overlap is displayed on the screen. Every gray scale can be adjusted individually for every display. **Tip:** By double-clicking the softedge mask header the window can be adjusted separately, i.e. it can be extended in size which facilitates adjustments. Double-click the header again to dock the window again.

Info

- If Live Update is rather slow during the adjustment, which depends on the network and the number of slave computers involved, you can suppress Live Update by pressing the **Shift** key additionally.
- Try using a number of different pictures with different brightness values and colors to evaluate the overlap. You will find a few test images in folder **Test Charts,** which can be found easiest by clicking **Extras** - **Open Folder** ▶**Media Samples**.
- You can copy the softedge mask curves from existing projects and paste them into other ones. Right-click the Preview Window containing the mask and select **Copy** or **Paste**.

See also

Editing the ramp band

Importing multidisplay configuration

Camera-based calibration of a multidisplay projection

Camera-based calibration of a multidisplay projection

Wings VIOSO offers camera-based calibration of multidisplay projection via one computer. It allows correction of geometry, color and brightness for the projection surface as well as generation of softedge masks. In addition to the compensation for uneven projection surfaces, compensation for colored, graphic structures on the projection surface is also possible and means that the projected image is influenced less by its structure.

Further information can be found in the following topics:

Suitable cameras for calibration

Calibrating a multidisplay projection via a camera

Manual calibration adjustment

Automatic calibration of a permanent installation

Suitable cameras for calibration

Calibration based on VIOSO technology requires a suitable camera connected to the computer. The following cameras can be used:

Webcams ...are usually connected via a USB port and should work if the automatic control system can be disabled.

DV video cameras ...are connected via Firewire and, in view of the low resolution, offer very good geometry connection.

HD video cameras ...can be used if the computer has a video input card.

Industrial HD cameras ...are connected via USB or network cable. The latter makes the setup location largely independent of camera and computer and is an interesting option. Such HD cameras are produced by IDS, for example. See www.ids-imaging.com.

A precondition for successful calibration is always manual adjustability of white balance and exposure. The better the quality of the camera, the better are the calibration results to be achieved.

See also

Camera-based calibration

Camera-based calibration

This function requires the Wings VIOSO License. See Licenses and functions.

Camera-based calibration of multidisplay projections is only available for single-computer systems with up to four video projectors and not for multidisplay systems with networked master and slaves. It requires a suitable camera. See Suitable cameras for calibration.

1. Hook up camera and data projector and start them. The control monitor should be the primary monitor using **ID 1** to avoid problems in display allocation. This can be verified via the graphics card driver software. During calibration, this configuration must not be changed any more. **If Windows has chosen some other allocation...**

    - Close down your computer and remove the connecting cable between video projector and graphics card.
    - With the control monitor connected, start up your computer and, via the graphics driver software, verify that the monitor has ID1.
    - With the computer on, connect the video projectors and switch them on. Windows and the graphics driver software should then add the video projectors using IDs 2, 3 and 4.
    - Restart the computer for Windows to save the settings.

- **Info** In order to ensure stable display allocation after a power failure or when the displays are defective we recommend connecting Gefen Detective along the signal line between display and graphics output. Gefen Detective saves EDID and transmits it to the graphics cards even when the video projector is switched off, disconnected or defective. This keeps Windows from from changing the display allocation due to altered EDIDs.

2. Create your multidisplay project and, next to **Multidisplay configuration**, click and select **All displays on the master starting with monitor 2** and select **VIOSO calibration.** **If you want to activate VIOSO calibration for a project at a later time...**

3. In the Media Pool on the left click on category **Screens** and the screens will be listed on the right.
4. Right-click the corresponding screen, select **Properties** and the dialog will appear.
5. Check the box next to **Allow display warp / VIOSO calibration** and close the dialog by clicking **OK**.
6. Click the plus sign next to category **Screens** and click the corresponding screen. After this the screen fields and displays are shown on the right.
7. Right-click the first display to be calibrated and select **Properties**.
8. At the left top, next to **VIOSO calibration via camera** place a checkmark and close the dialog by clicking **OK**.
9. For all other displays activate VIOSO calibration likewise.

10. In the main menu click **Multidisplay** and select **VIOSO calibration...**
11. Under **Create calibration** select the corresponding Screen and calibration mode:

- **Simple mode** ...should be appropriate for most applications and takes about 1 minute per projector.
- **Detailed mode** ...allows separate adjustment of brightness and calibration grid. This option is only useful if your video projectors have different brightnesses or if simple mode does not achieve the required result. Including the manual settings this mode takes about 2 minutes per projector.

12. Click **Start calibration** and a dialog box will appear. Start by selecting the type of projection surface for **Geometry correction**:
    - Select **Projection on plane or regular bent surfaces** ... for geometrically definable, uniform surfaces, i.e. cylindrical, conical or spherical sections, as well as inclined but level surfaces.
    - Select **Projection on uneven surfaces** ...for surfaces that cannot be defined geometrically, e.g. rock faces, three-dimensional sculptures, etc. **Note:** Used for level surfaces, this mode results in artifacts.
13. Under **Select camera** select the corresponding camera and under **Projectors / Displays** the devices to be calibrated. These devices must be set as follows:
    - The **Projectors** should show the same settings with regard to brightness, picture mode and color temperature, i.e. they should produce as identical pictures as possible.
    - For **Camera** disable automatic white balance and automatic exposure, as well as autofocus, so that you have to make all the settings manually and are able to check them.

    Note: If the expected video projector is not available, a dialog for video projector selection will appear automatically.
14. Click **Next**, following which a checkerboard pattern will be projected and an additional window showing the video image be opened up. Align the video projectors so that they fill the projection area and sufficiently large overlap areas are created. The projector image should extend slightly beyond the projection area; later on, the image can only be adjusted in size to fill the screen.
15. Align the camera so that it captures the entire projection image. You can verify this in the video window on the right by maximizing it. By

varying the shutter, adjust exposure until the bright check is distinct and the overlapping bright check is white. Following this, minimize the video window again.

16. Now you need to mask the projection area in the preview via the calibration wizard such that only the check pattern is visible and no irritating reflections or light sources are visible. There are two options for masking:

For rectangular projection areas

- Hold the **Shift** key down and click the corners of the projection screen one after the other. Close the frame by moving the mouse beyond the starting point and clicking it while pressing the **Alt** key.
- In order to mask unwanted border regions, hold the **Ctrl** key down and click this area. Some red masking will appear leaving only the projection surface free.
- If masking did not come out as expected you can delete it again. Hold the **Ctrl** key while right-clicking the masking to delete it. Following this you can create some new masking.

For other projection areas

- Holding the left mouse key down draw a line around the projection surface until the frame is closed. Close the frame by moving the mouse beyond the starting point and clicking it while pressing the **Alt** key.
- In order to mask unwanted border regions, hold the **Ctrl** key down and click this area. Some red masking will appear leaving only the projec-

tion surface free.

- If masking did not come out as expected hold the **Ctrl** key while right-clicking the masking to delete it. Following this you can create some new masking.

17. Click **Next** to start calibration. Depending on the the number of video projectors this will take a few minutes. In **Detailed Mode** further dialogs will be displayed...

Adjust brightness

- The control should be located slightly to the right of the maximum, i.e. at 90 to 95 percent.
- If it has been moved to the very right, camera sensitivity is too low. In this case open the camera iris, click **Back**, followed by **Next** for the control position to be redetermined. Repeat this step until the brightness is correct.
- If your video projectors differ in their brightnesses start by determining the brightness or required camera sensitivity for the darkest projector.
- Following this, click **Next**.
- Pattern properties
- Using controls Threshold and Thickness adjust the image in a way which displays the lines as finely as possible but individually and fully visible.
- Following this, click **Next**.
- Once you have finished with the first projector perform the same steps for any other projectors. Proceed as before although new entries will hardly be re-

quired. Usually, you only need to click **Next**.

18. At the end of calibration you will see a test image which can still be corrected to precisely fill the projection area. The following manual correction options are available:

    - Dragging the **round corners** changes the size proportionally. Grab with the **Ctrl** key pressed and drag and move the point.
    - Dragging the **square handles** shifts all the points of the corresponding border line.
    - By clicking the round handles at the border they are provided with additional **Bezier handles** which allow direction and degree of warping to be changed. This allows barrel or pillow shaped distortions caused by camera lens distortions to be eliminated.
    - Dragging in the picture moves the image as a whole.
    - Dragging outside the picture rotates it.
    - If the camera cannot be set up perpendicular to the screen the center of the image will not be right in the center of the projection surface. **This is how you can align the center of an image...**

      - Right-click the test image and select **grid sizeX ▶ 3**, if the camera is located to the side, or **grid sizeY ▶ 3**, if the camera is located above or below the center of the projection surface.
      - By moving the center axes the center of the image can be aligned with the center of

the projection surface.

- The softedge mask can be influenced via the three controls under softedge blending. The best thing would be to start with **Gamma**.

19. Once the image has been accurately aligned with the projection area, click **Next** and a message will appear announcing the end of calibrating. Close the dialog by clicking **Next** again.
20. You still need to save this calibration. If you want this calibration to be loaded automatically upon starting Wings VIOSO click **Save as startup calibration**. If you want to save this calibration under a particular name click **Save calibration** and you will be able to load it manually at a later time.
21. Click **Close** to terminate this process.

See also

Suitable cameras for calibration

Manual calibration adjustment

Automatic calibration of a permanent installation

Manual calibration adjustment

Calibration usually produces good results. However, some calibration parameters can also be corrected manually.

1. Start by moving the locator onto the image or video objects in order to make a suitable image for alignment appear on the screen.
2. To open the dialog box for calibration adjustment click main menu item **Multidisplay** and select **VIOSO Calibration...**
3. In the VIOSO dialog, click button **Properties** on the left, following which the dialog for calibration adjustment will appear.
4. In the large field the alignment grid allows the projected image to be correctly placed on the screen:

- Dragging the **round corners** changes the size proportionally, dragging while holding the **Ctrl** key down moves the point.
- Dragging the **square handles** shifts all the points of the corresponding border line.
- By clicking the round handles at the border they are provided with additional **Bezier handles** which allow direction and degree of warping to be changed. This allows barrel or pillow shaped distortions caused by camera lens distortions to be eliminated.
- Dragging in the picture moves the image as a whole, while dragging outside the picture rotates it.
- If the camera cannot be set up perpendicular to the screen the center of the image will not be right in the center of the projection surface. **This is how you can align the center of an image...**

  - Right-click the test image and select **grid sizeX** ▸ **3**, if the camera is located to the side, or **grid sizeY** ▸ **3**, if the camera is located above or below the center of the projection surface.
  - By moving the center axes the center of the image can be aligned with the center of the projection surface.

5. Below this field on the left you can enable or disable correction of **Geometry** and **Color**. This will immediately be visible in the projected image.
6. The projected image can also be influenced by the three sliders under **Picture**. **Brightness** and **Contrast** are clear. **LoD** means Level of Details and refers to geometric correction. If the slider is located on the left full correction is effective while the degree of geometric correction decreases when the slider is moved to the right. A reduction may be useful if calibration problems come up and surfaces could not be analyzed correctly.
7. The slider controls below **Softedge blending** refer to the image overlaps. Use controls **Plateau**, **Gradient** and **Gamma** to make these overlaps even more homogenous. In doing so you will notice that the edges

of the transitions are usually not straight. Manual correction is best started by **Gamma** followed by **Gradient**.

See also

Camera-based calibration

Suitable cameras for calibration

Automatic calibration of a permanent installation

Automatic calibration of a permanent installation

For permanent installations, calibrations can be performed automatically at certain intervals, e.g. in the morning when starting up the system or remotely-controlled via a media control system. This ensures high image quality for multidisplay shows at any time, e.g. even after exchanging projector lamps.

1. Start by performing a standard, camera-based calibration as explained in topic Camera-based calibration. **Important:** Before the calibration the images projected by the video projector need to be aligned in such a way that they cover up the screen so that it is fully illuminated even when the video projector is slightly misaligned.
2. Continue by adding the trigger **VIOSO calibration** in the project. It can be found in category **Multidisplay**. See also Creating triggers.
3. After executing this trigger VIOSO calibration will be performed automatically without any further queries. Should calibration fail for any reasons, the last successful calibration will be loaded.
4. The trigger can be executed by placing a trigger marker in a start timeline, remotely controlled via RS232 or time-controlled via the scheduler. See also Executing a trigger.

Info In order to ensure stable display allocation after a power failure or when the displays are defective we recommend connecting Gefen Detective along the signal line between display and graphics output. Gefen Detective saves EDID and transmits it to the graphics cards even when the video projector is switched off, disconnected or defective. This keeps Windows from from changing the display allocation due to altered EDIDs.

See also

Camera-based calibration

Manual calibration adjustment

Suitable cameras for calibration

Displaying test pictures

To align a number of projectors for split pictures Wings Platinum features a function which calls up prepared test pictures and displays them on all displays or projectors, respectively. Please bear in mind that this function is not suitable for aligning the overlapping projection areas for softedge projection. In such a case you'd better proceed as explained in workshop Creating a multidisplay show .

1. Close all open multidisplay screens by pressing **Shift** and **Esc**. In the main menu, click **Presentation** &endash; **Test pictures** and the corresponding dialog box will appear.
2. Click on **Select directory** and enter the folder holding your prepared test pictures.

   Info If Wings Platinum was installed from the DVD, you will find a few test pictures in the Wings Platinum program folder, which is usually located at drive:\....**My Documents\AV Stumpfl\Media Samples/Test charts**.
3. Following this, all pictures contained in this folder will be displayed in the list of test pictures. It is also possible to display only pictures of a

certain size. To do so, click on next to **Picture size** and select the corresponding size.

4. Under **Mode** the type of display can be selected:
   - Top left corner, original size, i.e. exactly 1 : 1
   - Fullscreen with correct aspect ratio (picture may be changed in size)
   - **Fullscreen** (picture may be distorted and changed in size)
5. Highlight the corresponding test picture, click on **Display picture** and this picture will be displayed on all displays. Use buttons and to jump from one picture in your sequence of test pictures to another. Click on to make the test picture disappear again.

Info

- In Dual Monitor Mode the test pictures are only displayed on the first monitor.
- For the test pictures to be displayed by the slave as well, button **Enable network** must be depressed. The pictures only need to be available on the master.
- When using test images for a show, please note that a margin with a width of about one pixel cannot be displayed on the screen. This means that the effective width and height of a texture is reduced by two pixels. This has no relevance for the function **Displaying test pictures**.

Restricting the output of visual contents to certain displays

For multidisplay shows, the output of the visual contents can be restricted to a particular display. For this purpose, a target display needs to be speci-

fied in the Track Properties. This may be appropriate for real time playback of videos in original quality to avoid wasting computer power.

This is an example of a multidisplay show in soft edge technology: A video is statically positioned and completely fills the central display. As the two neighbouring displays, due to the soft edge overlap, extend into the central display, the left and the right slave would also have to play the video. This can be avoided by restricting the output of the video track to the central slave, thus reducing the burden on the other two slaves.

Occasionally, it may be necessary to restrict the output of a PC that serves several slaves. If a video extends to one display only, output of the track can be restricted to this display only. This way loading and rendering of the video by the graphics card needs to be done only once. Output of the track can also be restricted to several displays if the show requires it.

This is how you restrict output of a track to one or more displays:

1. Highlight the track so that its parameters are displayed in the Properties Table.
2. In the Media Pool click the plus sign next to category **Screens** and click the corresponding screen below it. After this, its screen fields and displays are shown on the right.
3. Drag the corresponding display onto the field next to **Target displays**. If you want to assign several displays to this track repeat this process with all the other displays. If you move the mouse pointer across the field next to **Target displays** all assigned displays will be listed.

Info Target display assignments can be deleted by clicking **Target display** followed by clicking on button .

In order to be able to position the images and (split) videos simply and securely on the display, it may be useful to create a new screen field which corresponds exactly to the display in size and position.

1. In the Media Pool click the plus sign next to category **Screens** and select the new screen below it.
2. Right-click the display of the target PC and select **Add field**. This creates a screen field which corresponds exactly to the display position.

3. Enter an appropriate name for the screen field, e.g. **Centre**, by double-clicking **New field** and entering it.
4. In the Track Properties, assign the new field to the corresponding tracks.

Info As an alternative, you can also position media objects freely, e.g. via keyframes. When adjusting size and position, the display frames should be displayed so that the picture can be positioned within the display boundaries. See Displaying multidisplay frames.

Show status of master and slave computers

Wings Platinum Help offers the following options for status display:

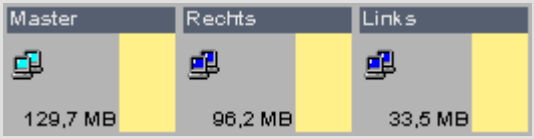
- **Statistics and Diagnosis** ...under **Network** this dialog provides information about file transfer and graphic display on all computers of a presentation network. This dialog can be opened by pressing **Alt** + **D**. See also Statistics and Diagnosis.
- **Control Panel** ...allows a control panel field for every computer to be set up, which offers a permanent status display.

  The following information is available for the PCs:

  - **Green** ...network connection established, idling condition, everything OK.
  - **Blue** ...the slave is running a multidisplay presentation and is in Play or Pause Mode.
  - **Yellow** ...slave computer is active; during a file transfer the rate of data to be transferred or during display data creation the media files to be processed are displayed additionally.
  - **Red** ...Error. Network connection not available.
  - **Exclamation mark** ...indicates an additional error for the slaves.

  Show examples

Presentation network ok.



File transfer, all PCs are active

Presentation; the slaves are in Play or Pause Mode

Error, no network connection with right slave

To set up control panel fields, click tab **Control Panel** and drag the corresponding PCs from the Media Pool **Devices** and drop them into the Control Panel. See also Adding control panel fields.

Info

- During display data creation the number of files to be processed is displayed, e.g. **35 / 14** means 35 pictures and 14 videos or audio files. See also Creating display data for media files.
- Any bitmaps for graphic design of these PC control panel fields need to consist of three parts. See also Graphic design of the Control Panel.

Transferring Global Options to slave PCs

Some Global Options important for multidisplay presentations can be transferred from the master to the slaves. The following Global Options are transferred:

- General: Allow automatic codec selection by Windows
- User interface: **Language**
- Output: Synchronization Mode
- Output: Playback priority
- Color management: **all relevant settings**; the customized color profile that may be used must be installed locally on the slave and selected in the options.
- Save: Automatically correct invalid file dates.
- and a few internal settings for the latest versions

These options can be transferred to all slaves or to individual slaves.

Transfer to all slave PCs

- In the main menu click **Extras** and select **Global Options** →**Slave PCs**

Transfer to one particular slave PC

- In the Media Pool click on category **Devices**.
- Right-click the corresponding slave PC and select **Transfer global options**.

Info For function **Transfer global options** there must be an active network connection to the slave PC; on master and slave the buttons **Enable network** must be grayed. Otherwise, menu item **Transfer global options** is not available or a transmission error message appears.

Background for slave computers

It is possible to enable a background for the slave computers to prevent the Windows desktop from being displayed. Optionally, the IP address can also be displayed.

1. Make sure that the entire presentation network is ready for use.
2. On the master in the main menu click **Multidisplay - Slave background...**
3. The dialog **Slave background** allows the following settings:
   - **Display background** ...enables display of the background in the specified color. The color can be selected by clicking the color field. **Details on color selection**.

     - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
     - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

     If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

     - Select a color so that it becomes visible in field **Old / New color** on the right.
     - Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.

- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Display IP address** ...enables display of the slave IP address in the specified size and color.
- **Save settings on slaves permanently** ...enters the settings in the slave Multidisplay Options, so that the selected background is also displayed after a restart. Without a checkmark, the selected background settings have only temporary effect and the settings of the corresponding slaves apply after a restart. See also **Options - Project Options - Multidisplay.**

4. Click **OK** to enable the background for the slaves.

Info The background can be removed likewise by removing the checkmark in the dialog. By pressing **Shift** and **Esc** you can remove the background directly for individual slaves.

Disguised restart of Wings Platinum

There is a way to restart Wings Platinum (...not correspond to a PC reboot) without the audience noticing. For this purpose file **BlankScreen.exe** needs to be located in the Wings Platinum folder (...i.e. in the same folder as the "Platinum.exe" file.) If you do no have this program available contact us and we will send it to you.

If Wings Platinum is restarted via a trigger action it calls up the **BlankScreen** program. The only thing it does is show a black screen or a picture (see below). After restarting Wings Platinum, which is done sort of "behind the scenes", the **BlankScreen** window remains until either the presentation is started (**F5**) or the slave screens are displayed (**Ctrl + F6**) or **Shift + Esc** are pressed. This means that you can take as long as it takes to load a project on the master and transfer it to the slaves without anybody noticing. Only when the actual presentation is started, does the **BlankScreen** window disappear.

Info In order to show a picture instead of the black screen, a picture called **BlankScreen.bmp**, **BlankScreen.jpg** or **BlankScreen.tif** must be located in the same folder as **BlankScreen.exe**. In such a case, the first (in the order as shown above) of these pictures is displayed at fullscreen size (if applicable stretched/compressed) on the corresponding display.

See also

Trigger Action - Wings Platinum - Freeze display content

Transferring an update to all slave PCs

A Wings Platinum update for all slaves can be performed centrally by the master. To do so you need an update file which can be downloaded from our website.

And this is how it is done:

1. Start up the presentation network with all its computers and make sure that Wings Platinum has established a connection to all slaves, just like for a presentation.
2. In the main menu click **?** and select **Software Update ▸ via Update File...** Now choose the update file you downloaded before. It must be available on a data carrier or LAN for the master.
3. If the update file is a later version than the installed version, proceed with the update by clicking **OK**. The query whether the update is to be performed for all slaves too, needs to be answered in positive. Following this, the update files will be copied onto the slaves. Wings Platinum will be briefly terminated and restarted again.
4. If you had chosen a user-specific online help you should download the preferred help version separately. Otherwise the help will contain **All the information**. See Separate update of the online help.

See

Software Update

Media Engine

The Media Engine by AV Stumpfl constitutes high-performance, high-reliability hardware for multidisplay shows. It is a media server which reflects the experience we have gained in the course of the past years. It is based on Windows 7 and has been provided with selected components that ensure optimal configuration. The following features make it stand out:

- Operating system on SSD guarantees highest performance and reliability
- High-performance graphics card with two or four display outputs (DUAL or QUAD), two additional outputs for control monitors.
- A Raid1 hard drive system automatically creates an exact copy (mirror) on a second hard disk.
- Reduced desktop allows fast access to the most important functions. See Media Engine Desktop.
- Generation of test images on all outputs facilitates alignment of video projectors or displays. See Displaying test images.
- A status interface allows querying of the MediaEngine in any situation. See Front, Rear Views and Ports.
- TeamViewer, the support module; allows remote access for remote maintenance and troubleshooting.
- Acronis Rebuilder allows the operating system to be reset to its initial condition or to a condition previously saved by a user. See System recovery.

Operating conditions

In order to guarantee proper operation make sure that the following operating conditions prevail.

Ambient temperature

An ambient temperature range of 21°C (69.8°F) to 23°C (73.4°F) is optimal for server reliability. At 22°C (71.6°F) it is easy to maintain a safe relative

humidity level. Operating in this temperature range provides a buffer if the environmental support systems fail.

Relative Humidity

Ambient relative humidity levels between 45% and 50% are the most suitable for data processing operations in order to:

- prevent corrosion
- provide an operating time buffer in the event of environmental control system failure
- help avoid failures caused by the intermittent interference from static discharges that occur when relative humidity is too low.

Airflow Considerations

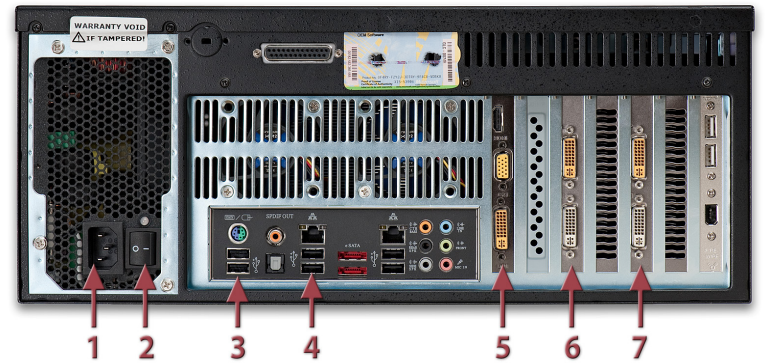
- Ensure unobstructed airflow through the chassis
- Ensure that inlet air enters at the front of the server and exits from the back.
- Ensure that ventilation openings, such as cabinet doors, for both the inlet and exhaust of the server provide minimum open area of 460 cm^2 (71.3 in^2) each.
- Take care to prevent recirculation of exhaust air within a rack or cabinet.
- Manage cables to minimize interfering with the server exhaust vent.

Media Engine Quick Start

The Media Engine is pre-installed and allows very quick starting.

1. Using the power cable, hook up the Media Engine power supply (1) with the mains supply.
2. Connect keyboard and mouse to the USB- or PS2 ports (3).

3. Connect the control monitor to the first graphics card (5) and the video projectors or displays for the show to the double-slot graphics cards (6 + 7).
4. Plug the copy protection dongles into the USB ports (4). With DUAL Media Engines usually only one dongle is used.
5. Switch on the power via the switch at the power supply unit (2).



6. Open the flap at the front and start the Media Engine via the switch (8). After starting, the Media Engine desktop appears:

7. Click onto symbols **Master** or **Slave** to start Wings in the corresponding mode. Slave Mode would only be practicable if you wanted to run and control the Media Engine on a network via a master in order to output a show on more than four displays or video projectors. After starting up Wings you can create a multidisplay project and design a show. See Creating a multidisplay show via one computer in the help topics.

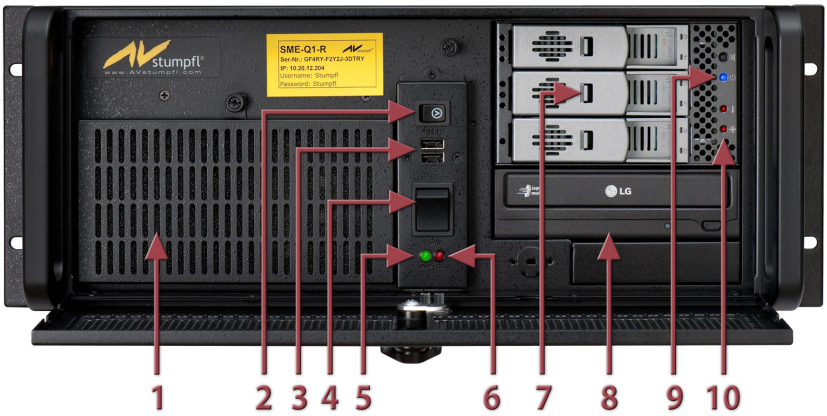
   Info If Wings is to start up automatically after starting the Media Engine click and check **Run at Startup** below the corresponding start symbol for master or slave mode. There are various options available for a Wings start, such as loading and starting of certain shows. See **Global Options** - **Program start** in the help topics.

8. Basic alignment of the video projectors is possible via the Media Engine test image generator by clicking

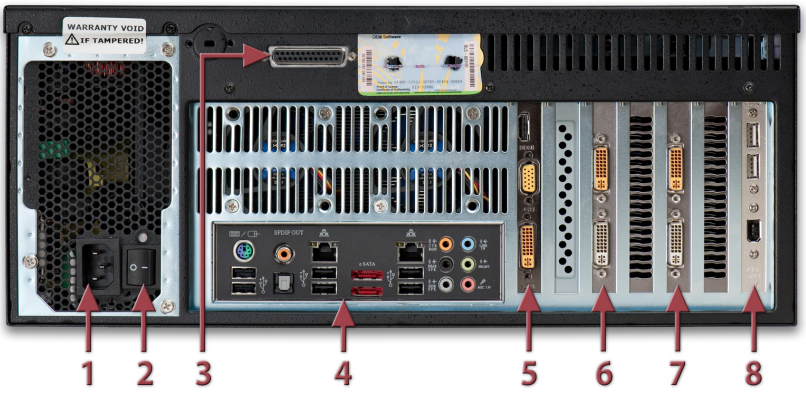
. See also Displaying test images.

Front, Rear Views and Ports

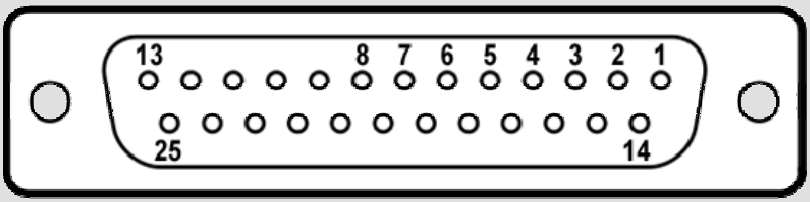
Controls and Media Engine drives are located behind a lockable flap at the front:



1. Intake for cooling air; after loosening the screw the cover can be removed and the filter be cleaned or replaced.
2. Reset switch for resetting the Media Engine.
3. USB 2.0 ports
4. Media Engine On/Off (Power) Switch. **Important:** Before the Media Engine can be switched on, the mains switch at the rear must be on.
5. Green LED indicates that the device is in operation.
6. Red LED indicates hard disk activity.
7. Unlocking lever to allow replacement of the RAID hard disk. By default, only the two top ones are used, the bottom one is kept in reserve. A defective hard disk may be replaced during operation.
8. CD/DVD drive
9. Blue LED indicates that the RAID system is ready for operation.
10. Red LEDs indicated warning of overheating (top one) and failure of fan (bottom one).



1. Socket for mains connection of 100 to 264 Volt AC and 47 to 63 Hz
2. Mains switch, LED is on when switched on.
3. Control port for On/Off status control and remotely controlled activation/deactivation and resetting. **Pin configuration**



1 - Power is ON

2 - Power is OFF

3 - Power Ref (0-24V/1A)

4 - Power OFF (12V)

5 - Power ON (12V)

6 - NC

7 - Reset (12V)

8...25 - GND

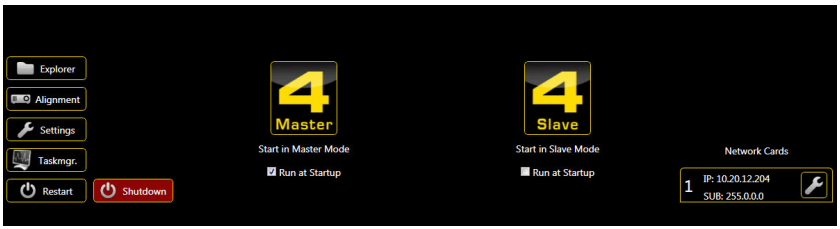
Shield - GND

- Pins 1 and 3 are shorted when the Media Engine is on. The maximum rating for this line, e.g. for control lamps, is 24V/1A.
- When the Media Engine is off, pins 2 and 3 are shorted. The maximum rating for this line, e.g. for control lamps, is 24V/1A.
- To switch on the Media Engine, a 12 V pulse must be applied between pin 5 and GND.
- To switch off the Media Engine, a 12 V pulse must applied between pin 4 and GND.
- To reset the Media Engine, a 12 V pulse must be applied between pin 7 and GND.

4. Connector panel as is customary for computers. For details refer to **Media Engine** in the Wings Platinum help topics.
5. Graphics card output for two control monitors. **Note:** If you want to render a video from a show you should improve performance by connecting the control monitor to one of the high-performance outputs.
6. High-performance output for two displays or video projectors
7. High-performance output for two displays or video projectors (only for QUAD Media Engine)
8. Firewire 400 and USB 2.0 ports

Media Engine Desktop

The Media Engine features a reduced desktop that comprises buttons for the most important functions.



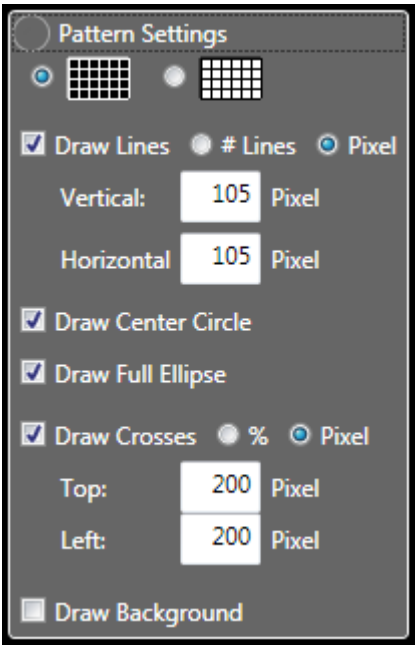
- **Start in Master Mode** ...starts Wings in Master Mode for Multidisplay shows run from a Media Engine. Place a checkmark next to **Run at Startup** to start Wings automatically in this mode after switching on the Media Engine.
- **Start in Master Mode** ...starts Wings in Slave Mode as additional networked Media Engine which is then controlled by a master. Place a checkmark next to **Run at Startup** to start Wings automatically in this mode after switching on the Media Engine.
- **Explorer** ...opens Windows Explorer.
- **Alignment** ...shows a test image which can be configured in accordance with your requirements. See also Displaying test images.
- **Settings** ...offers shortcuts for all the most dialogs and the Wings options for master and slave mode. See Shortcuts and Wings Settings.
- **Taskmgr.** ...opens Windows Task Manager.
- **Restart** ...terminates operation and restarts the Media Engine.
- **Shutdown** ...shuts the Media Engine down.
- **Network Cards** ...gives the Media Engine's IP address and the subnet mask if there is a network connection. Click to change the IP address and the subnet mask.

Displaying test images

The Media Engine features a test image generator which allows various test images at suitable resolution to be displayed at all outputs without requiring Wings. This is how the test image generator can be used:

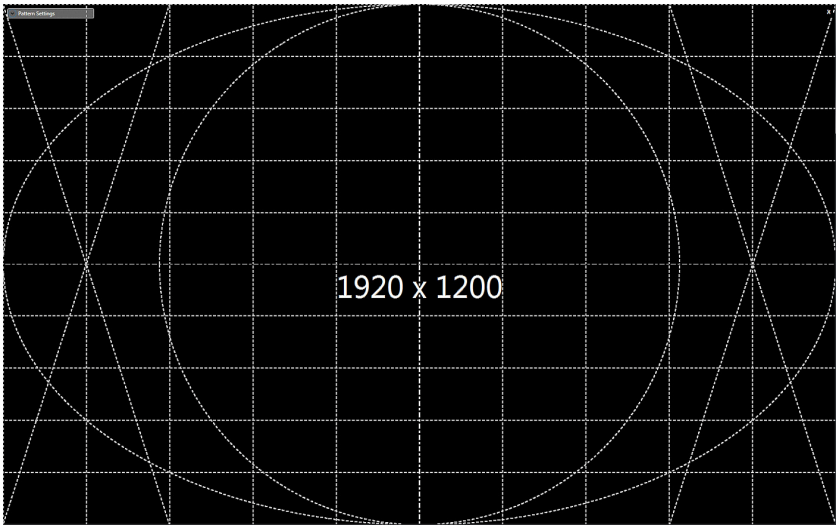
1. On the left desktop side click

, following which a test image will be displayed.
2. In order to set up the test image in accordance with your requirements click button **Pattern Settings** at the top, following which another dialog pops up:

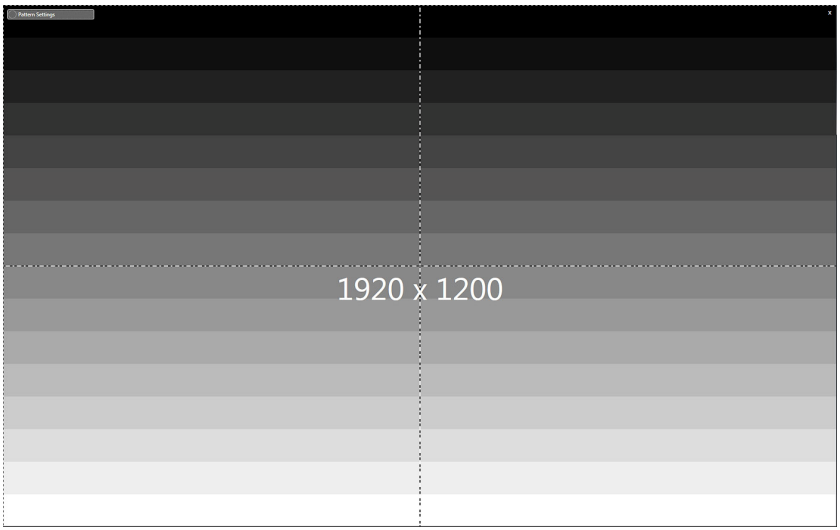


3. This dialog allows configuration of the test image as follows:
    - Choice between black or white grid lines
    - **Draw Lines** ...produces a grid with the specified grid division. The grid division can optionally be entered in lines (number of lines) or in pixels (distance between the lines in pixels).
    - **Draw Center Circle** ...produces a center circle.
    - **Draw Full Elipse** ...produces an ellipse which touches the edges of the image.
    - **Draw Crosses** ...produces diagonal lines in the overlap areas specified below. Entries can optionally be made in % or in pixels.
    - **Draw Background** ...produces grayscale or color stripes in the background.

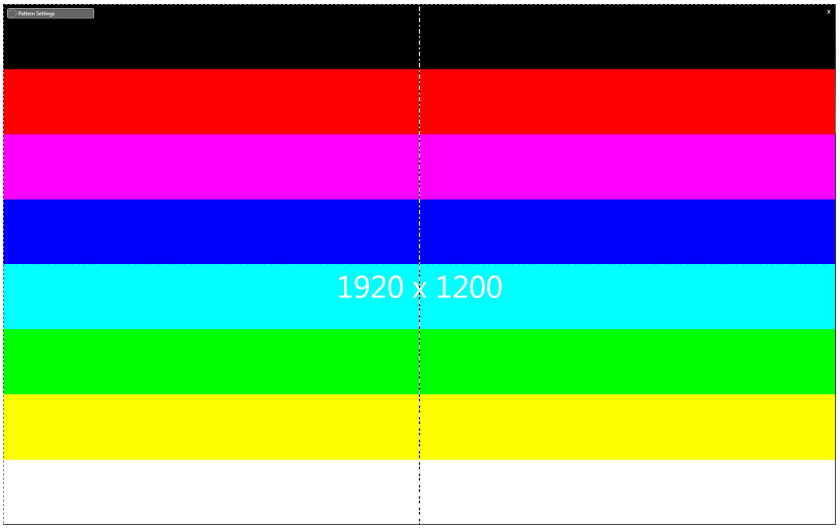
Below you will find a few examples:



Grid with ellipse and circle as well as diagonals in the overlap areas on the left and right.



Grayscale with simplest grid



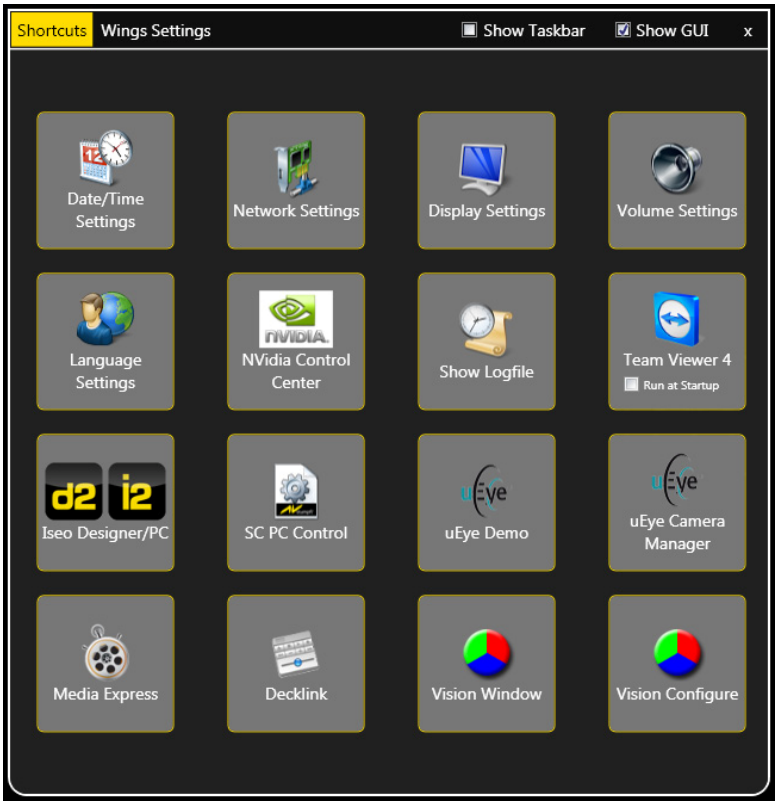
Primary and secondary colors, as well as white and black stripes

4. To terminate the test image generator click the small cross at the top right corner or press the **Esc** key.

Shortcuts

On the left desktop side click

to open a dialog that allows access to virtually all relevant Media Engine configuration dialogs:



- **Date/Time Setting** ...opens the Windows dialog for setting date and time.
- **Network Setting** ...opens the Windows dialog for the existing network cards.
- **Display Settings** ...opens the Windows dialog for changing the graphics card resolution.
- **Volume Settings** ...opens the Windows dialog for the sound properties.
- **Language Settings** ...opens the Windows dialog for regional and language options.
- **NVidia Control Center** ...opens the Nvidia configuration dialog.

- **Show Logfile** ...shows the content of the Wings log file.
- **TeamViewer 4** ...opens the dialog for remote support and maintenance. Clicking and checking the box next to **Run at Startup** starts TeamViewer along with the system and allows access via the Internet.
- **Iseo Designer/PC** ...opens Iseo Designer and Iseo PC, the AV Stumpfl media control system.
- **SC PC Control** ...starts the corresponding tool that allows remote control of the Media Engine via Iseo.
- **uEye Demo** ...opens
- **uEye Camera Manager** ...opens the configuration dialog for uEye-camera-based VIOSO calibration.
- **Media Express** ...opens the configuration dialog for Blackmagic video input cards.
- **Decklink** ...opens the configuration dialog for Decklink video input cards.
- **Vision Window** ...opens the control window for Datapath Vision RGB video input cards.
- **Vision Configure** ...opens the configuration dialog for Datapath Vision RGB video input cards.

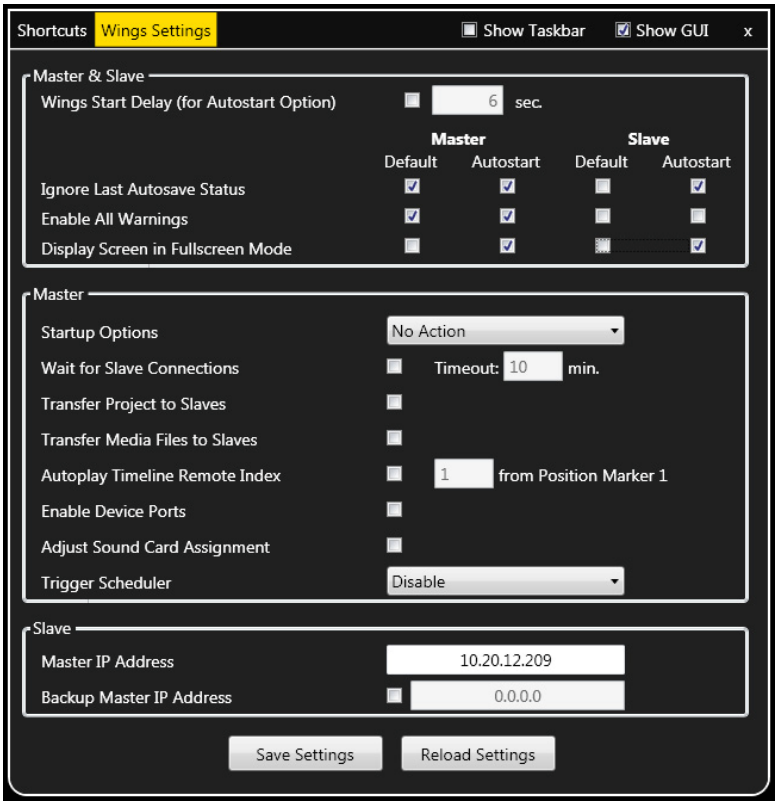
The checkboxes in the title bar have the following functions

- **Show Taskbar** ...shows the Windows task bar.
- **Show GUI** ...shows the Media Engine user interface.

Wings Settings

At the left desktop side click

and, in the dialog popping up, click on **Wings Settings** at the top. Here you can define the options for the Wings program start. They differ for master and slave mode, i.e. by choosing the correct start modus the appropriate configuration is loaded automatically.



The settings made here correspond to the Wings Options. See **Global Options** - Program start and Network in the Wings help topics.

Field **Master & Slave** allows separate settings for master and slave mode. Moreover, by clicking and selecting the checkboxes under **Default** you can choose the functions that are to apply for a normal startup by clicking the desktop symbols. The functions chosen under **Autostart** apply if Wings is started automatically along with the system after enabling Autostart below master and slave.

Saving and loading the settings

The settings can be written directly to the registry by clicking **Save Settings** so that they are taken over by Wings. If you change the program start options in Wings while the Settings Dialog is open you need to click **Reload Settings** to display the current settings.

System recovery

A hard disk backup software by **Acronis** is installed on the Media Engine, which allows you to restore the system drive to its original status. Of course it is also possible to prepare your own hard disk backups and to recover your system drive if necessary.

Backing up the system drive

To back up the Media Engine system drive use the supplied hard disk backup software **Acronis**.

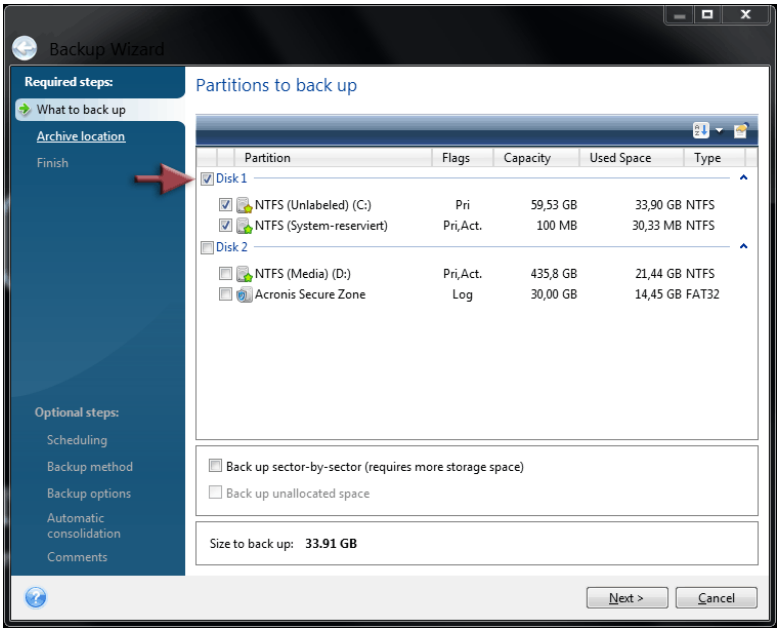
1. Click

and, in the dialog at the top, place a checkmark next to **Show Taskbar**, following which the task bar will appear. Close the dialog.

2. Click the Windows symbol and select **All Programs** - **Acronis** - **Acronis True Image Home** - **Acronis True Image Home** and a dialog box will open up.

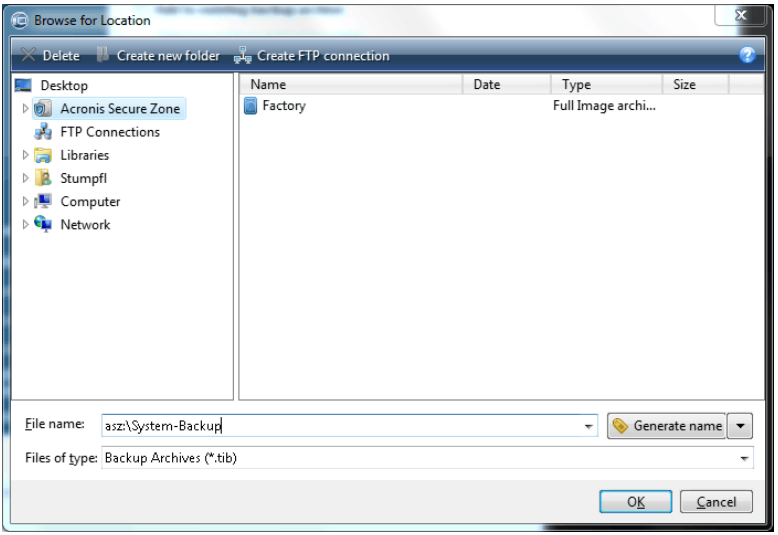
3. Under **Back Up** click **My Disk** and the Backup Wizard will appear.

4. Check the box **Disk 1** and click **Next**.



5. In the dialog box popping up select **Create New Backup Archive** and click **Browse** in order to enter the storage location.

6. Select **Acronis Secure Zone** and enter the appropriate file name under **Filename**. As an option you can also select a name affix by clicking under **Generate name** and entering the date, for example.



7. Close the file dialog by clicking **OK** and click **Next**, following which a summary of the tasks to be performed appears. Click on **Proceed**, to start the backup process.

8. After the backup has been completed a message appears which you need to confirm. The calendar view shows you the backups and the date of their creation.

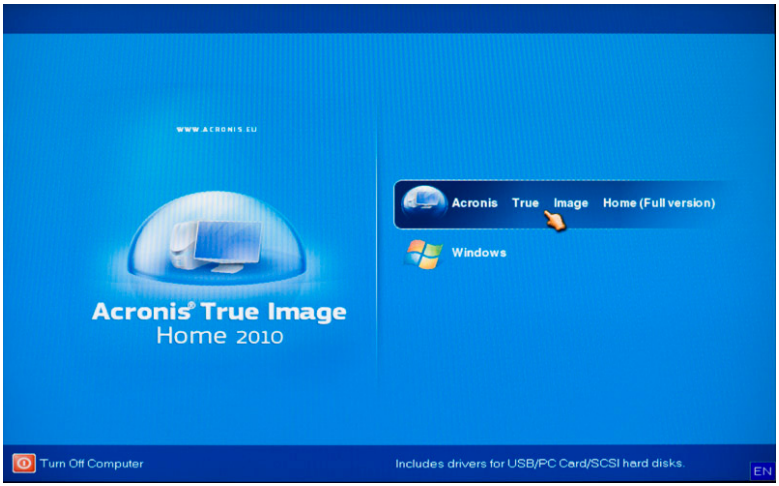
Recovering your system drive

To recover the Media Engine system drive use the supplied hard disk backup software **Acronis**. You can recover the original status (Backup **Factory**) or any other status that had previously been saved.

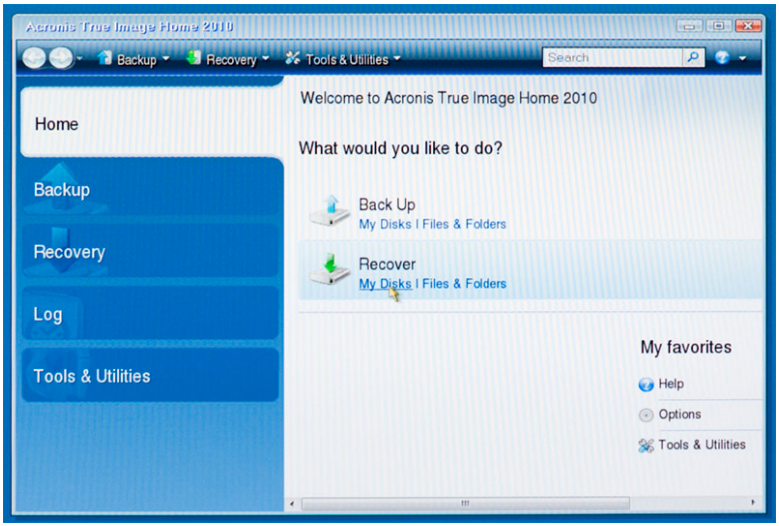
1. Restart the Media Engine by clicking

. After loading Bios the following message appears for a short time:

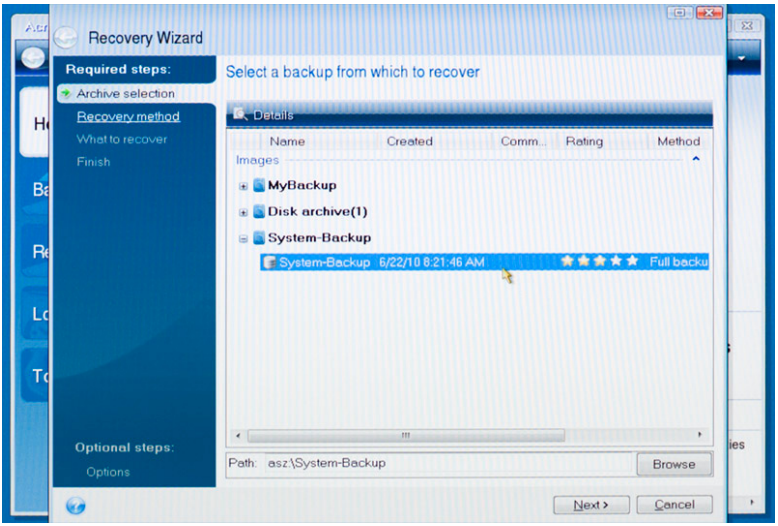
2. Press the **F11** key to start the Acronis Startup Recovery Manager. In the following dialog select **Acronis True Image Home**.



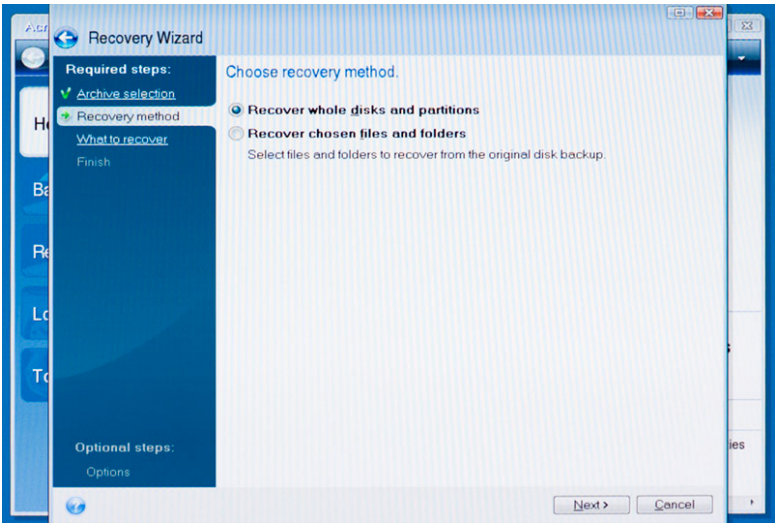
3. Under **Recover** click **My Disks**.



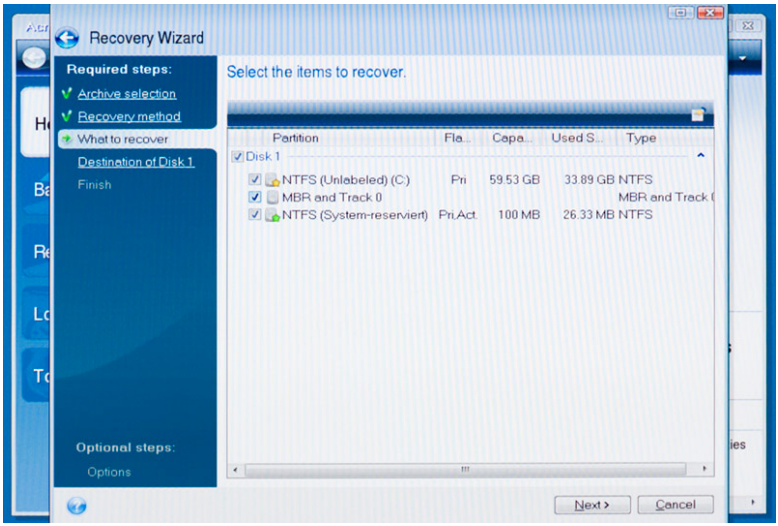
4. Select the system backup you want to recover. If the initial condition is to be resume, select **Factory**. Click **Next**.



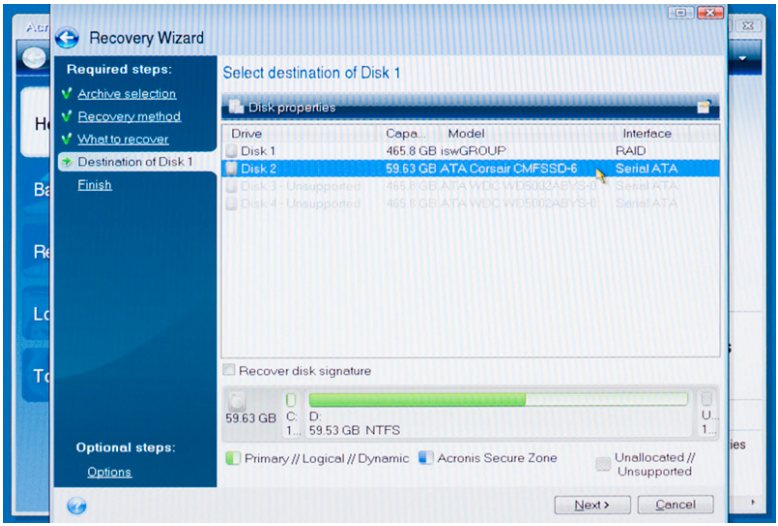
5. For Recovery method choose **Recover whole disks and partitions** and click **Next**.



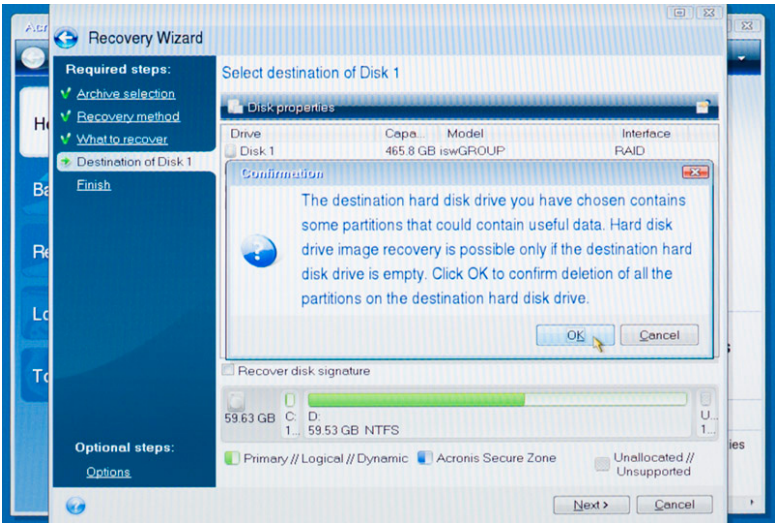
6. Select the drive that contains the partition to be recovered. In this case it is **Disk 1** and click **Next**.



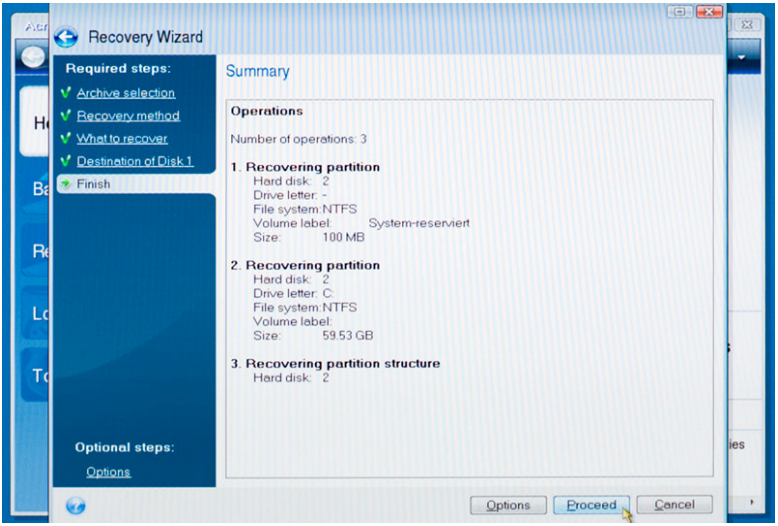
7. Select the SSD system drive **ATA Corsair CMFSSD-6** that contains the operating system and the programs and click **Next**.



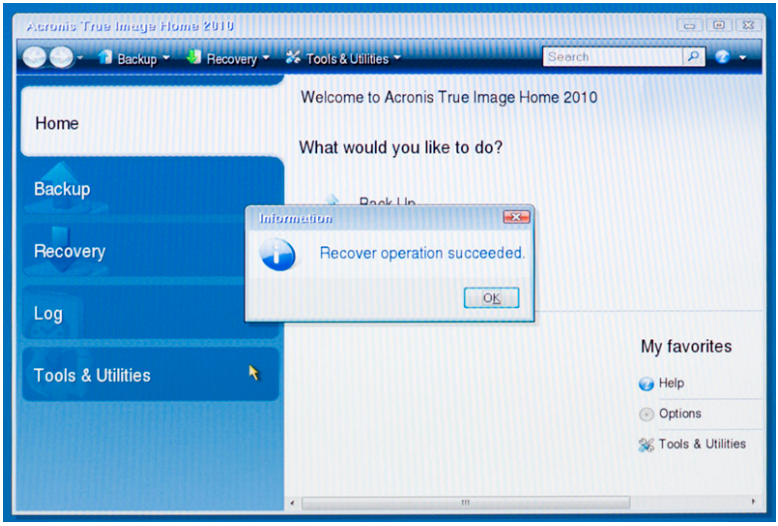
8. If you are sure that the drive is to be deleted and overwritten with the backup version click **OK**.



9. The measures taken are listed again below. Click **Proceed**, to start the process. A progress report and the expected time until completion of the backup will be displayed.



10. After the recovery is done, a message will appear saying that the operation was successful which you confirm by clicking **OK**.



11. You can now terminate **Acronis True Image Home** and restart the Media Engine.

Slide programming

You can only use Wings Platinum for slide show programming after activating control of slide projectors. See Enabling usage of slide projectors.

After this function has been enabled you can control the slide projectors directly on the computer or via the corresponding control units. See Control units and slide projectors.

For programming, the picture and sound objects are arranged in the timeline analogously to the way they are to be presented. Editing of media object is very simple &endash; all types of objects are usually edited similarly. See Editing objects.

However, there are specific functions for slide and slide tray management that will be explained separately. These are the most important topics:

Automatic sorting of slides

Collision of dissolves and slide transport

Change time for slide projectors

Programming without digital pictures

Multiple usage of slides

Using duplicate slides

Presenting landscape and portrait format

Hard cut with shutter

Activating the HighLight Function

Activating the Standby Function

Enable usage of slide projectors

Before your can actually project your show via slide projectors you need to enable usage of slide projectors in Wings Platinum.

1. Click **Options** in the toolbar below the main menu and select in **Global Options** - **General**.
2. Under **Slide projection** check box **Enable usage of slide projectors**.
3. Click **Help** on the left and enable the Help function for **Audiovision**.
4. Close the dialog by clicking **OK** and **close** Wings Platinum. After re-starting Wings Platinum usage of slide projectors is enabled.

See also

Slide programming

Multiple usage of slides

Multiple projection of an image, e.g. of a slide with a map on it, is very easy in Wings Platinum. You simply integrate it in your show by dragging the same image from the Media Pool again and placing it at the corresponding position in the timeline. Projectors featuring Random Access have easy and quick access to these slides.

For a show with two projectors only, the following problem may come up:

1. When the message Not Enough Projectors comes up while playing the show in the Preview Window , i.e. when an image has an orange background you may have to duplicate it. This may be due to the fact that the slide has been sorted into another tray than that used for the show. In order to check this, click on **Timeline** - **Assign slide tray positions** in the main menu.
2. Confirm with **OK**. Following this, the picture to be duplicated is displayed in the Media Pool. In the Media Pool, right-click this image and select **Duplicate file...**.
3. In the following file dialog click on **Save**, to save the file. To distinguish it from the other one, a "2" is automatically added to its file name. Now drag the duplicate onto the corresponding picture object in the timeline. When you run the show now, the duplicate slide is assigned to the corresponding tray.

Using duplicate slides

Multiple projection of an image, e.g. a slide with a map on it, is very easy in Wings Platinum. You simply integrate it in your show by dragging the same image from the Media Pool again and placing it at the corresponding position in the timeline. Projectors featuring Random Access can easily and quickly access these slides. If, however, you have standard projectors, it makes sense to produce a duplicate slide; otherwise it takes too long to access the slide.

1. To prevent you from wasting your time searching for the image to be duplicated in the Media Pool, right-click the object in the timeline that contains the picture to be duplicated and select **Display Pool Object**. Following this, the picture is displayed in the Media Pool.
2. Right-click this picture file and select **Duplicate file**. In the following file dialog, click on **Save** to save the file. To distinguish it from the other one, a "2" is automatically added to its file name.
3. Drag the duplicate picture from the Media Pool to its new position in a picture track and incorporate it in your show. That's all you need to do - Wings Platinum will automatically assign all pictures to the trays.

Pulsing

The Mute function for objects is a very simple means for creating regular blinking or pulsing. Any attempts at using the ramp band on an object for this purpose are much more tedious and the outcome is usually not as regular as via the Mute function. Please keep in mind, that the effect is different with slide projectors compared to digital playback.

1. Right-click the corresponding picture object and select **Control tracks** &endash; **Mute**.
2. Right-click the picture object once again and select **Special Functions** &endash; **Create ramp**.
3. Under **Mute off** (bright phase) and **Mute on** (dark phase) you can enter times for the blinking effect.
4. Click on **Assign** and the dark/bright phases will be displayed in the control track.

Info

- To change the blinking rhythm right-click the picture object, select **Special functions** &endash; **Create ramp** once again and alter the values.
- While playing back such a picture object, the required effect is produced by the slide projector shutter. If there is no such shutter, it's the lamp that is controlled accordingly. When the effect produced by the shutter seems to be too hard, you can deactivate the shutter. See Slide projector properties.

See also

Hard cut with shutter

Editing the ramp band

Hard cut with shutter

Some slide projectors feature a controllable mechanical shutter which allows hard cuts. In this case, the halogen lamp afterglow time does not have any effect. In Wings Platinum, the shutter is controlled via the Mute function in the control tracks of a picture object.

1. Right-click the corresponding picture object and select **Control tracks** &endash; **Mute**. Following this a control track will be displayed in the object.
2. Now double-click it to activate the shutter. This way you can program the shutter to be opened and closed. The red area indicates the period that the shutter is closed.
3. The length of the red area can be extended and adjusted in time by grabbing it with the mouse. As soon as you grab the boundary of this area, it is highlighted and can be moved. Delete the boundary of an area by right-clicking it, followed by selecting **Remove**.
4. For a hard cut, two objects are placed in different picture tracks and opening and closing of the shutter must be accurately aligned. This is done most easily when **Snap to objects** is activated, which means that the Locator turns magnetic. See Snapping to objects.

Info

- The muting function for control tracks offers an easy way for creating blinking effects. See Muting/pulsing objects.
- If you shorten or extend the area by double-clicking it, the old boundaries will remain visible as gray lines. They have no direct effect and can be removed by right-clicking them.
- This function can be used to imitate Snap commands created in the "old" Wings 4.x that were lost while importing the file.

Activating the HighLight Function

Some slide projectors, e.g. Ekatpro or Leica RT, feature a function to increase the lamp brightness.

1. Right-click a picture object and select **Special Functions ▶ HighLight (Slide projector).**
2. The same way the HighLight function can also be deactivated.
3. If you want to activate or deactivate the HighLight function for several picture objects you need to highlight them before you can do so. See also Marking objects.

See also

Object Properties

Activating the Standby Function

Some slide projectors, such as Kodak Ektapro or Leica RT can be program-controlled to be set to standby mode. This is done via picture objects, which are converted into standby objects, so to say. Usually, a standby function is required at the beginning or the end of a show.

Our example will show you how to set projectors to Standby Mode at the end. To do so, the last picture objects of a projector need to be copied and re-inserted. Which picture objects these are, can be seen from the Slide Tray Editor or from the projector identification in the info line.

1. Right-click the last picture object of a projector and select **Copy**.
2. With the right mouse button, click the picture track behind the picture object and select **Paste clipboard**.
3. Right-click the inserted picture object for the Properties Table to be displayed. Select tab **Picture** and check box **Standby activated**, followed by clicking on **OK**.
4. Repeat all steps for the last picture objects of all the other projectors. In the end, there should be such a "Standby Object" behind the actual picture object for every projector.

Info

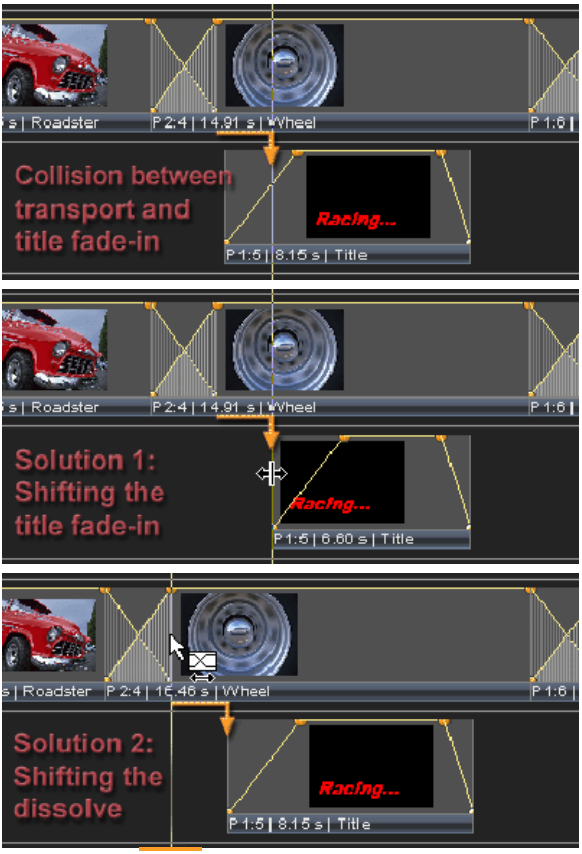
- "Standby Objects" can also be placed in the beginning or middle of a show. In principle, the process is the same.
- The Standby Function is activated via picture objects. This means that this standby mode is moved along to the corresponding projector when the slides are re-sorted. If a Standby Mode is to refer to a particular projector, the picture in the Slide Tray Editor needs to be locked in that projectors. See Locking slides in projectors.
- You can change the duration of a "Standby Object" to change the duration of the projector Standby Mode. However, we recommend using short "Standby Objects", because the Standby Function will remain active anyway during playback until the projector in question takes the next step and is then terminated automatically, e.g. by fading in.

See also

Collision of dissolves

Upon checking your dissolves with the slide projector you may find out that dissolves start although the projector has not been able to transport to the corresponding slide. In such a case the screen remains dark or a nasty wiping effect may be visible. You can solve this problem either be adding projectors or by changing the arrangement of picture objects so that the dissolves can be produced with the available number of projectors. The latter is the faster way. This is how you proceed:

- In the main menu, click **Timeline** - **Assign slide tray positions**... or press keys **Ctrl** and **W**. In this case you will be confronted with a message saying that there are not enough projectors for correct assignment of slides.
- Click on **OK**. The locator will jump to the corresponding position to show you when the corresponding projector is available again. Now you only need to change your dissolves accordingly. Objects which cause a collision are always allocated to the same projector. The projector allocation can be seen in the info line.



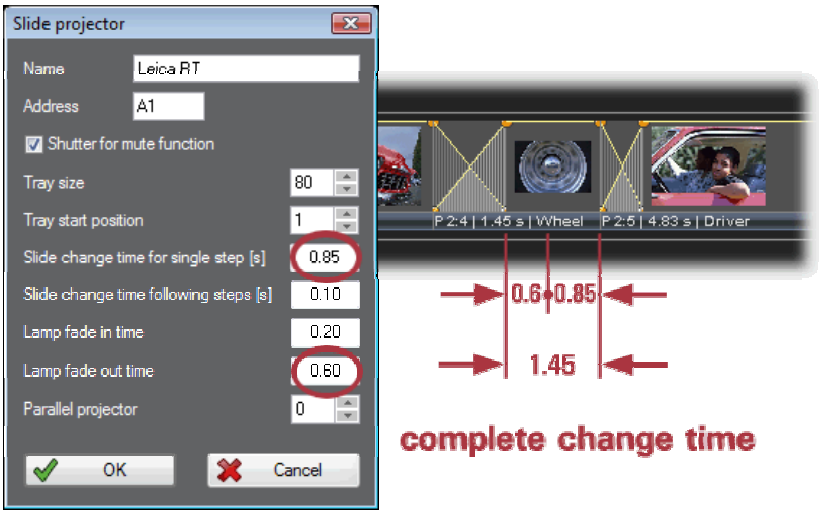
- After changing the dissolves click **Ctrl** and **W** to check whether the dissolves are ok. Please bear in mind that the change time considered by Wings Platinum is the result of the slide projector transport time and the lamp afterglow time. ... See also Slide projector change time.

Info If, after assigning the pictures to the tray compartments, several collisions are detected, the locator will always jump to the first collision. Only after eliminating this collision can you locate the next collision by clicking **Ctrl** and **W** again.

Change time for slide projectors

The change time considered by Wings Platinum is the result of the slide projector transport time and the physical lamp afterglow. This means that the transport step is only performed after the lamp has faded out completely.

Only correct the values if you know for sure that your projectors are faster. The effects of changes should definitely be checked by using the slide projectors to project images onto the projection screen. Choose short dissolve times for your tests, they cause the longest fade-out times. Use also slides with a different brightness. Please bear in mind that the interdependencies are very complex and very dynamic.



The default value for your projector can be found under Slide projector properties.

Slide and tray management

Automatic sorting of slides

Wings Platinum is a program based on media and objects which allows intuitive arrangement of pictures, sounds and videos. For this reason, we have done away with projector tracks, and the pictures are automatically assigned to the projectors and tray compartments. This is done before every playback and the result is displayed in the Slide Tray Editor.

When Wings Platinum detects that there are not enough projectors available for a certain arrangement of pictures, it reports a collision in the Preview Window. In this case, you will have to change your sequence to make it feasible for the projectors to carry out the dissolves. ... See also Collision of dissolves.

After having created a sequence with digital pictures to be dissolved with slide projectors, you need to sort the slides into the trays as displayed in the Slide Tray Editor. For this purpose you can also print out the list of slides. It makes sense to fix the position of those pictures already in the trays to prevent them from being rearranged during automatic sorting of slides. If you want to find out how this is done, click here.

Of course it's also possible to directly access particular tray positions or to program a tray zero position ...This is how it is done.

See also

Assigning slide tray positions

Collision of dissolves

Slide Tray Editor

Specifying a tray compartment for show start

Direct access to tray positions

Changing trays

Assigning slide tray positions

As soon as you have arranged a sequence in the picture tracks, you can assign the slides to their corresponding tray position.

- In the main menu click **Timeline** - **Assign slide tray positions**... or press keys **Ctrl** and **W**.

The pictures are automatically sorted into the trays and displayed on tab **Slide trays** in the Project Explorer. Your slides need to go to the same positions in the real slide trays of the corresponding projectors.

After assigning the slide tray positions, the tray information is displayed in the info line of the picture object as follows:

Projector ID : Tray number: Slide number

P3:14 means projector 3, slide 14 (...first tray)

P1:168 means projector 1, slide 168 (...interlinking trays)

P2:2.8 means projector 2, tray 2, slide 8

P4:5.76 means projector 4, tray 5, slide 76

Info

- In order allow assigning of slide tray positions, projectors must be registered with the device control system. If necessary, look up **Devices** in the Media Pool to find out whether a device port and projectors are registered. ... See also Configuring the device control.
- Should there be an error message saying that there are not enough projectors for a correct assignment of slides, solve this problem by changing dissolves.
- The tray number is only displayed when there is more than one tray for one projector.
- When playback is started, the order of pictures in the virtual tray is automatically updated.
- For actually sorting the slides into the trays you can also print out a list of slides.
- When the trays of all projectors are to be filled as uniformly as possible, you can specify this under **Options** - **Project Options** -**Slide trays**.

Slide Tray Editor

Before playing back, the pictures arranged in the timeline are automatically assigned to the tray slots in the editor. Later on, the slides must be sorted

into the real slide trays in accordance with their position in the Slide Tray Editor whose contents can be organized in a variety of ways:

Locking slides in tray slots

1. In the Project Explorer, click on tab **Slide trays**.
2. Mark the corresponding pictures by clicking on them, just like in Windows. In order to mark additional tracks, click the track heads of other tracks while holding the **Ctrl key**. Press the **Shift key** while clicking two pictures to mark all other pictures between those two as well.
3. Right-click a marked picture and select **Lock slide in tray slot**.

Info

- Locked slides are marked and their position is not changed when the tray contents are re-sorted. Should re-sorting be necessary after rearranging a sequence, you need to cancel locking. This is done exactly like locking, but you need to select **Unlock slide** from the context menu.
- If you remove locked pictures from the timeline, they are not removed from the tray. In this case you will have to remove them manually from the Slide Tray Editor.

Locking slides in projectors

For special effects to be performed by a particular projector certain slides may have to be locked in a particular projector, e.g. for zoom or mirror effects.

1. In the Project Explorer, click on tab **Slide trays**.
2. Mark the corresponding pictures by clicking on them, just like in Windows. In order to mark additional tracks, click the track heads of other tracks while pressing the **Ctrl key**. Press the **Shift key** while clicking two pictures to mark all other pictures located between those two as well.

3. Right-click a marked picture and select **Lock slide in projector.** Locked slides are marked and are not re-sorted to other projectors when there are any modifications.

Manual sorting of slides

1. In the Project Explorer, click on tab **Slide trays**.
2. Drag the corresponding picture to its new position while holding the mouse key. If this tray compartment is occupied, the pictures just swap their locations. But you can also drag the pictures from the Media Pool into the Slide Tray Editor.

Info

- Re-sorted slides are automatically locked in the corresponding tray slots. Automatic locking can also be deactivated under **Options** &endash; **Project Options** &endash; Slide trays.
- It is also possible to move several pictures at a time into a tray in the editor. This is a practical feature when old shows without any digital pictures were imported into Wings Platinum. Any subsequently and tray-wise scanned pictures can then very quickly and simply be allocated.

Printing a tray list

Once you have finished programming a sequence and want to check it with your slide projectors, you, first of all, need to sort the real slides into the trays. To help you doing this, you can print out a list of slides.

1. In the Project Explorer, click on tab **Slide trays**.
2. Right-click a picture in the corresponding tray and select **Print slide tray**.

Info The number of pictures per page and whether information (file names or comments from the Media Pool) is to be printed out as well, can be specified under **Options** &endash; **Global Options** &endash; Print.

See also

Printing the sequence of pictures in the timeline

Direct access to tray positions

In certain cases it may be necessary to access certain tray positions directly, e.g. the zero position for a tray change.

1. With the right mouse key, click in the picture track and select **Insert Dummy Picture**. Move it to the required position in time and drag the ramp band down to prevent the lamps from fading in.
2. Right-click the dummy picture and select **Display Pool Object.** In the Media Pool, the dummy picture can be labelled in column **Comment** (on the very right), e.g. zero pos. A.
3. In the Project Explorer, click on tab **Slide trays**. Now drag the dummy picture from the Media Pool into the required tray slot, e.g. the zero compartment to set the tray to its zero position.

Info If necessary, repeat this for other projectors or locations. If you want to set all projectors to zero, for example, create a dummy object for every projector and drag them into the corresponding zero slots.

See also

Specifying tray compartment for show start

Automatic sorting of slides

Changing trays

Specifying a tray compartment for show start

One tray may sometimes contain several shows - in particular when they are very short. Under Projector Properties you can specify the tray compartment for your show to start.

1. In the Media Pool click category **Devices**. If the projectors are not displayed, click on the plus sign next to the device port.

2. Right-click a projector and select **Properties**.
3. Under **Tray start position**, enter the tray number which contains the first slide of your show and click on **OK**.
4. Repeat this procedure for all the other projectors. You can enter a different tray position for every projector, if you feel like it.

See also

Direct access to tray positions

Blocking tray compartments

When trays are to be changed in the middle of a show, you need to find a suitable position to do so. This means that, under certain circumstances, some tray compartments towards the end must remain empty. To prevent slides from being sorted into these compartments during automatic allocation of slides, you can add dummy pictures in the Slide Tray Editor to replace the real slides.

1. Click tab **Slide trays**.
2. At the end of the trays in question, highlight all pictures which are to go into the next tray. Just like in the Window Explorer, you click the pictures while holding either the **Ctrl** or the **Shift** key. Right-click a highlighted picture and select **Remove**.
3. Right-click the first empty compartment in the corresponding tray and select **Dummy pictures until end of tray**. Repeat this procedure for all the other trays.
4. In the main menu, click on **Timeline** - **Assign slide tray position** for the pictures to be sorted into the next trays.

Info To prevent the slides in the trays from being moved again, you can lock the pictures in the tray compartments.

See also

Direct access to tray positions

Changing trays

Changing trays

For longer shows trays may have to be changed during the presentation. The Wings Platinum transport control works as follows:

1. Once the last slide of a tray has been projected, a transport step is carried out to the zero compartment for circular trays or to the empty compartment between two straight trays.
2. Now you can change the circular tray or insert the straight tray.
3. Just before the first slide of the new tray is faded in, the projector transports to slide 1, which is faded in and projected shortly afterwards.

Info

- If you work with two projectors only, choose a longer change time for those slides to be projected while exchanging the trays, so that you don't have to hurry when you actually exchange the trays. With more than two projectors, there are normally longer breaks for a tray change, as each projector is used less frequently.
- With Rollei slide projectors a tray change is only possible with interlinking trays. See Rollei interlinking trays.

See also

Changing trays at a certain position within a show

Direct access to tray positions

Changing trays for Braun SC 669

Rollei Interlinking Trays

If you want to use interlinking trays by Rollei, you need to define larger trays for the slide projectors. For direct projector control by computer these virtual trays can be for up to 999 slides, for control via a DLC control unit for up to 255 slides. The tray size can be altered via the Projector Properties in the Media Pool.

And this is how it is done:

1. In the Media Pool click category **Devices**. If the slide projectors are not displayed, click on the plus sign next to the device port or folder **All devices** to display the slide projector entries.
2. Right-click the slide projector and select **Properties**.
3. In the dialog box you can change the tray length. For interlinking trays you can increase the value to 999 (single projector) or 499 (Rollei Twin) for direct computer control or to 255 for control via DLC control signal.
4. Confirm with **OK** and repeat this procedure for any other slide projectors, if necessary.

Info

- The tray size for the Leica Pradovit PC projector must not exceed 250 slides if it is controlled via the serial interface and via P-COM protocol.
- Rollei projectors require new firmware in order to be able to process tray sizes of up to 999 slides. The old firmware only works for up to 255 slides. For a Rollei Twin enter a maximum of 499, i.e. half the maximum capacity.

Changing trays for Braun SC 669

The following procedure permits you to effect several tray changes for the Braun SC 669 during a show:

First of all, activate **Quick slide tray change** in the Port Properties.

1. Click category **Devices** in the Media Pool.
2. Right-click the device port **Braun SC 669** and select **Properties**.
3. In the pop-up dialog tick checkmark **Quick slide tray change**. Confirm with **OK**.

Example of a tray change with 50-compartment trays:

- As soon as project has finished projecting slide no. 50, it changes over to 51, which allows the tray to be removed.

- Now switch off the projector to set the internal counter to zero.
- Insert the next tray and push it towards the slide claw.
- Switch on the projector again. The next transport step will pull the tray in.

It is essential that Wings Platinum only performs the next transport step after the new tray has been installed and the projector been reactivated again. Make sure to leave enough time for the slide tray change during the programme and to practice these steps correspondingly.

Programming without digital pictures

Of course, it is also possible to program a slide show without any digital pictures. For this purpose you can use dummy pictures &endash; black pictures with consecutive numbers. And this is how you create a dummy picture:

- With the right mouse key, click in the picture track and select **Insert Dummy Picture**.
- The Wizard for automatic creation of a slide show offers a simply way to insert as many dummy pictures as you require in one go. It's advisable to produce the maximum number of dummy pictures that might be necessary. If, at the end, you find out that there are a few left, you can simply delete them.

Tips

- For improved orientation within the program, you can use the black areas of the dummy pictures for texts. For this purpose, you can enter text into the comment column in the Media Pool. ... See Comments for media files.
- Via Object Properties you can also specify a name for this dummy picture (... with the right mouse key click on the object and choose Properties). It will be visible in the info line.

Mixed presentation of landscape and portrait format

For design and aesthetic reasons, you should not mix projection of landscape and portrait format slides. It may, however, be necessary to do so, when certain indispensable slides are only available in portrait format. Wings Platinum offers the following options:

- If you configure a **square screen** (1:1) for your project, landscape and portrait format images are centered, i.e. at the left and right side or top and bottom black bars will be visible. This version simulates mixed projection of portrait and landscape format slides.
- If you configure a **landscape format screen** (image aspect ratio) for your project, landscape format images are displayed at full format, while portrait format images are centered and displayed with a black bar at the left and right side. This version is only appropriate for digital presentations. Key frame control allows arbitrary positioning of the landscape format picture. See Visual effects.

Changing the slide projectors in an existing project

To change the projector types in an existing project proceed as follows:

1. Start by removing all pictures from the Slide Tray Editor, so that the projectors are deallocated in the device control system. In the Project Explorer, click on tab **Slide trays**. Right-click a slide and choose **Select all slides**. Right-click a picture again and select **Remove from tray**.
2. In the **Media Pool**, in category **Devices**, you can now remove the old slide projectors and add other types of projectors. Right-click a projector and select **Remove**. Repeat this procedure for all the other projectors. Now right-click the device port and select **Add devices**. In the dialog box popping up you can choose the number and type of the corresponding projector and add them by clicking on **OK**.

3. Finally, click **Timeline** - **Assign slide tray positions** in the main menu to fill the slide trays again.

See also

Configuring the device control

Stereo projection with parallel projector

To avoid programming two pictures for stereo projection you can define a parallel projector for a particular slide projector. It performs the same operations as the "Master" projector, which means that a stereo show can be programmed just like any normal slide show.

1. Create a project with all the projectors you want to use. See Creation of a new AV Project.
2. Click category **Devices** in the Media Pool.
3. Click the plus sign in front of the device port and the folder All devices to display all slide projectors.
4. Right-click the first slide projector and select **Properties**.
5. In the dialog box popping up you can enter the ID number of the projector for parallel control under **Parallel Projector**. For an ordinary show with one screen field and four projectors you can enter **3**, for example. This way, projectors 1 and 3 will always perform the same functions. Click **OK**.
6. Right-click the second slide projector and select **Properties**. Enter a parallel projector as well, e.g. ID **4**. This way, projectors 2 and 4 will always perform the same functions. Click **OK**.
7. Now check projector allocation to the screen fields. In the Media Pool click category **Screens** and scroll to column **Projectors/Video...**.
8. When you entered four projectors during project creation, projectors **1, 2, 3, 4** should now be entered for screen field **Standard**. To change

this, highlight the line for screen field Standard. Click on the field for projector entry and remove the projectors you specified for parallel projection, i.e. **3** and **4** in our example.

Attention! The projectors specified for a particular screen fields must never include parallel projectors, only the "Master" projectors. Otherwise, the slide projectors will not be controlled correctly.

See also

Slide projector properties

Configuring the device control

Combining video projectors and slide projectors

Technically, a combination between video projectors and slide projectors is no problem at all as Wings Platinum is perfectly able to control slide projectors in parallel with a digital presentation. From an aesthetic point of view, however, a combination is usually not a good idea. You should consider the following aspects:

- The color temperatures of video projectors (UHP lamps) and slide projectors (halogen lamps) differ widely. The video projector picture will therefore have a bluish touch while that of the slide projector will tend to be yellowish. Simultaneous photographic display with both units is unacceptable &endash; the color effect is certainly not harmonious. The only conceivable combination would be texts or maps projected as additional information.
- Projection of both video projector and slide projector on one screen field requires the video projector to feature high contrast and good black level (ANSI contrast should possibly exceed 1000 : 1). These requirements are only fulfilled by very few video projectors. With the residual light of the video projector being permanently visible on the projections screen also the slides look grayish and washed out. This problem can be solved by using a controllable shutter that moves into the beam path when the video projector is not projecting.

- The brightness of slide projector and video projector should be about the same. You can assume that a video projector with 1,000 ANSI lumen has about the same brightness as a good slide projector with a 250 W lamp.

See also

Valuable information about data projectors

Preparing projects for video projectors and slide projectors

As explained above, Wings Platinum does not have any problems whatsoever in combining video projectors and slide projectors. Below you will find a description of how to go about this. If you have not used Wings Platinum before you should familiarize yourself with the basic functions first by creating a simple slide show. See Workshop What steps are necessary to produce a slide show?

Slide projectors and video projectors projecting onto one screen field

- Create a project for a show using the required number of slide projectors. See Creation of a new AV project.
- Create an additional screen field for the video projector on the existing screen and call it **video projector**. See Adding a screen field.
- Add pictures and videos to be displayed via video projector and additional tracks and assign them to the video projector screen field via the Track Properties. See Adding and removing tracks and properties of picture tracks, video tracks.
- Now you can produce your show and view the result of the combined video projector and slide projector projection as a simulation in the screen window.
- For slide projector presentation you need to disable display of the slides in the screen window. To allow the slide projectors to be controlled though, let's do a trick. Shift the screen field **Standard** (...for projection of slides) until it is no longer visible on the screen. This can

be done by entering a value of 100 per cent in column **X position** for the screen field **Standard** under **Screens** in the Media Pool. This entry can be reversed at a later time by entering zero again.

Slide projectors and video projectors projecting onto different screen fields

- Create a project for a show using the required number of slide projectors.
- Create a second screen for the video projector and rename screen field and screen to **video projector**. See Adding screens.
- Now add pictures and videos to be displayed via video projector and any additional tracks and assign them to the video projector screen field. See Adding and removing tracks.
- Now you can produce your show and view the result of the combined video projector and slide projector projection as simulation in two separate screen windows. If you have any problems displaying via hardware rendering, which essentially depends on the texture file size and the 3D graphics card, you can disable one screen (remove checkmark in the Media Pool).
- For presentation via slide projectors you should disable display of the screen window showing the slides, as it wastes computer capacity unnecessarily.

Importing and converting slide shows

Importing Wings 4.x shows

Wings shows cannot directly be imported in Wings Platinum. This is only possible by taking the detour via Wings Platinum 2 and Wings Platinum 3. Only shows down to Wings Platinum 3 can be opened by the current version. See also Opening version 3.x-projects.

Importing shows from other systems

Wings Platinum does not allow direct import of shows created by different systems. However, there is the option of using the converting function of **Wings 4.x**. This way, shows based on the following systems can be imported:

- Wings 1.00 - 3.66
- AudioSlide
- Stumpfl MPC
- Leica DCP
- Rollei DiaEdit
- Bässgen Imagix 2/3

Basically, the procedure explained below should work. However, you may have to do some extra work as incompatibilities may prevent total conversion of the show. Let's briefly describe the process at the example of an **Imagix show**:

1. Export the sound track from Imagix as mixdown. This file will contain all editing steps performed in Imagix and will be added and manually synced up in Wings Platinum at a later time.
2. Open the Imagix show (previously saved as Imagix 2/3 format) in Wings 4.x (demo version will do) and save the show again (ws4-format).
3. Open this ws4 file in Wings Platinum. See Importing Wings 4.x shows.
4. Add the previously exported sound track to the Media Pool and drag this sound file into an audio track. See Adding media files and Placing objects.
5. Align the sound track in the timeline with the dissolves. The best way to do so is to find a location where there is a slide change at a distinct beat. See Editing objects.
6. Scan the pictures again if the resolution of the Imagix pictures should be insufficient. In the Project Explorer, create a separate folder for all the pictures for one particular projector. See Scanning pictures.
7. Now highlight all the pictures for one projector and drag them into the corresponding slide tray in the editor. Repeat this procedure for all projectors. See Slide Tray Editor.

This more or less completes the conversion. Now play the show again and edit the sections you are not satisfied with, using the new features of Wings Platinum.

Special functions

- **Importing of older Wings 4.x shows is possible.** However, a number of items must be considered. ...More about this topic.
- Wings 4.xx function **Autoshow** is no longer directly available but only in a modified form. See Automatic creation of an Audio Vision.
- Of course, a virtual projection screen remains available, but due to the fact that Wings Platinum can also output digitally on video projectors and displays we have chosen the general term **Screen**. So, do not look for virtual projection screens, but for **Screens** instead.
- **In order to move to specific tray positions,** just like the old Tray command used before, use the Slide Tray Editor.
- If a show is to start at a different tray compartment than compartment no. 1, you can specify the required tray compartment for the first slides in the Projector Properties.
- The traditional **control of the mechanical shutter** with the Snap Command will no longer be available. In Wings Platinum, the mechanical shutter is programmed in the control tracks for picture objects. See Hard cut with shutter.
- **X times** for programming Speaker Support shows no longer exist in Wings Platinum. They were replaced by Pause Markers.
- Programmed switching of **AUX relays**, which are incorporated in a number of control units, can be done by using the Show Control Functions.

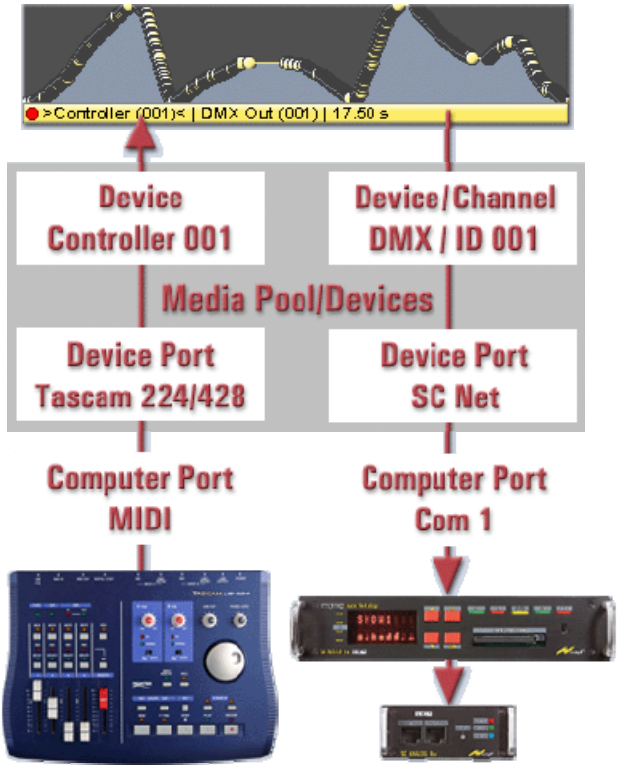
Show Control Functions

In Wings Platinum, all media and devices can be arranged, programmed and controlled in one single project. Any function required, such as switches, 0 – 10 Volts control voltages, DMX control channels or serial commands are simply arranged in the timeline tracks as objects. Everything you arrange in the form of objects is carried out synchronously by the connected devices and, if necessary, they even follow the Locator during editing. Everything is absolutely and constantly synchronized.

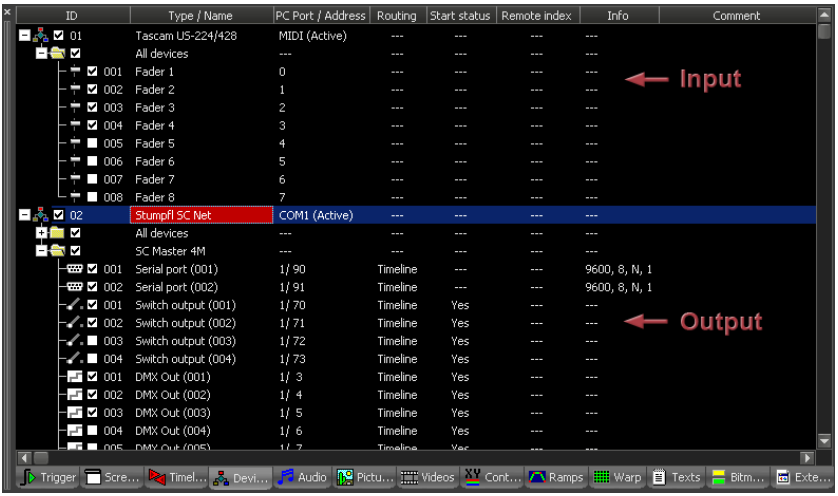
The Wings Platinum Advanced License already allows you to program up to 32 control channels (switches, DMX, voltages of 0 – 10 V or servo motors). One of these 32 channels may be an RS 232 channel. To be able to use an arbitrary number of control channels you require the Show Control Module.

Device structure and data flow

Wings Platinum with its modern software architecture permits control of nearly an unlimited number of devices. Connection from software to Show Control hardware is via device ports which are allocated a computer port and a protocol. In principle, the integration of input and output devices is identical, as many devices operate bi-directionally.



In our example both an input and an output device are linked up with a data object. In the Media Pool, the hard is displayed as **Device ports** and devices, e.g. **control channels**, **slider controls**, etc. From the Media Pool, you simply drag a control channel or a slide control onto the data object or into the timeline.



- **Device ports** always feature a protocol and are linked up with a **computer port.** The remark **Active** means that the device control is currently enabled, otherwise the it is disabled (**inactive**).
- Devices are split up into categories, e.g. switching channels, analog channels (0 – 10 Volts), DMX channels, faders, etc. Within one category they are distinguished by their **ID numbers**. Type of device and ID number allow a clear identification within Wings Platinum and are displayed in the object info line. The hardware, on the other hand, uses **addresses** which, in their structure, depend on the type of devices used.
- By unchecking the column **ID** a device port or a device can be disabled.

Programming switches

According to the device used, switches can be floating relays or open collector outputs. For programming, however, this does not make any difference.

Configuring switches

The easiest way to create Show Control projects with SC Net devices is via the Wizard for mixed media projects. However, it is also possible to manually add devices at a later time. To do so proceed as follows:

1. In the Media Pool, click the plus sign next to category **Devices** and select the corresponding device port below it, e.g. **Stumpfl DLC** or **Stumpfl SC Net**.
2. If no device port has been specified yet, add a port for **Stumpfl DLC** or **Stumpfl SC Net**. ..See Configuring the device control.
3. Which port are you using? (... please click to receive specific information)
   Stumpfl SC Net Port or **Stumpfl DLC Port**

4. In the right part of the Media Pool rightclick the corresponding device port and select **Add devices...**.
5. Click and check **0 - 10 Volts** or **DMX**. Now enter the corresponding number of control channels and the required first address (... for a number of channels the addresses are counted up automatically).

   Info If you are using a **Stumpfl DLC port** and want DMX control you need to select 0 -10 Volts because in this case control information is output in parallel as DMX and 0 – 10 Volts.
6. Finish adding devices by clicking on **OK** and continue at item 9.

7. In the right part of the Media Pool right-click the corresponding device port **Stumpfl SC Net**, select **Add SC Net Module** and a dialog box will appear.
8. Click on and select the corresponding module. If you want to use an Event Control unit, choose the corresponding SC Master unit, e.g.

Lite, 2M or 4M.

9. Under **SC Net address** the address will be set automatically. Enter a different address if the preset one does not match your device set.
10. Under **Device functions / Number of devices** select the corresponding resources. If you know that you only require a certain number of functions

from among the total of available functions, you can enter a lower number. This may be useful for DMX, for example.

11. Click on **OK**. Following this, a device folder is displayed carrying the module name. If you click on the plus sign in front of this folder, the functions are displayed. If necessary add further

modules likewise.

Alternatively, you can also use the **SC LAN Relay 8out**. See Configuration SC LAN Relay 8 out.

12. It may be useful to name the switches appropriately, e.g. "Screen up", "Screen down", etc. Right-click the **switch output**, select **Properties** and enter the corresponding name under **Name**. As an alternative, you can also open the Properties Dialog by double-clicking the device.

13. Now grab a control channel and drag it into a universal track. If no universal track is available yet or if the data object is to be created in a new track, drag it into the empty timeline space below the tracks. A new universal track is then created automatically.

Info

- **Important:** For the devices to be addresses through the specified control channels, the addresses in the Media Pool must correspond to those set at the hardware. If necessary, correct the addresses. See Configuring the SC Net system.
- You can link up an object with a number of control channels by highlighting the corresponding control channels in the Media Pool and dragging them all simultaneously into the timeline.
- A control channel can now be assigned to a number of objects simultaneously by highlighting the corresponding objects before dragging the control channel onto one of these objects.
- You can drag several devices or control channels into the timeline in one go and create a separate track for every individual device by pressing the **Shift** key while releasing the mouse key.

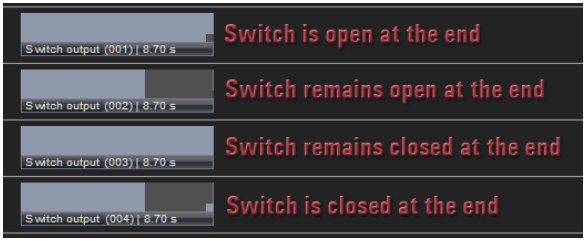
Programming the switching time

Switches are programmed via special switch objects. In principle, they can be edited just like any other objects but they have no ramp band. Moreover, the following features are also worth mentioning:

- Unless you have already done so, create an object by grabbing a switch channel in the Media Pool and dragging it into a universal track. If no universal track is available or if the switch object is to be created

in a new track, drag it into the empty timeline space below the tracks. A new universal track is then created automatically.

- Switch objects only have two statuses. **Switch on**, displayed in red and **Switch off**, displayed in gray.
- Double-click the object to program a switching operation. The switching pulse, i.e. the vertical limit between red and gray can be grabbed and dragged with the mouse.
- Just like for data objects, there is one important difference between data objects and other types of objects: the last value of an object is retained. This means that the switch retains the position it had when the object was terminated. If for the duration of a show a relay is to be closed, you need a short switch object for closing it at the beginning of the show and a short object at the end of a show for opening the relay.
- The indicator for the final status of a switch object is the small square at the end of the object. If it is gray, the final object status is **off** or "switch open", if the square is red, the final status is **on** or "switch closed".



So if a switch needs to remain closed at the end of the switch object you need to remove the gray square that may possibly be displayed, by right-clicking the object and selecting **Cut right**.

Info

- Any redundant switch points (gray, vertical lines) created by setting switching with the mouse or via data recording can be removed. Right-click the corresponding switch object and select **Switch points ▶Remove redundant points**.

- You can remove all switch points by right-clicking the switch object and selecting **Switch points ▶Reset**.
- The programmed switching states can also be inverted. See Inverting ramp shapes or switching states.
- If a switch object is to control several switches, you can assign the corresponding number of switch outputs. For this purpose, hold the **Ctrl** key and drag additional switch outputs onto the switch object. Output of the switch object to several switching channels is indicated by three plus signs **+++** in the info line. A detailed list can be found in the Object Properties.
- If several devices or control channels are assigned to a data object, cyclic data output can be enabled. This way you can program effects such as running light or a moving fountain, etc. without any extra efforts. See Cyclic data output to several devices.
- Via external input devices switching sequences can also be entered live and recorded in the switch object, e.g. also using a PC keyboard. See Using external input devices.
- Via a control panel field, devices can also be directly or, optionally, override controlled. See Control Panel for direct operation.
- Switches can also be displayed as objects with ramp band. At a value exceeding 50 % the switch is closed, i.e. activated and at a value below 50 % it is opened or deactivated, respectively. To create a switch objects, right-click a universal track, select **Insert data object** and drag the corresponding switching channel from the Media Pool onto the data object. See also Editing objects.

Programming analog/DMX devices

In principle, programming of analog control voltages and DMX functions works the same way. The only difference is that certain values for DMX have a different meaning. For programming, however, this does not make any difference.

Configuring control channels

The easiest way to create Show Control projects with SC Net devices is via the Wizard for mixed media projects. However, it is also possible to manually add devices at a later time. To do so proceed as follows:

1. In the Media Pool click one category **Devices** and select the device port you want to add devices to.
2. If no device port has been specified yet, add a port for **Stumpfl DLC** or **Stumpfl SC Net**. ..See Configuring the device control.
3. Which port are you using? (... please click to receive specific information)

   Stumpfl SC Net-Port If you would like to use a DLC port instead, refer to the Help topics for further information.

4. In the right part of the Media Pool right-click the corresponding device port **Stumpfl SC Net**, select **Add SC Net Module** and a dialog box will appear.
5. Click on and select the corresponding module. If you want to use an Event Control unit, choose the corresponding SC Master unit, e.g. Lite, 2M or 4M.
6. Under **SC Net address** the address will be set automatically. Enter a different address if the preset one does not match your device set.
7. Under **Device functions / Number of devices** select the corresponding resources. If you know that you only require a certain number of functions from among the total of available functions, you can enter a lower number. This may be useful for DMX, for example.
8. Click on **OK**. Following this, a device folder is displayed carrying the module name. If you click on the plus sign in front of this folder, the functions are displayed. If necessary add further modules likewise.

As an alternative to DMX, you can also use SC LAN DMX512 in/out and **Stumpfl USB-DMX-IO** or **Soundlight** interfaces verwenden. See *Adding a DMX port*.

9. It may be useful to name the control channels appropriately, e.g. "Room illumination", "Spot left", "Filter blue", etc. Right-click the control channel, select **Properties** and enter the corresponding name under **Name**. As an alternative, you can also open the Properties Dialog by double-clicking the device.
10. Now grab a control channel and drag it into a universal track. If no universal track is available yet or if the data object is to be created in a new track, drag it into the empty timeline space below the tracks. A new universal track is then created automatically.

Info

- **Important:** For the devices to be addresses through the specified control channels, the addresses in the Media Pool must correspond to those set at the hardware. If necessary, correct the addresses. See Configuring the SC Net system.
- It is also possible to output 16-Bit DMX signals if you use two DMX channels for one data object. In the DMX Properties, one of these channels is set to **16 bits MSB** and the other one to **16 bits LSB**. This function is only possible for devices that are able to read two such channels. See DMX Properties.
- You can link up an object with a number of control channels by highlighting the corresponding control channels in the Media Pool and dragging them all simultaneously into the timeline.
- A control channel can now be assigned to a number of objects simultaneously by highlighting the corresponding objects before dragging the control channel onto one of these objects.
- You can drag several devices or control channels into the timeline in one go and create a separate track for every individual device by pressing the **Shift** key while releasing the mouse key.

Programming data objects

To create a data object, grab a control channel in the Media Pool and drag it into a universal track. If no universal track is available yet or if the data object is to be created in a new track, just drag it into the empty timeline

space below the tracks. A new universal track is then created automatically. For editing the following applies:

- Basically, data objects can be edited just like any other object. Data objects can be modified in their duration, while the output values correspond to the ramp band progression. Via the ramp shape you can change the values arbitrarily at any speed, i.e. dimming, moving, rotating or whatever function the devices to be controlled allow.
- In accordance with the ramp shape, the control voltage at 0 % = 0 Volt and at 100 % = 10 Volts.
- For DMX data objects the ramp shape is output in accordance with DMX512 protocol.
- There is one important difference between data objects and other types of objects: the last value of an object is retained. This means that a spot light, for example, maintains its brightness level, even if the object has already been terminated. Therefore, you only require data objects if you want to modify values. Decisive for the last value is the position of the last standard node.

Compared to other objects, a data object only has two standard nodes (orange). They are always located at the beginning and the end of an object. Additional nodes are yellow and are set by double-clicking the appropriate location. See Editing objects and Editing the ramp band.

Info

- Animations or flash effects can be created very simply and fast via the ramp shape. ...See also Shaping ramps and Ramp Editor.

- You can invert the ramp shape of data objects. See Inverting ramp shapes or switching states.
- If a data object is to control several devices, you can assign the corresponding number of control channels. For this purpose, hold the **Ctrl** key and drag additional devices or control channels onto the data object. Output of the data object to several devices is indicated by three plus signs **+++** in the info line.
- Optionally, certain keyframe tools can also be used for nodes, which may be an interesting feature if the value of a data object needs to be constant. They are enabled under **Options** - **Global Options** - **Objects**.
- If several devices or control channels are assigned to a data object, cyclic data output can be enabled. This way you can program effects such as running light or a moving fountain, etc. without any extra efforts. See Cyclic data output to several devices.
- Via external input devices, such as slider controls or joysticks, the values can also be entered live and recorded in the data objects. ...See also Recording control data.
- The node values can be displayed as a percentage or as DMX values. See Displaying values in objects.
- Via a control panel field, devices can also be directly or, optionally, override controlled. See Control Panel for direct operation.

Outputting defined values

In order to trigger certain functions for devices, you need to apply certain defined values, e.g. for DMX controllable devices. Wings Platinum offers two different ways to do so:

- **Data object** ...the ramp band is simply set to the corresponding value. The value is output as status information, i.e. even when moving the Locator with the mouse, for example. In the case of extremely high data traffic in the SC Net it may theoretically happen that the information from very brief data objects arrives late or not at all.
- **Value Markers** ...change any output value during a specified period into target values. This is a "Fade to Level" so to say. Any information sent via a value marker takes priority over data object information and

is output in any case, as it is buffered. Output is only during regular playback though, and not while moving the Locator with the mouse.

Output value with data object

1. Drag the corresponding control channel from the Media Pool into a universal track.
2. Right-click a data object and select **Ramp** – **Assign value**.
3. Under **Value** click the corresponding unit and enter the required value.
4. Click on **OK**. Following this, standard nodes are moved to the preset value and superfluous nodes removed.

Output value with value marker

1. Drag the corresponding control channel from the Media Pool into a marker track.
2. Right-click the created value marker and select **Properties**.
3. Under **Value** click the corresponding unit and enter the appropriate value.
4. Under **Value fade time** you enter the time it should take for the value to change from the current value to the target value.
5. Click on **OK**. When the Locator passes the marker during playback, the corresponding value is output.

Info

- If you want to create a value marker in a new track, drag the corresponding control channel into the free area below the tracks while holding the **Ctrl** key.
- For value markers the output period is not displayed graphically in the timeline.
- Output of value markers is only during playback and not while moving the Locator with the mouse.

Controlling a DALI light system

The DALI system is used for controlling light and housing engineering technology in buildings. An **SC Master** unit (all version except the **Lite** version) can be used to control DALI system devices. For this purpose, the Remote connector of the SC Master is setup for output of DALI signals (SC Master menu: **Options** - **RMT-Out** - **DALI-Out**). All 16 DALI groups are available, but there is no differentiation between subaddresses. The first 16 DMX channels are used for programming in Wings Platinum. I.e. you configure DMX control channels using addresses 1 to 16 and program them just like DMX devices. See Programming analog/DMX devices.

Cyclic data output to a number of devices

The information of one data or switch object can be output cyclically to several devices. In this case, the value of a data object are output in turn to several devices, allowing you to create running light, for example. This option is available for switch and data objects, which makes the range of possible applications very wide. One single object therefore allows creation of extra nifty effects with a minimum effort.

And this is how it is done:

1. Drag a device or control channel into a universal track to create an object.
2. Hold the **Ctrl** key and drag all control channels participating in cyclic output onto the object. In the info line you will see plus signs **+++**, signalising several devices linked up with this object.
3. Double-click the info line for the Properties Dialog to appear. Item **Output devices** lists all devices receiving data from this object.
4. Place a checkmark next to **Cyclic output** and enter the desired number of output cycles for the object at **Cycles**. The frequency depends on the length of the object and the number of cycles. Two more options are available:

- **Inverse** ...outputs the current value to all devices and cyclically sets one to zero. Usually, all devices are set to zero and the current value is cyclically output to one of them.
- **Reverse**...reverses the order, i.e. start is at the last device.

You should try these options in practice to find out about how they work.

5. After clicking on **OK** you can test output, which requires devices to be connected or at least a control panel field for the devices in the Control Panel. When the object length changes, the frequency changes, too. For data objects the values can be varied with the ramp band as usual, i.e. you can create fade-ins or outs, for example.

Info Please consider that the maximum time resolution, i.e. the data update rate for cyclic output is 1/100 second. However, whether this time resolution can be achieved or not, depends on the data traffic and the achievable baud rate within the SC Net.

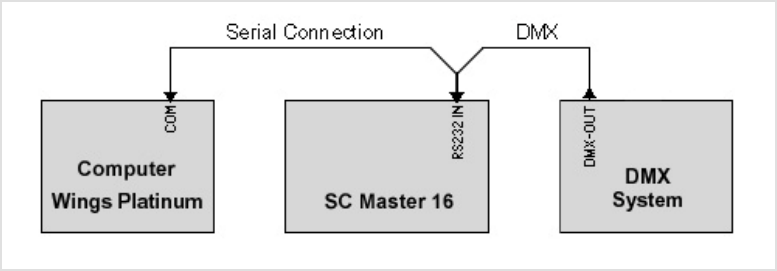
Recording DMX data

Wings Platinum allows recording of DMX data from other systems and their integration in a project. This means that you can use the DMX system you are familiar with to design the light concept or prepare other design projects and import these DMC data into Wings Platinum. These data can then be edited and synchronized with sound. This way, an SC Master unit or a computer with Wings Platinum and the corresponding modules can assume the task of a DMX player for an installation with perfect synchronization of sound and video.

In addition to the Wings Platinum Show Control Module you require the following interfaces with DMX-In and Out for DMX recording:

- **SC Master 6** or **SC Master 16**, Hardware HWV 1.03 and firmware V 1.48. **Further info**
  - **Special cable** SCK-DMX_Rec/3 (three-pole) or /5 (five-pole)
  - **SC Net DMX512out** or **DMX128out** (Firmware V 1.17) for playback at a later time

Link up the units via the special cable as illustrated below and start up the system.



- **SC LAN DMX512 in/Out.** See Configuration SC LAN DMX512 in/out
- AV Stumpfl USB-DMX-Interface. See Adding a DMX port.

As an alternative, you can also use USB-DMX interfaces by Soundlight . See Adding a DMX port for Soundlight interfaces hinzufügen.

This is how you prepare for recording:

1. Create a project and add the necessary device ports for your DMX interface. If your device set has a certain address structure you need to observe the correct SC Net addresses when adding modules. See Wizard for Mixed Media.

   Or, as an alternative,

   ... you can also open an existing project you want to add the DMX data to. However, this should be a project with the above-mentioned devices configured in the device control system. If necessary, add the corresponding devices. See further above in this topic.

2. Press the **F8** key to enable the device ports.
3. In the main menu **Timeline** click **DMX Recording...**
4. The device port has been preset. Modifications may be necessary if the project has more than one device port.
5. Under **Channels** you specify the range of DMX channels, i.e. which of the 512 DMX channels are used for recording.
6. For **Ramp type** you can choose between two types:

- **Steps** ... is a universal setting and particularly suitable for function channels to achieve definite DMX values.
- **Ramp** ... is a useful setting for dimmer packs or spot lights to achieve homogenous ramps. Under **Data reduction** you can choose the degree of accuracy for displaying a ramp and its nodes. But this can also be done at a later time. See Simplifying ramps.

7. If you have already configured DMX channels in the device control system – which is a good idea – you can specify under **Base Address** which DMX channel address is to be used for the first recorded DMX channel, e.g. **2/1**. This can save a lot of time because it makes individual address allocation superfluous.
8. Now click on **Start** and start playback of your DMX system to begin recording. During recording, dialog or timeline won't change.
9. Once playback on the DMX system is complete, terminate playback by clicking on **Cancel**. Following this, a new timeline containing the recorded DMX data will be displayed.

Adding DMX data to a timeline

The data from your DMX system are now available in a separate timeline. Presumably, you may want to link up and synchronize the DMX data with a show. Therefore, you will have to copy the tracks containing the data objects into the timeline of the corresponding show.

1. Highlight all tracks that contain DMX objects by clicking a track head (Wings Platinum symbol) while holding the Shift key.
2. Right-click a free area of a track and choose **Select all objects.**
3. Right-click an object and select **Copy** which means that the objects are copied to the clipboard.
4. Open the timeline containing the show by double-clicking the corresponding timeline in the Media Pool or by opening the corresponding project.
5. Right-click the dark gray area below the tracks and select **Paste clipboard to new tracks.**

6. To prevent the DMX objects from being displaced against each other you should group them. Right-click all data objects, right-click one of the high-lighted objects and select **Grouping ▸ Create new group**.
7. The objects can now be synchronized with the other sequences and edited. If some of the ramps have too many nodes – which may make editing a tedious job – you can simplify the ramps. See Simplifying ramps.

Combining data or switch objects

Several data objects or switch objects can now be combined into one object. This feature comes in very handy when the best parts of various data signal recordings are cut and combined into one object. It clearly facilitates further handling, such as allocation of devices.

1. Highlight the objects you want to join. They all need to be located on the same universal track.
2. Right-click this universal track and **Join selected data objects together**.

Info

- It is not possible to combine data and switch objects but only data or switch objects.
- If there are any "foreign" or other unhighlighted data or switch objects located between the highlighted objects, the new object is added on a new track.

See also

Marking objects

Recording DMX data

Live control and recording in objects

Inverting ramp shapes or switching states

It is now possible to invert the ramp shapes for data objects and the switching states for switch objects.

Right-click the corresponding object and select **Ramp** - **Invert** for data objects or **Switching points** - **Invert** for switch objects.

If you want to do this for a number of data and switch objects you need to highlight them beforehand. See Highlighting objects.

See also

Programming analog/DMX devices

Programming switches

Editing objects

Programming serial commands

Serial commands are programmed via objects without duration. In a way, they are just markers sending a sequence of characters at a certain point of time via a computer or other Stumpfl hardware port. This topic is about sending sequences of characters. An easy way of sending serial commands is via drivers, which, however, must be device-specific. See Control via serial drivers. (...this requires the Pro License or the Show Control Module).

Configuring a serial output and placing commands

1. In the Media Pool, click one category **Devices.** If no serial port has been configured in the device control system yet, you need to do so now. Specify the type of port you want to use:

Stumpfl hardware port

2. In the right Media Pool portion, right-click some free space and select **Add port** ▶**Stumpfl DLC** or **Stumpfl SC Net** for device port.

3. In the dialog box under **Serial Port**, click on the arrow and select a computer port for the corresponding device port, e.g. **Com 1**.
4. Finish configuring the device port by clicking on **OK**.
5. Under **Device** highlight the newly created device port. In the right Media Pool part right-click the device port and select **Add devices...**
6. Click and check box **Serial**. Now enter the corresponding number of ports.
7. Finish adding devices by clicking on **OK**.
8. It may be useful to name the ports appropriately, e.g. "Data projector", "Spot left", "Source changeover", etc. To do so, right-click the port, select **Properties** and enter the corresponding name under **Name**. If necessary, you can also adjust the port parameters in this dialog. **Important:** The address in the Media Pool must correspond with the address for the hardware used. See Setting addresses.

   Info The Properties Dialog can also be opened by double-clicking the device in the Media Pool.
9. Now grab a port and drag it into a marker track. If no marker track is available yet or if the command marker is to be created in a new track, drag it into the empty timeline space below the tracks. A new marker track is then created automatically.

Computer port (applies also to the **master** within the network)

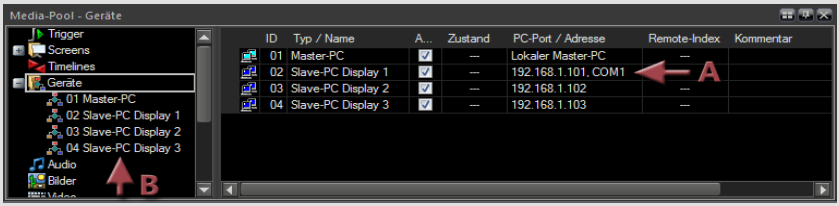
10. In the right Media Pool part, right-click some free space and select **Add port** ▶ **Serial / LAN** for device port.
11. Under **General settings** select a serial port or the network connection. See also Configuration Serial / LAN.
12. For a serial port you also need to enter the parameters required by the device to be controlled.
13. Finish adding a port by clicking on **OK.**

14. Now grab a port and drag it into a marker track. If no marker track is available yet or if the command marker is to be created in a new track, just drag it into the empty timeline space below the tracks. A new marker track is then created automatically.

Slave port

15. If you have already started a multidisplay project, master and slaves should be available and the serial ports of the slaves can be used. If this is not the case, create a multidisplay project and set up the presentation network.
16. Click on the plus sign in front of **Slave PC** and **All devices** for the serial ports to be displayed.
17. Right-click **Serial port** and select **Properties**. Make the following settings in the dialog popping up.
    - Under **Name** you can enter any name you like.
    - For **Configuration serial port** you need to enter all the port parameters as required for the device to be controlled. As a rule, the documentation of the device to be controlled will provide the necessary information.
18. Close the dialog by clicking on **OK**.
19. Now grab a port and drag it into a marker track. If no marker track is available yet or if the command marker is to be created in a new track, just drag it into the empty timeline space below the tracks. A new marker track is then created automatically.

Info Which serial port on the slave is addressed, can be seen in the Media Pool in the device port line. In this example it is **Com 6**, the other numbers for the serial ports are only internal IDs.



Configuring a serial command

- Command markers can be dragged to the corresponding position in time. ...See also Markers.
- In order to enter the sequence of characters, you need to right-click the marker and select **Properties**. Under **Command/Data** enter the sequence of characters to be transmitted.
    - By default, decimal values are directly accepted. Bytes must be separated by a separator (space or comma).
    - ASCII characters must be entered between quotation marks.
    - For input of hexadecimal values, every byte must be marked as "Hexbyte". This can be done by adding the following characters: **0x12**, **h12**, **12h** or **$12** (in examples **12** is the byte information).
- In line **Hexbytes** you can see number and information of hexadecimal bytes sent off by Wings Platinum.

Info

- If a command marker is to be output to several ports, you can assign the corresponding number of ports. For this purpose, hold the **Ctrl** key and drag additional ports onto the command marker.
- A serial port can be assigned to a number of command markers simultaneously by highlighting the corresponding objects before dragging the serial port onto one of these objects.
- For a DLC control signal with more than 24 bytes, only the first 24 bytes are considered.
- When using the serial port of a slave, Acknowledge will not be available.

See also

Control via serial drivers

Sending MIDI commands

You can send MIDI commands by placing the corresponding markers in the timeline or setting up MIDI control panel fields. This is how you proceed:

1. Add a MIDI port unless this has already been done. To do so, click category **Devices** in the Media Pool.
2. Right-click some free space in the Media Pool and select **Add port** ▶**MIDI**.
3. In the dialog box under **MIDI input** and **MIDI output** select the corresponding hardware ports. You can use different devices for input and output.

   Info Click on **OK** to close the dialog. For remotely controlling Wings Platinum via MIDI you need to select the corresponding functions under **Control of Platinum functions**. See MIDI configuration.
4. Right-click the **MIDI** device port and select **Add devices**.
5. Place a checkmark next to **MIDI output** and close the dialog by clicking on **OK**.
6. How would you like to send the MIDI commands?

   ◆**From the timeline via markers**

7. n order to create a marker, drag entry **MIDI output (0...)** from the Media Pool and drop it into the empty timeline or a marker track.
8. Double-click the marker for the Properties Dialog to appear.
9. Under Status you can select the corresponding MIDI commands. Depending on the type of command additional entry fields will appear which allow entry of parameters as required.
10. In field **Comment** you can enter a designation for the marker to be displayed in the timeline.
11. Close the dialog by clicking **OK**.
12. In order to send the command, enable the device ports, e.g. by pressing the **F8** key and start playback in the timeline. When the Locator moves across the marker, the command will be sent. **Important:** The device ports need to be enabled. If necessary, press the **F8** key for the button **Device ports** to be enabled like this .

Via a mouse-click in the Control Panel

13. To create a control panel field, drag entry **MIDI Output (0..)** from the Media Pool and drop it onto some empty space in the Control Panel. If applicable you may have to select tab **Control Panel** first.
14. In the control panel field created thus click on for the Properties Dialog to appear.
15. Under Status you can select the corresponding MIDI commands. Depending on the type of command additional entry fields will appear which allow entry of parameters as required.
16. Close the dialog by clicking **OK**.
17. You can label it by right-clicking the control panel field and selecting **Field Properties**. In field **Name** enter the required information followed by clicking on **OK**.
18. In order to send the command, click in the control panel field. **Important:** The device ports need to be enabled. If necessary, press the **F8** key for the button **Enable device ports** to look like this .

Info If the command cannot be sent, check in the Media Pool in column **PC port / Address** whether the MIDI port is actually enabled.

Serial control by means of drivers

Drivers can be used to simplify device control. They allow functions to be directly selectable as commands without having to deal with sets of characters and protocols. A necessary precondition is the existence of a driver for the device to be controlled. Unless a driver is already available you can write one using a text editor and have it placed into our data base. This way all Stumpfl users can benefit and we hope that drivers for a great number of devices will be available within a short period of time.

Using drivers for serial control

Usage of drivers requires the Pro License as a minimum or the Show Control Module. See Versions and Licenses.

When using drivers, commands can very conveniently be selected from a menu without any knowledge about command protocols. A necessary pre-condition is the existence of a driver for the device to be controlled. See also Available drivers. Unless a driver is already available you can write one yourself using a text editor. See also Creating a driver.

This is how you install a port with a driver:

1. In the Media Pool, click the plus sign next to category **Devices** and select the corresponding device port below it. In the right Media Pool section, right-click the serial port you want to use and select **Properties**. Unless you have already configured a serial port, do so now. Specify the type of port you want to use:

SC Net hardware port

1. Right-click some free space of category **Devices** and select **Add port** ▶ **Stumpfl SC Net**. In the dialog box under **Serial Port**, click on the arrow and select a computer port for the corresponding device port, e.g. **Com 1**. Connected and activated devices are immediately searched for and displayed. Finish configuring the device port by clicking on **OK**.
2. Right-click the corresponding device port **Stumpfl SC Net**, select **Add SC Net Module** and a dialog box will appear.
3. Click on and select the corresponding module. If you want to use an Event Control unit, choose the corresponding SC Master unit, e.g. Lite, 2M or 4M.
4. Under **SC Net address** the address will be set automatically. Enter a different address if the preset one does not match your device set.
5. Under **Device functions** / **Number of devices** select the required resources, i.e. at least one serial port in our case.
6. Click **OK**. Following this, a device folder is displayed carrying the module name. If you click on the plus sign next to this folder, the functions are displayed. Right-click the corresponding serial port and select **Properties**.

Continue at item 7 with the Driver settings.

Computer port (applies also to a **Master** within a network)

1. Right-click some free space of category **Devices** and select **Add port** ▸ **Serial/LAN**.
2. Under **General settings** select the required type of communication:
   - If you want control via a serial port, click **Serial port** and select the corresponding port.
   - If you want control via a network, click on **IP address / Port** and enter address, server or device port and the control protocol. The server is always the computer or device this computer (being the client) is to be hooked up to.
3. For a serial connection, select the parameters in accordance with the device requirements under **Configuration serial port.** Click on **OK**.
4. Under **Serial / LAN** click the plus sign next to the folder **All devices** for the serial port to be displayed. Right-click **Serial port** and select **Properties**.

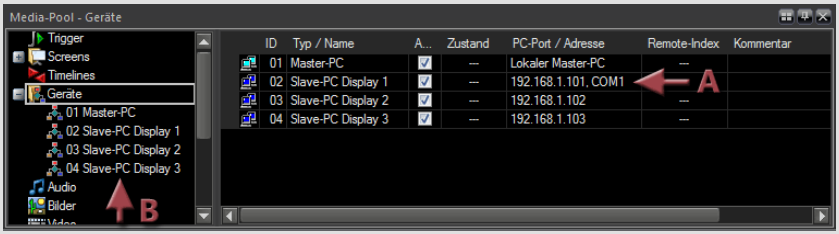
Continue at item 7 with the Driver settings.

Slave port

1. When you have already started a multidisplay project, master and slaves should be available and the serial ports of the slaves can be used. If this is not the case, create a multidisplay project and set up the presentation network.
2. Click on the plus sign next to **Slave PC** and **All devices** for the serial ports to be displayed.
3. Right-click **Serial port** and select **Properties**.

Info Which serial port on the slave is addressed, can be seen in the Media Pool in the device port line. **Show**.

In this example it is **Com 6**, the other numbers for the serial ports are only internal IDs.



Continue at item 7 with the Driver settings.

4. Under **Driver settings** add a checkmark next to **Use driver** and click **Load driver...**
5. Select the required driver file on the list and click **Open**. **If you want to add a new driver...**

   ...click **Add driver file...** From the file dialog, select the new driver file and click **Open**.
6. Whether it makes sense to activate **Enable acknowledge** depends on the driver (... needs to be able to evaluate an acknowledge signal) and on the device to be controlled (...must be able to send an acknowledge signal). **Note:** When using the serial port of a slave the Acknowledge function is not available.

7. Finish by entering an appropriate name for the port that refers to the device. Finally, click on **OK**.

Info If you want to edit the selected driver, click on **Edit driver**. After saving the modifications and clicking on **OK**, the modifications are also available in the project. See also Creating drivers.

Selecting and sending commands

Once you have assigned a driver to a serial port you can place and execute driver commands in the form of markers in the timeline or as control panel fields.

1. Drag the serial port into the timeline or into the Control Panel for a marker or a control panel field to be created.
2. Open the dialog **Configure driver command** by double-clicking the marker or clicking in the control panel field.
3. Click on **Select command** and select the required command. Depending on the type of command you may have to enter further parameters. Usually, the driver author will have written a few words of explanation which are displayed in the dialog box. Finally, click on **OK**.
4. The commands will be sent when played back in the timeline (marker) or can be sent manually by clicking on (control panel field).

Serial driver commands as control panel fields

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

First of all, add a few control panel fields for a serial port provided with a driver. This can be done most easily by dragging the ports from the Media Pool to the Control Panel. See also Adding control panel fields.

- **Command button** ...this button calls up the dialog **Configure driver command**. In this dialog, click on **Select command** and select the required command. Depending on the type of command

you may have to enter further parameters. Usually, the driver author will have written a few words of explanation which are displayed in the dialog box. If no commands are selectable, you need to choose a driver first. See Using drivers for serial control.

- **Action button** ...sends the selected command via the associated port to the device. To be able to do so, the device ports need to be enabled. See also Synchronizing devices.
- **Override button** ...disables timeline output and allows the device in question to be controlled via the control panel field only. When override control is disabled, it still allows control via the control panel field, but commands in the timeline are sent all the same.
- **Grouping of control panel fields** ...allows joint operation of devices. Highlight the corresponding control panel fields, right-click one of these fields and select **Grouping ▶Create new group**. Grouping functions, in principle, correspond to objects. See Grouping objects. For one-off joint operation of devices, highlighting the corresponding control panel fields will also do.

Info You can have the devices, triggers, etc. which are linked up with the control panel fields displayed in the Media Pool by clicking the control panel field and selecting **Display Pool Object**.

Available drivers

During the Wings Platinum installation more than 40 drivers are copied into folder ...**Documents and Settings*User name*\Application data\AV Stumpfl\Drivers**. If you add a driver to a serial port in the Properties Dialog, you will be presented with a list of available drivers. As the drivers have been created by different authors and are freely editable we cannot assume any responsibility for their correct function. See Using drivers for serial control.

If there is no driver available for your device you can also create one in a text editing program. More about this in topic Creating your own drivers.

Creating your own drivers

You want direct serial control of a device but there is no driver available yet &endash; why don't you just write your own driver by means of a text editor. All you need to know about is the device protocol and the way a driver for Wings Platinum is structured. The latter you will find out about in this chapter. Once you have written a driver we are asking you to make it available to us so that we can build up a data base all Stumpfl users can benefit from. See also Available drivers. So if you should require a driver next time maybe somebody else has already done the job for you, too.

Structure of a driver

When you use a text editor to open an existing driver &endash; some of them you will find in folder **...\Wings Platinum\Drivers** &endash; you can see what its structure is like. There is a description at the beginning, followed by the commands in the order they are to appear in the selection menu. Every line may contain any sort of comment, which must be separated from the command by two slashes. Look a the example below: **//This comment is for your information only and will not be evaluated.**

`[Driver]`

This ID in the first line is compulsory.

`Name=XXX`

Name of driver or device to be controlled

`Date=XXX`

Date of creation

`Author=XXX`

Name of the person creating the driver

`Comment=XXX`

Any comments on the driver

`ID used last=XXX`

Specifies the ID used last. This way the author knows which IDs have already been used when he adds further commands. It should always be kept up-to-date and is used for the information of the author only.

With the exception of the last bit this information will be visible in **Serial Port** Properties Dialog after selecting the driver. In the driver file, a complete block of information might look as follows:

```
[Driver]
Name=AV Stumpfl EventPlayer
Version=1.00
Date=26.04.2004
Author=Christoph Hilger
Comment=Basic control of EventPlayer software
ID used last=10
```

Separated by a blank line, this is followed by an obligatory command block for sending any character strings that can be entered in the driver dialog at a later time:

```
[SendData]
Info=Sends raw data
ID=1
SubID=0
Par1=Data, Data to be sent to Device
Send=#Data(Par1)
```

This can be followed by further command blocks separated by a blank line each.

Data format

Character strings for serial commands can be entered in a variety of forms; even mixed entry is possible:

- Decimal notation is directly accepted.
- ASCII characters must be entered between quotation marks. Bytes must be separated by a separator (space or comma).
- For input of hexadecimal values, every byte must be marked as "Hex-byte". This can be done by adding the following characters: **0x12, h12, 12h** or **$12** (in our examples **12** is the byte information).

Structure of a command block

First of all, we would like to illustrate the basic structure of commands in a driver. At the end of this topic you will find a few examples of drivers that do not use all the options available and actually show how simple the commands are structured. Please make sure you write any information and comments in English so that the drivers can be used internationally.

`[Command name:Subname]`

Command name displayed for selection in the context menu. Separated by a colon, a optional subname can be entered to be displayed as a submenu.

`ShortName=XXXX`

For optional entry of a short name to be shown in markers and control panel fields (preferably 10 characters only). This is very useful for very long command names and submenus. For commands including parameters, the parameters are displayed after the short name, i.e. just like for the SC Master 16 driver for **Card Volume to Value**, where two parameters (for card player and value) must be entered: **Vol crd 3, 25**

`Info=XXXX`

Information to be displayed as comment in the driver dialog when this command is selected.

`Icon=X`

Specification of an icon; **X** stands for the index of one of the icons listed here. When no icon is specified, **Icon=0,** i.e. the standard icon , is used automatically.

`ID=1`

Every command must have a unique ID number between 1 and 255, which must not be used for any other commands in the driver. **Important:** When you modify a driver, do not alter the IDs of any existing commands. Otherwise the driver will be incompatible with any earlier driver versions!!!

`SubID=1`

Related commands can be structured on a second level by adding a sub-ID between 1 and 255, which has them displayed in the submenu of the context

menu, too. The sub-ID within an ID number must be unique. SubID=0 means no sub menu. **Important**: When you modify a driver, do not alter the sub-IDs of any existing commands. Otherwise the driver will be incompatible with any earlier driver versions!!!

Par1=Format (VX, Y, Z), name of entry field

Allows parameter entry in the driver dialog. "Format" specifies the type of information to be expected; **VX** is the value address (e.g. **V3**); the admissible range is defined by **Y** (minimum) and **Z** (maximum). The following parameters are possible:

> **Data** ... max. 255 characters in accordance with defined data format, mixing of ASCII, Hex, etc. is possible
>
> **Number (Y, Z)**; the driver dialog will display a number entry field. The range of values needs to be defined, e.g. **Number(1,255)**
>
> **Value (VX, Y, Z)** uses the value at address **X** based on the value range of **X** and **Y**, with **Y**=0% and **Z**=100% of a data object, e.g. **Value (V3, 1, 3456)**. This is how you can define the output range for data objects or control panel fields. See also Variable data output by means of drivers.

This way three different parameters can be used (Par1 to Par3). For **Value** parameters you need to additionally define a **DriverLoop** command for time control. In a parameter line, too, although separated by a comma, the part following after is the name of the entry field in the driver dialog.

Info If you are using more than three parameters and want to use this driver for older projects (...created by Wings Platinum 2.40 or earlier), you should definitely test the functions extensively. Otherwise there may be compatibility problems.

Send=Character string

As character string up to 255 characters can be sent. Entry can be in mixed notation in accordance with the data format defined. Adding command

#Pause(X)

to a character string creates a pause with a duration of **X** (entry in milliseconds between 1 and 255) at this location when sending the command.

Variable parameters (**Par1** to **Par8**) can be integrated as follows:

#Data(Par1)

The character string for parameter 1 is evaluated as mixed notation and output in hexadecimal values.

#Byte(Par1)

As above, but with only the first byte of parameter 1 being output.

#Word(Par1)

As above, but with only the first two bytes of parameter 1 being output.

#Long(Par1)

As above, but with only the first four bytes of parameter 1 being output.

#Decimal(Par1)

The character string for parameter 1 is output as ASCII characters.

#Decimal:Decimal position(Par1)

As above, but specifying the decimal position that needs to be send. Decimal positions between 1 and 100,000 can be specified. This is a useful option when devices require individual bytes, i.e. the keystroke on a remote control unit.

Evaluation of acknowledgements

Acknowledgements of the device following receipt or execution of commands can be evaluated. The driver description should contain information about whether this function has been programmed for the user to know whether an activation of **Acknowledge** in the driver dialog actually makes sense.

ReceiveAck=XXX

Here you enter the character string the device sends back upon receiving a command.

ReceiveTimeout=XXX

This command is for defining the period (in milliseconds) for Wings Platinum to wait for the acknowledgement. After expiration of this period, an entry is

made in the log file and, if applicable, the command is resent (Retries=?). Allows sufficient time for the receiving device to recognize the command and to send an acknowledgement.

ExecuteAck=XXX

Here you enter the character string the device sends back upon executing a command.

ExecuteTimeout=XXX

Just like **ReceiveTimeout**, but refers to the execution of a command.

Retries=X

This entry allows you to define the number of times a command is to be repeated if no acknowledgement is received within the specified period of time. For **Retries=2**, the command is sent three times at a maximum.

Sending variable values from data objects or control panel fields

In combination with parameter **Value** you can use command **DriverLoop** to define the circumstances when the data are to be sent. This command is, therefore, an internal instruction for other commands.

[DriverLoopX]

Internal command, with **X** (1...255) being the index for differentiation between different command blocks.

ID=X

SubID=X

ID and **SubID** define the command the DriverLoop command is to take effect on.

Interval=XXXX

This entry defines the frequency with which values are to be sent. Entry is in milliseconds.

SendAlways=X

Here you can define whether values are to be sent always (**X=1**) or only after having changed (**X=0**).

Example of a complete command with DriverLoop

```
[SendValue]
Info=Sends value to device
ID=2
SubID=0
Par1=Value (V3, 1, 3456)
Par2=Value (V7, 567, 987)
Send=0x54 #Decimal(Par1) 0x0c #Decimal(Par2) 0xFF 0x0a
0x0d

[DriverLoop1]
ID=2
SubID=0
Interval=200
SendAlways=0
```

The **Send** command contains two variable parameters, that originate from value addresses 3 and 7 in the Media Pool or linked data objects, control panel fields or external inputs. See also Variable data output by means of drivers.

Examples

Below you will find a few examples of drivers used for our EventPlayer software. The command block below is used for sending a simple command. Here it is the play command for the current folder of the EventPlayer software. In hexadecimal values it is FF 01 04 FE.

```
[Play]
Info=Starts playback of current folder
Icon=1
ID=5
SubID=0
Send=0xFF 0x01 0x04 0xFE
```

Should the play command for the EventPlayer software refer to a particular folder, the folder remote index must be contained in the command. This is done by entering parameter 1. Moreover, submenu **Folder** should be displayed in the context menu **Play**. This can be achieved by specifying a subname. The specified short name makes sure that the whole information including folder index is visible, e.g. **Play fold 14**. As this is also a play command, the same ID was used but with a different sub-ID. For entry of parameter 1, number format and a range from 1 to 255 were selected. The command contains **#Byte(Par1)** for the remote index. This causes only the first byte of the entry field information in the driver dialog to be evaluated.

```
[Play:Folder]  //This comment is not displayed in the driver dialog.
Info=Starts specified media folder
ShortName=Play fold
Icon=1
ID=5
SubID=1
Par1=Number(1,255), Remote index of media folder
Send=0xFF 0x02 0x04 #Byte(Par1) 0xFE
```

This command block initiates evaluation of an acknowledgement for correct reception of the command. This requires the last three lines. At **ReceiveAck** the character string sent back by the device is entered. Allow enough time for **Receive Timeout** (500 ms in this case), otherwise commands may be sent several times due to **retries**. When the expected acknowledgement does not arrive within the specified time, Wings Platinum makes an entry in the log file.

```
[Load Project]
Info=Loads predefined project
ShortName=Load P
Icon=19
ID=10
SubID=0
Par1=Number(1,255), Number of predefined project
Send=0xFF 0x02 0x0A #Byte(Par1) 0xFE
```

```
ReceiveAck="OK" 0x0D 0x0A
ReceiveTimeout=500
Retries=2
```

Tips for creating your first driver

You should write your first driver for a device whose protocol you are familiar with. If there are any problems in controlling the device, debugging is much easier because you need to concentrate on the driver and its syntax only.

After you have made alterations to a driver used in an open project, you need to reload the project for the driver to be reloaded and the alterations to take effect. You don't need to do so if you open the driver as follows:

1. In the Media Pool click on category **Devices**.
2. Right-click the serial port and select **Properties**.
3. Click on **Edit driver**, edit and save the driver.
4. In the Wings Platinum dialog click **OK**. Following this you can use the driver and its functions.

Selecting icons

For clear optical differentiation of drivers to be used as markers or control panel fields you can assign various icons when creating a driver. To do so, specify the icons when programming the commands as follows:

```
Icon=X
```

X stands for the index of one of the icons listed below. **Icon=2** therefore stands for this icon: . The example icons show a gray background. In markers or control panel fields, however, the background that was chosen is maintained. Please stick to the following conventions:

= **0** **...Driver command;** is also visible when no icon has been specified.

= **1** **...Play** for playback or show start

= **2** **...Pause** for Pause Mode

= **3** **...Stop** for end of playback

= **4** **...Reset** for cancelling playback or resetting a device

= **5** **...Skip forward** for jumping to the next marker, index, etc.

= **6** **...Skip backward** for jumping to the previous marker, index, etc.

= **7** **...Fast forward** for navigational purposes

= **8** **...Fast reverse** for navigational purposes

= **9** **...Jump** to a specified location

= **10** **...Trigger** for starting trigger actions or similar

= **11** **...Volume up** to increase volume or values

= **12** **...Volume down** to reduce volume or values

= **13** **...Locate** to position the Locator or similar

= **14** **...Eject** for ejecting data or sound carriers, etc..

= **15** **...Button** for universal marking of functional buttons

= **16** **...Devices** in general for device line-ups or communication, etc.

= **17** **...Record** for record start

= **18** **...Port** for serial port or connection establishment, etc.

= **19** **...File** for marking of file operations, etc.

= **24** **...Minimize** program windows

= **25** **...Maximize** program windows

= **26** **...Restore** program windows

= **20** **...Presentation** for Presentation/Full Screen Mode, etc.

= **21** **...OFF** for deactivation of devices or termination of processes

= **22** **...ON** for activation of devices or starting of processes

= **39** **...Standby** for the standby mode of devices

= **23** **...Loudspeaker** for acoustic playback or functions

= **27** **...Loudspeaker** for the audio mute function

= **28** **...Picture** for picture playback or for disabling the mute function

= **29** **...Picture** for the picture playback mute function

= **30** **...Film strip** for video playback, i.e. picture and sound or for deactivating the mute function

= **31** **...Film strip** for muting video playback, i.e. picture and sound, or for deactivating the mute function

=**32** **...Text sheet** for displaying text or for deactivating the mute function

= **33** **...Text sheet** for muting the text function

= **34** **...Cursor up** for menu operation

=**35** **...Cursor right** for menu operation

= **36** **...Cursor down** for menu operation

= **37** **...Cursor left** for menu operation

= **38** **...Enter** for confirming entries

Variable data output by means of drivers

In addition to cue output it is also possible to send variable data - even continuously. Input for data variation is via data objects or control panel fields as well as via external input device linked up with data objects. See also Using external input devices. This allows interaction and control of special devices such as Motion Bases, etc.

The necessary precondition is the existence of a suitable driver which needs to be created by the user her/himself. For this purpose commands with parameter **Value** and the corresponding **DriverLoop** commands are used. See also Creating drivers.

When a driver is available, proceed as follows:

1. Click category **Devices** in the Media Pool. Right-click the serial port you want to use and select **Properties**. Unless you have already configured a serial port, do so now. Specify the type of port you want to use:

Computer port (applies also to a **Master** within a network)

1. Right-click some free space of category **Devices** and select **Add port** ▸ **Serial/LAN**.
2. Under **General settings** select the required type of communication:
   - If you want control via a serial port, click **Serial port** and select the corresponding port.
   - If you want control via a network, click on **IP address / Port** and enter address, server or device port and the control protocol. The server is always the computer or device this computer (being the client) is to be hooked up to.
3. For a serial connection, select the parameters in accordance with the device requirements under **Configuration serial port.** Click on **OK**.
4. Under **Serial / LAN** click the plus sign next to the folder **All devices** for the serial port to be displayed. Right-click **Serial port** and select **Properties**.

Continue at item 5 with the Driver settings.

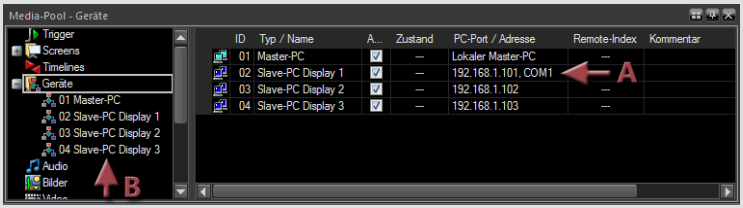
Slave port

1. When you have already started a multidisplay project, master and slaves should be available and the serial ports of the slaves can be used. If this is not the case, create a multidisplay project and set up the presentation network.
2. Click on the plus sign next to **Slave PC** and **All devices** for the serial ports to be displayed.
3. Right-click **Serial port** and select **Properties**.

Info

- Please keep in mind that in dependence on the interval (...is predetermined by the driver) variable data output requires a distinctly higher amount of data to be transferred than simple commands. With a high data traffic within the network and short intervals this may be noticeable.
- Which serial port on the slave is addressed, can be seen in the Media Pool in the device port line. **Show**.

In this example it is **Com 1**, the other numbers for the serial ports are only internal IDs.



Continue at item 5 with the driver settings.

4. Under **Driver settings** add a checkmark next to **Use driver** and click **Load driver...**
5. Select the appropriate driver from the list and click **Open**. **If you want to add a new driver...**

   ...click **Add driver file...** From the file dialog, select the new driver file and click **Open**.

Info When there is an error message, ensure that every command in the driver with **Value** parameters has a **DriverLoop** command, too. Moreover, any commands referring to a **DriverLoop** command must not contain any **data** or **number** parameters.

6. Add a checkmark next to **Enable driver loop** and make sure that **Enable Acknowledge** is not activated. Finally, click on **OK**.

   Info When testing drivers or eliminating faults, you can deactivate execution of **DriverLoop** commands by removing the checkmark next to **Enable driver loop**.

7. Now right-click **Serial Port** and select **Add devices...**
8. Add a checkmark next to **Value** and enter the corresponding number of value addresses. Click **OK** and the corresponding entries will appear in the Media Pool.

These value addresses can now be saved and used as data objects or control panel fields. They actually work like DMX data objects or control panel fields. The values that are output for 0 and 100 per cent have been specified in the driver by entering minimum and maximum values. The relevant factor for linkage with the corresponding command block is the driver address (e.g. **V3**) and column **PC Port/Address** in the Media Pool.

Control Panel for direct operation

The Control Panel can be used for direct and timeline-independent operation of devices and for direct start of trigger actions. Moreover, it also allows control of all sorts of devices via serial driver commands. The Control Panel offers status displays for control channels, switching states, incoming timecode and SC Master variables. The override functions makes it highly suitable for live applications which require direct intervention in programmed sequences or for calling up pre-programmed sequences by means of the corresponding trigger actions. All this is done via control panel fields arranged on the Control Panel. The Control Panel pages – up to 999 are possible – can even be called up via timeline control. Fullscreen mode and the option of individual, graphic design make the Control Panel a perfect fit for operation via touch panel.

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

Adding control panel fields

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

Various devices (switches, 0 – 10 Volts, DMX, serial drivers, servomotors, motion bases and slide projectors) as well as triggers can be placed into the Control Panel as control panel fields for direct access and operation, as well as status display. Moreover, variables can also be displayed on the SC Master. See Setting variables.

A control panel field is always added the same way:

1. Click tab **Control Panel**. It is located at the same place as the Project Explorer or the Audio Level.
2. What type of control panel field would you like to add?

Device/Control channel

In the Media Pool, click tab **Devices** and drag the corresponding device or control channel into the Control Panel. After releasing the mouse button, a control panel field for this device is created. See also Operating devices via control panel fields.

Master/Slave computers

In the Media Pool, click tab **Devices** and drag and drop the necessary multidisplay PCs into the Control Panel. After releasing the mouse button, a control panel field for this device is created. See also Show status of master and slave computers.

Trigger

In the Media Pool, click tab **Trigger** and drag the corresponding trigger into the Control Panel. Let go of the mouse button and a control panel field for this trigger is created. By clicking on this Action button the trigger can be executed.

Driver command

In the Media Pool, click tab **Devices** and drag the serial port to which you previously assigned a trigger into the Control Panel. After releasing the mouse button, a control panel field for transmitting serial commands is created. By clicking on select the corresponding command. See also Using drivers for serial control.

MIDI command

In the Media Pool, click tab **Devices** and drag and drop a MIDI output into the Control Panel. After releasing the mouse button, a control panel field for sending MIDI commands is created. By clicking on select the corresponding command. See also Sending MIDI commands.

Display of variables

In the Media Pool, click tab **Devices** and drag the **Special functions** entry in the **All devices** folder into the Control Panel. Let go of the mouse button and a control panel field for variables is created. Click to select the variable to be displayed.

3. A control panel field can be grabbed at the title bar and moved. You may have noticed that the control panel fields snap to the suggested checkerboard pattern on the Control Panel.
4. The designation in the title bar corresponds to the name specified for the device. It can be changed by right-clicking the control panel field, selecting **Properties** and entering the corresponding **name**. The Properties Dialog offers various options for button functions, display of values, remote control and color design, which are explained in detail in topic Control panel field properties.
5. Finish by clicking on **OK**.

Info You can have the devices, triggers, etc. which are linked up with the control panel fields displayed in the Media Pool by clicking the control panel field and selecting **Display Pool Object**.

Operating devices via control panel fields

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

First of all, add the control panel fields for devices or control channels to be controlled to the Control Panel. This can be done most easily by dragging the device from the Media Pool to the Control Panel. See also Adding control panel fields.

- **Status display** ...is visible as soon as playback is started. The current value is displayed graphically via the yellow bar and numerically as well. The unit for numerical display can be chosen in the Control Panel Field Properties (open by right-clicking the control panel field).
- **Adjust value** ...can be done by grabbing and dragging the yellow bar. It allows fine adjustment of the values as the mouse movement is geared down.
- **Action button** ...changes over between maximum and minimum values. The function of this button can be adjusted: switch on only or maximum value, respectively or switch off only or minimum value, respectively . This may be useful for important emergency functions, for example. See Control panel field properties.
- **Override button** ...disables timeline output and allows the device in question to be controlled via the control panel field only. When override control is disabled, it still allows control via the control panel field, but any value changes through an object in the timeline take priority.
- **Grouping of control panel fields** ...allows joint operation of devices. Highlight the corresponding control panel fields, right-click one of these fields and select **Grouping ▶Create new group**. For one-off joint operation of devices, highlighting the corresponding control panel fields will also do. Further details and information on how to operate groups via a Master button can be found in topic Operating grouped control panel fields.

Info

- **Control panel fields** can be **designed graphically**. See Graphic design of the Control Panel. The function a button is to perform by clicking it,

can be selected in the Control Panel field properties, e.g. override, on/off, always on, always off, etc.

- You can have the devices, triggers, etc. which are linked up with the control panel fields displayed in the Media Pool by clicking the control panel field and selecting **Display Pool Object**.

Operating grouped control panel fields

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

Grouping of control panel fields allows joint operation of devices. This way grouped control panel fields can be highlighted by one mouse-click and be operated jointly or via a master button. The latter is necessary when graphically designed bitmap buttons are used. See also Graphic design of the Control Panel.

This is how you proceed:

1. Highlight the corresponding control panel fields.
2. Right-click one of these control panel fields and select **Grouping ▶Create new group**. The group index will be displayed at the beginning of the header.

   Info In principle, the other grouping functions correspond to the grouping of timeline objects, i.e. **adding**, **changing** or **removing** groupings, See Grouping objects.
3. Clicking the header causes all control panel fields of this particular group to be highlighted so that they can be operated jointly.
4. Via a master button a group can be operated without having to click the header first. For this purpose, drag a button from the Media Pool Bitmap into some empty Control Panel space.
5. Right-click the button and select **Assign group...**
6. Under **New** enter the new group to be controlled via this button and confirm with **OK**.

When you click the master button, all control panel fields of this group are addressed. This way, however, only switching functions can be performed.

Serial driver commands as control panel fields

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

First of all, add a few control panel fields for a serial port provided with a driver. This can be done most easily by dragging the ports from the Media Pool to the Control Panel. See also Adding control panel fields.

- **Command button** ...this button calls up the dialog **Configure driver command**. In this dialog, click on **Select command** and select the required command. Depending on the type of command you may have to enter further parameters. Usually, the driver author will have written a few words of explanation which are displayed in the dialog box. If no commands are selectable, you need to choose a driver first. See Using drivers for serial control.
- **Action button** ...sends the selected command via the associated port to the device. To be able to do so, the device ports need to be enabled. See also Synchronizing devices.
- **Override button** ...disables timeline output and allows the device in question to be controlled via the control panel field only. When override control is disabled, it still allows control via the control panel field, but commands in the timeline are sent all the same.
- **Grouping of control panel fields** ...allows joint operation of devices. Highlight the corresponding control panel fields, right-click one of these fields and select **Grouping ▶Create new group**. Grouping functions, in principle, correspond to objects. See Grouping objects. For one-off joint operation of devices, highlighting the corresponding control panel fields will also do.

Info You can have the devices, triggers, etc. which are linked up with the control panel fields displayed in the Media Pool by clicking the control panel field and selecting **Display Pool Object**.

Executing trigger actions via control panel fields

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

Begin by adding the control panel fields for the trigger action to be executed directly to the Control Panel. This can be done most easily by dragging the trigger from the Media Pool to the Control Panel. See also Adding control panel fields.

- A trigger action is executed by clicking the **Action button** .
- Triggers to be executed via the Control Panel only require an action and no further conditions. See also Creating a trigger function and Trigger actions.
- Trigger control panel fields can be named individually and provided with different colors for text and background. See Control panel field properties.
- Control panel fields for triggers cannot be functionally grouped.
- The trigger control fields can also be displayed as individually designed buttons. See Graphic design of the Control Panel.

Control Panel Field Properties

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

To open the Control Panel Field Properties dialog, right-click the control panel field and select **Properties**.

Under **Display** you can make the following settings:

- For **Name** enter an individual name for the control panel field.
- For **Unit** choose the corresponding unit for display of numerical values.
- Select the **Background color** by checking the checkbox and clicking the field next to it. This opens a dialog, which allows you to select the corresponding color. See Color selection.
- The **Text color** can be chosen just like the background color.

For **Function of action button** you can choose from among three functions for the corresponding button:

- **Toggle** ...changes over between maximum and minimum values; symbol in the control panel field .
- **On**...output of maximum value only; symbol in the control panel field
- **Off**...output of minimum value only; symbol in the control panel field
- **None** ...disables the action button

The action buttons of grouped control panel fields always react as defined, no matter which action button in the group is clicked.

Field **Bitmaps** allows entries for individually designed bitmap buttons to be made.

- By adding a checkmark in front of **Display bitmap** you can have the corresponding bitmap button displayed while removing the checkmark causes the actual control panel field to be displayed again. See also Graphic design of the Control Panel.
- If you place a checkmark next to Transparent, the bitmap graphics is displayed transparent, i.e. it is not visible. The shape of the transparent button, however, continues to define the area that can be clicked. This is a very versatile option as it allows you to integrate the control panel field in a background picture.
- Next to **Mouse-click triggers** you can define whether the graphic button is to refer to the **Action** or the **Override** button of the control panel field. If **No button** is selected, mouse-clicks remain ineffective and the function is restricted to status display.

Under **Remote** you can enter a **remote index** which allows the action button to be activated via a serial command. See also Remote-controlling Wings Platinum.

Selecting a Control Panel page

This function requires the Pro License as a minimum (for a maximum of one page) or the Show Control Module (for several pages). See Licenses and functions.

You can use up to 999 pages in the Control Panel, which can be individually selected and displayed. There are various ways of doing this. First of all, click tab **Control Panel**.

- Right-click a free area in the Control Panel and select **Previous page** or **Next page**. The corresponding page number is given in brackets.
- If you want direct access to a certain page, you also right-click a free area in the Control Panel and select **To page...**. In the dialog box to follow you can enter the corresponding page number and have it displayed by pressing **OK**.
- Control Panel pages can also be displayed via a trigger and the corresponding action. See Creating a trigger. These triggers can be used for selecting a page in different ways:
  - **As control panel field** which allows you call up a page via a mouse-click. See Starting trigger actions via control panel fields.
  - **As a marker in the timeline** calling up a page during playback. See Using markers.
  - **Via external Remote command** executing the trigger and calling up the page. See Remote-controlling Wings Platinum.
  - **Time-controlled access via Scheduler** which calls up a page as soon as certain conditions are met. See Time-related conditions.

  All these instruments turn the Control Panel into an extremely versatile tool for many different applications.

Duplicating a Control Panel page

A Control Panel page with all its control panel fields and graphics can be duplicated in a very simple way:

1. Right-click some free space in the Control Panel and select **Duplicate page**.

2. In the dialog popping up enter the page the elements of the current page are to be copied to.
3. Under Field properties you can choose whether existing groupings or remote indexes are to be kept or not.
4. Click **OK** to duplicate the page.

See also

Selecting a Control Panel page

Headers in the Control Panel

Page Properties

Page Properties

This function requires the Pro License as a minimum (for a maximum of one page) or the Show Control Module (for several pages). See Licenses and functions.

Every Control Panel page can be customized by making the corresponding settings below.

Background

- **Individual color** ...allows specification of any background color for the Control Panel page. Place a checkmark next to it and click the color field to select the color. **Details on color selection**.
  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
  - Selection of colors is particularly easy via the pipette.

Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Individual picture** ...allows any picture to be used for the background. Place a checkmark next to **Individual picture** and close the Properties Dialog by clicking on OK. Drag the appropriate picture from the Media Pool and drop it onto the Control Panel page. Please note that the picture is not scaled, i.e. the pixels need to match the Control Panel size.

Field size

- If you place a checkmark next to **Individual field size**, you can specify the size of a field, i.e. the size of a control panel field. The default size is 88 x 66 pixels. The default setting can be restored by clicking **Default**.

Header

If every page is to be provided with an individual header, place a checkmark next to **Individual**. In this case, any global header specified in the Project Options will be ignored for this page. See also **Project Options** - Control Panel.

- **Height** ...for entering the header height in pixels. Enter **0** pixels if no header is to be displayed.

- **Color** ...header background color. Click this field to specify the desired color. See also Color selection.
- **Text color** ...specifies the text color. Click this field to determine the desired color.

In the field below you can enter the applicable text. Add the current page number in the text by entering **%P**. Date and time can be added likewise. See **Syntax for date and time display format**. Click to select the text orientation.

The following format characters produce the following information:

%a ...for weekdays, abbreviated, e.g. **Fr** for Friday

%A ...for weekdays, e.g. **Friday**

%b ...for month, abbreviated, e.g. **Jul** for July

%B ...for month, e.g. **July**

%c ...for date and time in local format, e.g. **23.07.2004 11:09:58**

%d ...for the day of a month as a decimal figure (01 - 31)

%H ...for hours in 24-hour format (00 – 23)

%I ...for hours in 12-hour format (00 – 12)

%j ...for the day of a year as a decimal figure (001 - 366)

%m ...for the month as a decimal figure (01 - 12)

%M ...for the minute as a decimal figure (00 - 59)

%p ...for marking mornings/afternoons in accordance with local format, e.g. **A.M.** / **P.M.**

%S ...for seconds as a decimal figure (00 - 59)

%U ...for the calendar week as a decimal figure, with Sunday being the first weekday (00 - 53)

%w ...for weekdays as a decimal figure (0 – 6, Sunday is 0)

%W ...for the calendar week as a decimal figure, with Monday

being the first weekday (00 - 53)

%x ...for the date in local format, e.g. **24.07.2004**

%X ...for the time in local format, e.g. **11:37:49**

%y ..for the year without century as a decimal figure (00 – 99), e.g. **04**

%Y ...for the year including century as a decimal figure, e.g. **2004**

%Z ...for the time zone (only possible if the time zone is known by the system), e.g. **Western European Standard Time**

%% ...for display of the percent sign in the text

The additional character **#** allows you to enter the date in extended form, examples:

%#x ...for **Friday, 23 July 2004**

%#c ...for **Friday, 23 July 2004 11:52:08**

This option is not available for all date formats.

See also

Graphic design of Control Panel

Duplicating Control Panel pages

Selecting a Control Panel page

Headers in the Control Panel

The Control Panel pages can be provided with headers. The header can be identical for all pages or defined for every page individually. Headers may contain text, page numbers, date and time and be provided with color attributes.

- The settings for **global headers** are made in the Project Options. See **Project Options** - **Control Panel**.

- The settings for **individual headers** are made in the page properties. See Page Properties.

Fullscreen mode for Control Panel

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

The Control Panel can also permanently be displayed in fullscreen mode. In combination with individually designed interfaces this is a particularly interesting feature for permanent installations and operation via touch panels.

This is how you enable fullscreen mode:

1. Click on **Options** in the tool bar below the main menu and select **Project Options** – **Control Panel** on the left.
2. Under **Fullscreen settings** select the required size of fullscreen mode:
    - **Full screen size** ....enlarges the Control Panel to fill the entire monitor area.
    - **Custom** ...allows entry of position and size; the Control Panel is displayed as an area without any border around it.
3. Right-click a free area in the Control Panel and select Fullscreen Mode for the Control Panel to appear at the previously defined size.
4. Fullscreen mode can be terminated by pressing **Shift** + **Esc**!

Info

- The settings for the Control Panel can be such that the Control Panel is always opened in fullscreen mode after opening the project. See **Options** – **Project Options** – **Control Panel**.
- You may want to enable password protection for fullscreen mode to protect the Control Panel against unauthorized closing. See Password protection.
- When video presentations are to be started via a touch screen and displayed on the same monitor, the Control Panel may remain visible at the side when the aspect ratio deviates. This can be avoided by

enabling function **Display as topmost window** under **Options** - **Project Options** - **Control Panel**.

- Fullscreen mode is a particularly attractive feature in combination with individually designed graphic interfaces. See Graphic design of Control Panel.
- Der Vollbildmodus ist besonders mit grafischen Oberflächen interessant, siehe Graphic design of Control Panel.

Graphic design of Control Panel

This function requires the Pro License as a minimum (for a maximum of one page) or the Show Control Module (for several pages). See Licenses and functions.

Feel free to design individual buttons and choose background colors for your Control Panel. Buttons can be downloaded from the Internet or designed individually by means of a graphics program. Several buttons and backgrounds can be found in the Wings Platinum program folder, which is located at ...**My Documents\AV Stumpfl\Media Samples/Control Panel**.

Creating and editing button graphics

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

Buttons can be downloaded from the Internet (e.g. search for "free buttons") or designed individually by means of a graphics program. Once you have found suitable buttons on the Internet, you need to modify them for usage in the Control Panel.

- Buttons can be made up of one or two symbols. Two symbols stand for two different switching states.
- Any areas to be displayed transparent need to be in pink. The exact color values must be used: red = 255, green = 0 and blue = 255.

  Examples:

- Buttons should not be larger than a control panel field (...to be selected in the Options; default value is 88 x 66 pixels). A button graphic containing two symbols is double the size of one containing only one symbol. It is irrelevant whether symbols are arranged on top of each other or next to each other as this can be specified in the file name and in the Media Pool under **Bitmap**. However, you need to bear in mind that the bottom or right symbol is displayed when activated.
- Buttons and graphics must be saved as bitmap ***.bmp*** files, while the name should include the following identifications corresponding to the arrangement of the switch symbols:
  - Name**_§1**.bmp ...for one-piece buttons or for graphics that serve illustration purposes
  - Name**_§2V**.bmp ...for buttons with two symbols that are arranged vertically
  - Name**_§2H**.bmp ...for buttons with two symbols that are arranged horizontally

  When a button has more than two symbols or switching states you can enter the corresponding figure up to a maximum of **9**. Instead of the **§** character you can also use the **$** character as a separator.

After preparing the buttons this way, they are sorted under **Bitmaps** when importing them in the Media Pool (Drag & Drop) and appear with their correct number of parts. See also Using individual buttons.

Tips

- Start by creating the graphic design for the Control Panel pages and defining colors and names. When you have done this, creating the required bitmaps is just a few steps away. Please consider that the field size has an influence on the raster pattern. You can change the field size and thus the raster. See **Options – Project Options – Control Panel.**

- For buttons downloaded from the Internet you should choose a background color which is as close as possible to the planned background color in the Control Panel.
- When filling the button background in pink, make sure the any graphics program options such as **Smoothen** are disabled, otherwise combination colors may cause pink edges in the Control Panel.
- The empty Control Panel fields can be provided with any type of individually designed bitmaps. This allows you to create eye-catching labelling or multi-color backgrounds. The bitmaps should have the same size as the Control Panel fields. Otherwise they are cropped or do not fill the entire field. See also **Options** – **Project Options** – **Control Panel**.

Using individually designed buttons

This function requires the Pro License or up or the Show Control Module. See Licenses and functions.

If you want to use individually designed buttons for your control panel fields, you need to get hold of the corresponding buttons. The Wings Platinum DVD contains buttons and background graphics which are saved to folder **Control Panel**. Open the folder by clicking **Extras** in the main menu followed by **Open folder ▶Media Samples** and double-clicking folder **Control Panel**. If you want to use different buttons they need to meet certain criteria. See Creating and editing button graphics.

Once the required buttons are available, you can import them to the Media Pool and place them in the Control Panel. This is how you proceed:

1. In the Media Pool click category **Bitmaps**, followed by right-clicking a free area there to select **Add bitmaps for control panel.**. In the dialog appearing select the bitmaps and click **Open**.

   Tip Bitmaps for buttons or even folders containing different media can be dragged from the Explorer into the Media Pool. The different media are automatically sorted in accordance with the Media Pool categories.

2. After highlighting a bitmap the Preview window will show you whether there is a double symbol and whether they are arranged horizontally or vertically. This is also shown in columns **Horiz. parts** or **Vertical parts**.

   Info For the display of bitmaps in the Media Pool switch over between list and light box view by pressing **F9**.

3. Now click tab **Control Panel** to display one page with control panel fields. Unless devices, triggers, etc. are already available as control panel fields, you should add them now. See Adding control panel fields.

4. Drag one bitmap or button from the Media Pool onto a control panel field. If you are testing this function for the first time, you should try and drag a bitmap with two symbols onto a device control field (e.g. switch or DMX) to find out how this works.

5. After clicking the button it displays a switching state, provided control panel field and button are suitable for this purpose. For a bitmap with one symbol only or a control panel field configuration with one switching state only, the button graphics won't change.

6. Now you can define whether the graphic button is to refer to the **Action** or the **Override button** of the control panel field. To do so click on the button and select **Properties**.

7. Under **Bitmap** you can select the corresponding button function next to **Mouse-click triggers**. If you have chosen an **Action button**, you can specify the corresponding function under **Function of action button**, i.e. you can choose **On** or **Off** or **None** instead of **Toggle**. Close the dialog by clicking **OK**.

8. You can also select a background color for the Control Panel pages. Right-click a free area in the Control Panel and select **Control Panel - Options**.

9. Below **Background** click on **Color**. Finally, select the corresponding background color by clicking into the color field. See also Color selection.

10. After closing the Options Dialog, the buttons or control panel fields are displayed with the corresponding background color.

Info

- Disable bitmap display (button graphics) by right-clicking some free area in the Control Panel and selecting ✓ **Display bitmaps**. The same way bitmap display can be reenabled.
- Bitmaps to be used in the Control Panel can be displayed in the Media Pool. Right-click the button in the Control Panel and select **Display bitmap in pool**.
- The size of control panel fields (field raster in the Control Panel) is freely selectable. See **Options** &endash; **Project Options** &endash; **Control Panel**.
- Empty control panel fields can be provided with any type of individually designed bitmaps. This allows you to create eye-catching labelling or multi-color backgrounds. The bitmaps should have the same size as the control panel fields. Otherwise they are cropped or do not fill the entire field. See also **Options** &endash; **Project Options** &endash; **Control Panel.**
- If button symbols do not change over when clicking the button, there is usually no information available as to the number of parts in a button. Enter the corresponding information under **Bitmaps** in columns **Horiz. parts** or **Vert. parts**. You can also enter the corresponding information in the button file name. See File names for buttons.

Using external input devices

Using external input devices

Wings Platinum offers a variety of ways to control processes via external input devices. You can use external sliders to adjust the volume, or external keyboards to control presentations or to record control information in switch or data objects. The following external input devices can be used:

- **PC keyboard** ... **Ctrl** and **Shift** keys. See PC keyboard configuration
- **Joystick** ...with up to six axes and 12 buttons. See Joystick configuration.
- **MIDI devices** ...keypads and controllers with keys, faders and rotary controls can be used., e.g. Behringer BCF2000. Wings Platinum supports a number of different MIDI commands (Note On, Note Off, Program Change, Controller Change, Song functions and MMC). See also MIDI configuration.

Behringer BCF2000, programmable MIDI controller with motor faders, buttons and rotary controls.

- **Tascam US-224/428** (DAW-Controller) ...drive buttons, slider controls and data wheel. (Unfortunately, this device is no longer available).

Audio Controller Tascam US-224 ..with audio converters (stereo 96 kHz/24 bits), remote function via MIDI, connection via USB port.

- **Mackie Control** (DAW-Controller) ...slider control, function keys, drive buttons, data wheel and many more. See also Mackie Control functions.

The sliders are motor-controlled and touch-sensitive.

- **Stumpfl Iseo** ...universal, programmable remote control system with touch panel. It offers faders and buttons, which can be arranged on any interface. See Interactivity with Iseo.

AV Prompter ...is a simple, yet comfortable remote control unit with Prompter based on Apple iPod or iPhone, which uses WLAN control. See Remote control via iPod and AV Prompter.

- **SC LAN DMX512 in-out** ...DMX Module connected via LAN which features inputs and outputs. See also Configuration SC LAN DMX512 in/out.
- **SC Remote 16 in-out** ...combined SC Net Module with inputs and outputs. The inputs allow buttons or switches to be connected or voltages

to be evaluated. The outputs allow status information to be displayed via connected LEDs.

- **Audio level** ...can be recorded as data object and allows triggering of light sources in line with the audio level. Control of real time effect parameters via audio level is also interesting. See External control of effect parameters.
- ...and any other devices which are able to output serial commands via RS 232 or TCP/IP. See also Wings Platinum remote control.

The external input device is connected and set up in the Media Pool under **Devices**. In addition to the fixed functions provided for by Wings Platinum, many other control elements can also be freely allocated and used for live control or recording in switch and data objects.

Live control and recording in objects

The following preconditions must be fulfilled before external control elements can be used for live control and recording of data:

- The input device must be configured in the Media Pool. The input devices in question are listed in topic Using external input devices.
- The control elements must be linked up with objects. See Allocating control elements.

Object Control Modes

When using external control elements, switch and data objects can be put into various modes.

- **Playback** ... is the standard mode of switch and data objects, external control elements are not effective.
- **Live** ...when recording is active, the control element can be used for controlling although no recording takes place. The values or ramps used in the objects are not considered.
- **Start recording** ... after recording has been started the control element can be used for controlling. The values or ramps in the object are overwritten.

- **Record-> Play** ...as above, but after stopping the object is put into mode **Playback of recording**. For further recording a Record mode must again be activated for the object.
- Playback of recording ...marks a data object as recorded.
- **Record Punch In/Out** ...activates recording during playback. This option allows certain object portions to be overwritten during playback. To enable **Punch In** and **Punch Out** you need to create the corresponding triggers, which may be linked up with certain keys. Further information can be found here.

And this is how it is done:

1. Right-click the corresponding data object, select **Mode** and **Live, Start recording, Record->Playback** or **Record Punch In/Out**. The active mode is displayed at the beginning of the info line. If you want to change the mode for several objects simultaneously, you need to highlight them before you can do so.
2. Move the Locator to a position before the switch or data object or to the position where control is to start.
3. If the device control has not been enabled yet, click on **Enable device ports** in the function bar below the main menu. Please note that recording is only possible when the data or switch objects are linked up with at least one output channel.
4. Start recording by enabling **Record Mode** in the tool bar, followed by pressing the **space bar**. Alternatively, you can press the **Record key** on the Mackie Control (if applicable). See also Mackie Control Functions. The length of the data object corresponds to the time window that allows remote controlling or recording. In **Record Punch In/Out** Mode recording only starts with **Punch In** and finishes with **Punch Out**.
5. Now actuate the corresponding control element for input. During recording, the recorded values are immediately displayed in the data object.
6. Stop recording by pressing the **Esc** key or the Stop key of connected controllers. When objects were in mode **Record-> Play** they change to mode **Playback of recording**.

7. The ramp bands in the data objects created thus can be edited with the mouse. Usually, they show a high number of nodes which make editing quite impossible. This is why you should remove any superfluous nodes beforehand. See Simplifying ramps and Editing the ramp band.

Info

- **Important:** In order to record data in a switch or data object, at least one control channel must be assigned for output, i.e. a DMX channel or a switch channel, for example.
- As an alternative, you can start recording by pressing keys **Ctrl** and **R**.
- Recording of a certain portion only is very elegantly done via the Punch In/Out function and trigger markers. See Recording via Punch In/Out.
- Object modes **Play**, **Live**, **Start recording**, etc. can also be altered for a whole series of objects, by marking them prior to changing their mode. See Marking objects.
- Display of node values should be deactivated, otherwise the course of the ramp is not clearly visible. See Displaying values in objects.
- You can invert the recorded ramp shape of data objects. See Inverting ramp shapes or switching states.
- Any redundant switch points (gray, vertical lines) created by setting switching with the mouse or via data recording can be removed. Right-click the corresponding switch object and select **Switch points ▶Remove redundant points**.
- You can remove all switch points by right-clicking the switch object and selecting **Switch points ▶Reset**.

Allocating control elements

In order to use external control elements for controlling devices, the corresponding link between data object and control element must be established. Buttons, for example, lend themselves to switching functions, slide controls to analog/DMX control. To be able to allocate and use a control

element it needs to be set up in the Media Pool category Devices. See Configuring devices in the Media Pool.

And this is how you proceed:

1. Create a data object for the device to be controlled. See Programming switching outputs or analog/DMX control channels.
2. In the Media Pool, click category **Devices**. If no input device is available yet, right-click the Media Pool and add one. ...See also Registering input devices in the Media Pool.
3. Click the plus sign in front of the input device to display the control elements to be allocated.
4. Grab the corresponding control element and drag it to the data object of the device to be controlled. The data object info line will show the name of the allocated control element.

You can also allocate the same control elements to several data objects. For control or recording purposes, the corresponding devices can be controlled jointly via one control element.

See also

Record with Punch In/Out

For recording of control information in switch and data objects you can use the Punch In/Out function which allows you to re-record certain passages only. As a preparatory measure you need to create triggers and link them up with the corresponding controls. An exception are the corresponding MMC commands (MIDI Machine Control). They only need to be enabled in the MIDI port. See MIDI configuration.

If you want to use a Mackie Control or Tascam US 224/428 you only need to configure the corresponding device port. With the Mackie Control, Punch In/out is available via the **UNDO** key, with the Tascam 224/428 via the **REC** key. See also Mackie Control and Tascam US224.

In all other cases, prepare the Punch In/Out Function as follows:

1. Right-click category **Trigger** in the Media Pool.
2. Right-click some free space and select **Add trigger** for the Properties Dialog to appear.
3. Enter **Punch In** for the name.
4. For **Category** click on and select Devices. For **Action** select **Record Punch In**.
5. If you want to execute the trigger later by pressing a function key, you can assign keys **F1** to **F12** next to **F key**. If you want to execute a trigger via a serial command or via the MIDI command **Program Change**, you need to specify a remote index of **1** or more.
6. Click on **OK** to close the dialog.
7. The same way, create a trigger for **Punch Out**. Use a different function key or remote index if you want to use these features.

The Punch In/Out function can be performed during playback by pressing the selected keys. A useful feature in this connection is the option to place trigger markers in a marker track. This way the recording range can very clearly be defined.

Removing control elements from objects

If you no longer require the control elements for a data object, you can remove the link.

1. Right-click the data object and select **Properties**.
2. Under **Input value for live and record mode** click **Remove**.

Info The Properties Dialog can also be opened by double-clicking the info line of the object.

Trigger functions

Trigger functions

Trigger functions allow various actions and functions to be started by pressing function keys, by serial commands or even live by pressing a button in the Control Panel, or time-controlled by specifying certain conditions . Possible actions range from playback of certain timelines and file download from the Internet to the dispatch of messages when certain conditions are met. Triggers can be used in so many different ways, for instance as markers in the timeline, that there is virtually no limit to the user's imagination...

Creating a trigger

All trigger functions are created and organized in the Media Pool under **Trigger**. This allows various actions to be controlled which can be used for playback, presentation and show control applications. The scheduler allows time-controlled execution of triggers in accordance with certain conditions.

This is how you create a trigger:

1. In the Media Pool click on category **Trigger**.
2. Right-click a free area in the Media Pool and select **Add trigger** for the Properties Dialog to pop up.
3. Now select a **Category** and an **Action**. In accordance with the action, certain entry fields are displayed on the right for specifying the required parameters. An overview of possible actions and their parameters can be found under Trigger actions.
4. If the action is to be performed on the local computer only, place a checkmark next to **Local PC**. If the trigger is to be executed by the slaves, select them at **Target PC**. **Options for slave computer selection**.

   The target PCs need to be set up as slaves for this master under **Global Options** - **Network** and must usually fulfil some other criteria as well:

- **None** ...the trigger is not executed by any other PCs.
- All slaves ...the trigger is executed on all PCs set up as slaves for this master.
- Project slaves ...as above, but the PCs need to be additionally registered as slaves in category Devices in the Media Pool.
- Display slaves ...as above, but the PCs need to be additionally linked up with a display.
- Slave list ...the trigger is executed on all PCs selected on the slave list. You can call up and edit the list by clicking on **Select slave PCs**.

5. If you want to execute the trigger later by pressing a function key, you can assign a keys **F1** to **F12** next to **F key**.
6. If you want to execute the trigger via a serial command, e.g. from a higher media control system, enter a remote index of **1** or higher.
7. Close the dialog by clicking on **OK**.

To find out how to define conditions for time control refer to Time-related conditions.

Info

- A trigger action can be tested directly by right-clicking the trigger and selecting **Execute now**. You should save your project before doing so because certain actions, such as **Terminate Wings Platinum** or **Shut down PC** may cause your work to be lost.
- In order to duplicate a trigger, you right-click the trigger to be duplicated and select **Add trigger**.
- Certain conditions and trigger functions can be disabled by removing the checkmark in the Media Pool.

- Triggers can also be dragged into the **Control Panel** and control fields be created for direct control via the mouse. See Control Panel for direct operation.
- Triggers with a remote index can be remote-controlled via serial commands. See Remote control via EventPlayer protocol.
- You can also drag triggers in a marker track and place them as markers. They will be executed during playback.
- Certain conditions and trigger functions can be deactivated by removing the checkmark in the Media Pool.
- In order to enable the trigger function, click on **Enable trigger scheduler** to depress the button. Activation and deactivation of the trigger function can also be remote controlled via serial commands.

Attention! Some triggers start functions which may cause playback to be aborted and data to be lost unless you have previously saved them! Think carefully about the trigger actions you want to use.

Trigger actions

The Show Control Module lets you use all trigger actions. The Advanced, Pro and Multidisplay License only feature a restricted number of trigger actions which are marked accordingly further below. Wings VIOSO offers the same triggers as the Multidisplay License.

The trigger actions are arranged in alphabetical order in accordance with their category:

Attention! Some triggers start functions which may cause playback to be aborted and data to be lost unless you have previously saved them! Think carefully about the trigger actions you want to use.

Audio

These trigger actions are available from the Advanced Version and up and are also suitable for EXE presentations..

- **Set volume** ...sets the volume of the addressed stereo output to the specified value.
- **Volume down** ...reduces the volume of the addressed stereo output by the specified value.
- **Volume up** ...increases the volume of the addressed stereo output by the specified value.

The stereo outputs can be addressed by figures **1** to **12**. Enter **0** for the output to affect the master control.

Computer

These trigger actions are available from the Pro License and up.

- **Log off user** ...terminates all applications and logs off the current user.
- **Restart** ...terminates all applications and restarts the computer (Master) and any connected slaves.
- **Shut down** ...terminates all applications and shuts down the computer (Master) and any connected slaves.
- **Switch off** ...as above, with the computer (Master) and any connected slaves being switched off.
- **Terminate program** ....terminates the specified programs. If you need this function turn to us for further information.

Control Panel

- **Execute field** ...executes the control panel field with the specified remote index.
- **Next page** ...calls up the next page in the Control Panel.
- **Select page** ...calls up the specified page in the Control Panel.
- **Previous page** ...calls up the previous page in the Control Panel.

Devices

- **Continue internal timecode** ...disables reading of external timecoe and continues playback via the PC clock.
- **Disable device ports** ...disables all Media Pool device ports.
- **Enable device port** ...enables all preselected Media Pool device ports and establishes communication with the devices.
- **Read external timecode** ...enables reading of incoming timecode. See also Timecode synchronization.
- **Record Punch In** ...during playback, changes the enabled switch and data objects to recording. See also **Record via Punch In/Out.**
- **Record Punch Out** ...terminates recording in the enabled switch and data objects without terminating playback.
- **Record Toggle** ...combined function: changes to recording when in playback mode and to playback when in recording mode.
- **Re-enable device ports** ...enables all device ports and then re-establishes communication with the devices. This procedures offers improved security as it helps to prevent undefined conditions of the connected modules.

Internet

These trigger actions are available from the Pro Version and up.

- **Synchronize clock** ...sets the PC clock according to the Internet reference time. When the first address is unavailable, the process is automatically repeated using the next address. The address is entered without **http://www**. A list of time servers can be found at **www.ntp.org**.

Live-Video / TV

These trigger actions are available from the Pro License and up.

They are used for changing over the between inputs of a video input card and for TV channel selection in the case of TV tuner cards, which are currently the **ATI All in Wonder** models and the **TerraTec Cinergy 250 PCI**.

- **Close input** ...closes the specified Live Video input. To open it again, close the screen and restart the presentation. This may be necessary if the card needs to be reinitialized after a signal change.
- **Select next TV channel** ...changes over to the next TV channel.
- **Select previous TV channel** ...changes over to the previous TV channel.
- **Select TV channel** ...changes over to the selected TV channel. See also **Selecting TV channels**.
- **Video input** ...changes over to the selected video input. This works also during playback.

Tip Actions **Select next** or **previous TV channel** are very helpful in finding out about TV channels. See also Selecting TV channels.

Mix groups

These trigger actions are available from the Pro License and up and work also for a multi-timeline EXE presentation.

They are used for controlling mix groups, i.e. dissolves of parallel contents.

- **Continue + fade** ...continues paused playback and fades over to the specified mix preset.
- **Disable mix group** ...disables control via mix groups. After performing this function, all tracks in a timeline are again played back.
- **Fade** ...fades over to the specified mix preset during playback.
- **Fade + pause** ...fades over to the specified mix preset, followed by putting playback into Pause Mode.

For fades to mix groups you need to specify at **Parameters** on the right which mix groups are to be faded in in what way:

- **Mix groups** ...here you specify the groups addressed by this particular trigger.
  However, it makes a difference whether a mix group is entered in capital letters or in small letters:

- **Capital letter** ...causes a fade to the **end value** in the specified period of time.
- Small letter ....causes a fade to zero in the specified period of time.

Between the letters no separators are required. Mix groups which are not specified retain their status.

- **End value** ...defines the target value for brightness, opacity, or volume for the mix group in capital letters.
- **Time** ...defines the duration of the fade. Please note that entry must be in tenths of seconds.

Further information can be found under Presenting with mix groups.

Multidisplay

These triggers are available from the Multidisplay version and up and are very useful for service tasks for multidisplay systems:

- **Delete slave files** ...deletes the media files in folder **Wings Platinum 4 Slave Sync** on the specified target computers specified under **Parameter**.
- **Disable softedge mask** ...disables the softedge mask on all target computers so that the overlapping area becomes fully visible.
- **Restore softedge mask** ...enables the softedge mask on all target PCs.
- Transfer slave files ...transfers the required files to the slaves. See also Transferring project data to the slaves.
- **VIOSO calibration** ...starts an automatic, camera-based calibration. See also Automatic calibration of a permanent installation.

For **Target PCs** you should choose the **Display slaves**.

Notes window

These trigger actions are available with the Pro License and up. They are used to control the display of text in notes windows. See also Displaying text in notes windows.

- **Display text** ...causes some text to be displayed. For Parameters, the number of the notes window (1...4) and the text files need to be entered, the contents of which are displayed as follows:

  The **text file** is displayed when the file is found in the specified path.

  The **spare text file** is displayed when the **text file** is not found in the specified path.

  The **spare text** is displayed when neither **text file** nor **spare text file** are found in the specified path.

  Depending on availability or non-availability of files, information can be presented in a highly differentiated way.

- **Display two text files** ...as above, but with the **second text file** being also displayed after the first file.

- **Reset text** ...deletes the text being displayed in the specified notes field.

Ticker field

These trigger actions are available with the Pro License and up. They control display of text in ticker fields either on the full screen or in additional screen windows. See also Retrieving information from a text file via trigger.

- **Display text** ...causes some text to be displayed. For Parameters, the remote index of the text field and the text files need to be entered the contents of which are displayed as follows:

  The **text file** is displayed when the file is found in the specified path.

  The **spare text file** is displayed when the **text file** is not found in the specified path.

  The **spare text** is displayed when neither **text file** nor **spare text file** are found in the specified path.

  Depending on availability or non-availability of files, information can be presented in a highly differentiated way. See also Displaying current information from a text file.

- **Display two text files** ...as above, but with the **second text file** being also displayed after the first file.
- **Reset text** ...deletes the text being displayed in the specified ticker field.

Info You can check the text files for alterations even during the presentation to make sure that always the latest contents are displayed. See Ticker field properties.

Timeline

The version allowing these trigger actions is specified for each of them.

- **Continue**...continues paused playback. (... Advanced License and up)
- **Jump to position** ...causes the Locator to jump to the specified position marker with the corresponding remote index. If the remote index is zero, the Locator jumps to 0:00 seconds. Jumping to a position marker is possible if a marker mode and a remote index, if applicable, have been defined. See also Playback from position marker. (...from the Advanced License and up).
- **Pause** ...to activate Pause Mode. (... Advanced License and up)
- **Pause auto mute objects** ...pauses and mutes playback of auto mute objects (...but not timeline playback). In the dialog on the right, a **group** can be specified. With a setting of **0** the action refers to all auto mute objects. More information on trigger-controlled playback of auto mute objects can be found in topic Control of asynchronous playback via triggers. (... Pro License and up)
- **Play** ...starts playback of the specified timeline. As an option, playback can be started from a position marker, provided the marker mode and a remote index, if applicable, have been defined. See also Playback from position marker. (... Advanced License and up)
- **Reset** ...terminates Presentation Mode and playback. The screen is closed. (...Advanced License and up)
- **Reset auto mute objects** ...stops playback of auto mute objects. Any possible pause positions are cancelled; during renewed playback the

objects behave as programmed. Specification of the group as above. (... Pro License and up)

Restart ...stops the show automatically, freezes display contents, closes the screen and restarts the presentation at the current position. This trigger may be useful in combination with function **Restart presentation as a result of graphics card errors**. See also **Project Options - Output**.

- **Run auto mute objects** ...ensures that auto mute objects are played and displayed, provided the Locator is located on the corresponding objects. Specification of the group as above. (... Pro License and up)
- **Scrub to position** ...moves the Locator, at normal playback speed from its current position to the specified position marker. The screen will be updated, audio will not be audible. (...requires the Show Control-Modul)
- **Start presentation** ...starts the presentation in fullscreen mode. See also Presenting videos. Playback from a position marker is possible if a marker mode and a remote index, if applicable, have been defined. See also Playback from position marker. (... Advanced License and up, suitable for multi-timeline EXE presentations)
- **Start presentation (Pause)** ...as before, but changes to Pause Mode immediately. Playback from a position marker is possible if a marker mode and a remote index, if applicable, have been defined. See also Playback from position marker. (... Advanced License and up, suitable for multi-timeline EXE presentations)
- **Stop** ...stops playback. (... Advanced License and up)

To next pause marker ...the Locator jumps to the next pause marker and playback is paused. (...Advanced version and up)

To previous pause marker ...the Locator jumps to the previous pause marker and playback is paused. (...Advanced version and up)

Info All Playback Modes require a timeline to be specified. If a remote index of zero has been specified for the Position Marker, playback starts at the current Locator position.

Trigger

- **Disable trigger** ...disables the trigger whose remote index was entered at parameter; zero disables all the triggers.
- **Disable trigger scheduler** ...disables time-controlled execution of triggers.
- **Enable trigger** ...enables the trigger whose remote index was entered at parameter; zero enables all the triggers.
- **Enable trigger scheduler** ...enables time-controlled execution of triggers.

Wings Platinum

These trigger actions require the Show Control Module or the specified version.

- **Disable network** ...terminates connection with all other Wings Platinum computers (Multidisplay License).
- **Enable network** ...establishes a connection with all other Wings Platinum computers (Multidisplay License). See also Configuring a presentation network.
- **Exit**...terminates the program on the local computer (Master) and any connected slaves (... Pro License and up).
- **Freeze displays** ...freezes the display content in the screen (...Pro License and up).
- **Freeze displays permanently** ...as above, but freezing can only be made undone via trigger Unlock display (Pro License and up).
- **Maximize window** ...enlarges the Wings Platinum program window to full monitor size (Multidisplay License).
- **Minimize window** ...minimizes the program window and "hides" it in the task bar (Multidisplay License).
- **Reenable network** ...terminates connection with all other Wings Platinum computers and re-establishes it again (Multidisplay License).
- **Restart** ...terminates the program and restarts it. This is done on both the local computer (Master) and any connected slaves. When fullscreen presentation mode is activate, the program is restarted on a

dark screen without the Windows desktop being visible (...Pro License and up).

- **Restart + Autoplay** ...as above, but the specified project is loaded after program start and the timeline with the specified remote index started in Presentation Mode (requires the Show Control Module).
- **Restore window** ...restores the size and position of the program window as previously set (Multidisplay License).
- **Unlock displays** ...unlocks freezing and displays current information again (... Pro License and up).

  Info If the master PC supplies a display with contents, this display must be regarded as **Monitor 1**. Otherwise the wrong monitor freezes. See Display Properties.
- **Update via update file** ...starts updating in accordance with the specified update file (... Pro License and up). See also Software Update.

Executing a trigger

These functions require the Advanced License as a minimum, and sometimes even higher versions. See Licenses and functions.

Trigger actions can be executed in a variety of different ways:

- In the Media Pool, right-click the trigger and select **Execute now**.
- By pressing function keys **F1** to **F12**. See also Executing triggers with function keys.
- Remote-controlled via serial commands. See Remote control via EventPlayer protocol.
- Remote controlled via MIDI commands (Program Change) or via DMX signal (both variants require the Show Control Module). See *Remote control via MIDI commands* and *Remote control via DMX signals*.

- In the Control Panel, by dragging a trigger into the Control Panel and clicking the Action button (requires the Show Control Module). See Executing trigger actions via control panel fields.
- Via screen objects, i.e. a picture or a video that is clicked on the screen or on the touch panel interface. See Executing triggers via screen objects.
- Via switches, keypads, light barriers or motion detectors via the SC LAN Remote 8in. See Configuration SC LAN Modules.
- Time-controlled via the trigger scheduler. Requires a few conditions to be specified beforehand (requires the Show Control Module). See Time-related conditions.
- Trigger lists allow several triggers to be executed as a sequence of functions (requires the Show Control Module). See Executing several triggers on a list.

Attention! Some triggers start functions which may cause playback to be aborted and data to be lost unless you have previously saved them! Think carefully about the trigger actions you want to use.

Executing triggers with function keys

If you want execute a trigger by pressing a key, you proceed as follows:

1. In the Media Pool, click category **Trigger** following which the triggers are displayed on the right.
2. Right-click the corresponding trigger and select **Properties**. Unless a trigger has already been created, do so now. See also Creating a trigger.
3. For **F key**, enter a number from **1**...**12**, depending on the function key (**F1** to **F12**) to be used for executing the trigger, followed by clicking on **OK**.
4. You can start the trigger action directly by pressing the corresponding function key while holding the **Shift** key.
5. During playback or on Pause Mode additional pressing of the **Shift** key is not required; this clearly simplifies operation during a presentation.

6.

Executing triggers via objects on the screen

This function is available from the Advanced License and up. See also Licenses and functions.

Triggers can also be executed via screen objects, i.e. a picture or a video that is clicked on the screen or on the touch screen. It is totally irrelevant whether the picture has the shape of a button or just shows a landscape. As pictures, videos and other visual objects are displayed on the screen in dependence on time the buttons can be modified and changed temporarily, allowing for interesting interaction between show and visitors.

7. In the timeline, arrange the visual objects which are to serve as buttons for the triggers. They should be displayed on the screen in the desired order.
8. In the Media Pool, click categpry **Trigger** and create the trigger with the corresponding actions. See Creating triggers.
9. Now drag and drop the trigger onto the prepared object in the timeline and the trigger denomination will be displayed in the info line.
10. For the mouse cursor to be visible in Fullscreen Mode, you need to enable the pointer. In the Screen Pool right-click the screen used and select **Properties**.
11. Under **Fullscreen settings** place a checkmark next to **Display mouse cursor** and close the dialog by clicking on **OK**.
12. After starting the presentation, by pressing **F5**, for example, you can execute the linked trigger by clicking the object when it appears on the screen.

Info

- Please note that the objects containing the links to the triggers must be topmost at the time they are clicked and must not be covered by the transparent parts of other objects.
- If the mouse cursor is not visible in Fullscreen Mode although it was enabled in the Screen Properties, the graphics card fullscreen mode

may not be enabled. This mode can be enabled under **Options** - **Project Options** - **Output.**

- The succession of fast clicks is limited by the setting for the double-click speed as double-clicks of screen objects are not evaluated. If necessary, increase the double-click speed in the Windows control panel.
- Please note that EXE presentations may contain one timeline only, i.e. jumping to other timelines is not possible but only only jumping within a timeline contained in the EXE presentation. See also Creating EXE presentations.

Executing several triggers according to a list

You can add several triggers to a list and have this set of functions executed jointly. This way you can perform timeline-independent control tasks in addition to playback functions. The order of trigger execution is defined in a trigger list, which may also contain waiting times.

Attention! Some trigger functions must not be combined and may cause malfunctions. At the moment we cannot say which trigger combinations may cause problems. Therefore, we are asking you to be cautious in using the trigger list and consider carefully which triggers you are combining.

1. Start by creating the appropriate trigger on the Media Pool **Trigger** category. See also Creating triggers.
2. Drag and drop the first trigger into the Control Panel and a control panel field will be created. See also Executing triggers via control panel fields.
3. Following this, hold the **Ctrl** key and drag and drop all the triggers that you want to add to the list one after the other onto the control panel field of the first trigger. In the control field title bar the number of triggers on the list will be displayed in brackets.
4. To show and edit the list, right-click the control panel field and select **trigger list** for the trigger list to appear.

5. On the trigger list you can see the triggers in the order they were added. For editing the following options are available:

   - Use buttons and to move the highlighted trigger up or down. This changes the order and thus the sequence of functions.
   - In column **Pause** you can enter a period in milliseconds for every trigger that is to expire before the next trigger is to be executed.

     Important: The period is entered in milliseconds, but the accuracy is only about 0.1 to 0.2 seconds depending on the trigger action. The execution time of a trigger list should be kept rather short as certain actions might block Wings Platinum.

   - Use button **Remove** to remove a highlighted trigger from the list.

Once you have established the order and waiting timers for the triggers, you can click **OK**.

6. You can now have the trigger list executed by clicking on the control panel field. In the preview window a message will be displayed, saying that the trigger list is being executed. When trigger execution is finished, a corresponding message will also be displayed. You can interrupt trigger execution by hitting the **Esc** key.

Info Execution of a trigger list by pressing a function key is organized by means of the trigger action **Execute field.** This requires the control panel field containing the list to be provided with a remote index via its properties. In trigger **Execute field** enter the remote index of the field to be executed and the corresponding function key. See also Trigger actions.

See also

Executing a trigger

Trigger Properties

To open the Properties Dialog, right-click the trigger in the Media Pool and select Properties. This dialog allows numerous settings:

- **Name** ...to enter individual names
- **Category** and **Action** &ldots;to select an action. Depending on the selected action you need to make further entries under **Parameters**. See Trigger actions.
- If the local PC, i.e. the one with the project on it, is to execute the trigger, there must be a checkmark next to **Execute trigger**.
- The computers on a network of computers which are to execute the trigger can be specified next to **Target PC**. The target PCs need to be set up as slaves for this master under **Global Options** - **Network** and must usually fulfil some other criteria as well:
  - **None** ...the trigger is not executed by any other PCs.
  - **All slaves** ...the trigger is executed on all PCs set up as slaves for this master.
  - **Project slaves** ...as above, but the PCs need to be additionally registered as slaves in category **Devices** in the Media Pool.
  - **Display slaves** ...as above, but the PCs need to be additionally linked up with a display.
  - **Slave list** ...the trigger is executed on all PCs selected on the slave list. You can call up and edit the list by clicking on Select slave PCs.
- **Comment** ...for notes to be displayed in the corresponding column in the Media Pool.
- **Remote index** ...required for remote control via serial commands (1 to 250, 0 = no index). See also **Remote control via EventPlayer protocol**.

  Info Every function or every type of object, respectively has its own remote indexes. Thus it is possible that there are remote indexes with the same number for timelines, position markers, triggers, mix groups, etc.
- **F key** &ldots;for assigning function keys F1 to F12. See also Executing triggers with function keys.

Time-related conditions

These functions require the Show Control Module. See Licenses and functions.

For time-related conditions you can choose between selecting a simple point of time and a more differentiated schedule.

- In the Media Pool click category **Trigger**, right-click the corresponding trigger and select **Add conditions**. Under **Scheduler conditions** right-click some free space in the list and choose the required function:
  - **New date** for certain points of time or time ranges
  - **New date pattern** for more complex applications (e.g. referring to a particular day of the week)
- If you want to modify existing conditions, right-click the trigger and select **Properties**.

All conditions of a trigger are connected by **AND** operations. The trigger actions are only performed when all conditions are met. If you require triggers linked up by **OR** operations, you can create a number of copies of the same trigger and assign different conditions.

In order to enable time control for trigger based on certain conditions, click on **Enable trigger scheduler** to depress the button. See also Enabling the trigger scheduler.

Date

Here you can enter a date and a time as a condition, which are both connected by an **AND** operation. The condition is only met, when both parameters apply.

> Example: **22.09.2003, 14:40:00** ...this condition is only met for one second.

If you select >= additionally, which means "larger than", the condition is met starting from the specified point of time.

Examples:

22.09.2003, >= 15:00:00 ...this condition is met on 22.09.2003 from 15.00 to 24.00.

>= 22.09.2003, >= 11:00:00 ...this condition is met from 11.00 to 24.00 on 22.09.2003 and any other day following it.

>= 22.09.2003, 08:30:00 ...this condition is met at 8:30 on 22.09.2003 and any other day following it.

Enter any names and remarks in fields **Name** and **Comment**. They are displayed in the Media Pool in the corresponding column.

Date pattern

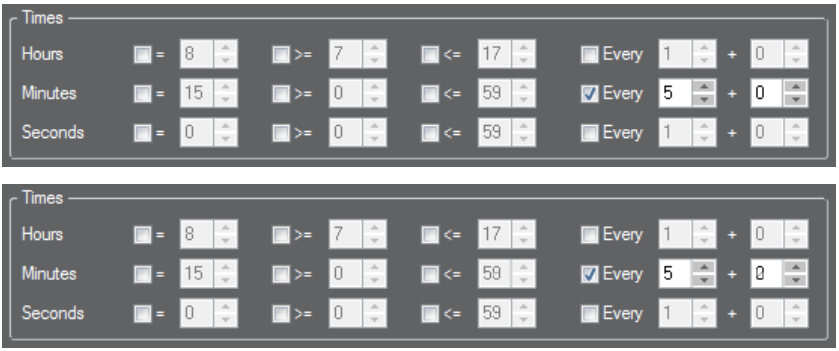
This dialog allows you to specify certain schedules considering a variety of criteria. Please bear in mind that all parameters in this dialog are linked up by **AND** operations. This has far-reaching consequences.

Under **General** you can specify a period of time the trigger function is to be valid. Enter any names and remarks in fields **Name** and **Comment**. They are displayed in the Media Pool in the corresponding column.

The parameters entered for **Months**, **Weekdays** and **Days in month** are linked up by **AND** operations. If all the checkmarks are ticked, all these conditions are always met. Unchecking certain check boxes means that certain restrictions are applied. Use buttons **All** or **None** to select or deselect all checkboxes.

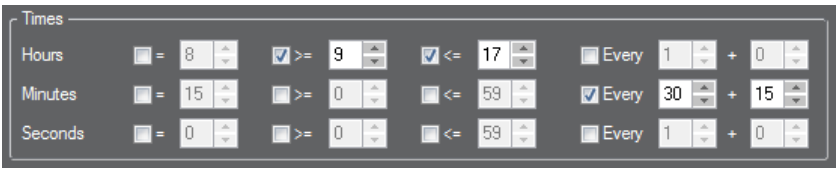
Also the parameters under Times are linked up by **AND** operations (all of them, vertically and horizontally!). Under **Hours**, **Minutes** and **Seconds**, you can select various operators by ticking their check boxes and defining time ranges. However, make sure that the combinations make sense, e.g. **Minutes >= 15** and **<=10** is a condition that can never be met.

The parameters under **Times** at the very right are used for specifying an **interval**, which can additionally be provided with an offset. If you enter **Every 5 minutes**, as shown below, this condition is met at 0:05, 0:10, 0:15, 0:20, etc. until 24:00.

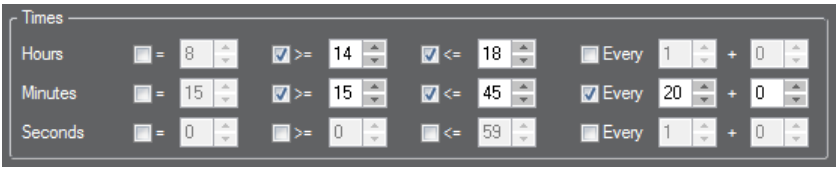


However, if you enter **Every 5 minutes** and an Offset of **+ 2 minutes**, this condition is met at 0:07, 0:12, 0:17, 0:22, etc. until 23:57, 0:02 and so on.

Further examples of time schedules:



Here, a time range, an interval and an offset have been entered. These conditions are met at 9:15, 9:45 .... 16:15, 16:45.



Considering these conditions, a trigger function would be performed every 20 minutes between 14.00 and 18.00. The parameter **Minute >= 15** and **<= 45** restricts the time range once again. The resulting execution times are as follows: 14:20, 14:40, 15:20, 15:40 ... 17:20, 17: 40.

Enabling the trigger scheduler

These functions require the Show Control Module. See Licenses and functions.

Once you have created triggers and specified actions and conditions in the Media Pool, you can have them executed in accordance with your requirements.

- In order to enable the trigger scheduler function, click on **Enable trigger scheduler** to depress the button.
- Certain conditions and trigger functions can be deactivated, by removing the checkmark in the Media Pool.
- Individual trigger actions can be tested directly by right-clicking the trigger and selecting **Execute now**. You should save your project before doing so because certain actions, such as **Terminate Wings Platinum** or **Shut down PC** may cause your work to be lost.
- You can use Windows Autostart to start-up of Wings Platinum automatically, to load a certain project and enable triggers for playback control. See **Options** &endash; **Global Options** &endash; **Program start**.

Timecode synchronization

Timecode synchronization

In combination with a Show Control Module, Wings Platinum can output timecode for synchronization of other systems or be run as slave in accordance with some timecode applied. Please mind the following:

- Output of SMPTE timecode via a sound card output, i.e. Wings Platinum is the master unit. See Master mode with SMPTE timecode
- Reading SMPTE timecode via an SC Master 2M, 4M or Lite, i.e. Wings Platinum is run in Slave Mode. See Slave mode with SMPTE timecode synchronization
- Reading SMPTE timecode via the audio output of the ASIO driver soundcard. In this case, Wings Platinum is run as slave. See Configuration of Audio Input

- MTC (MIDI timecode) can directly be applied to the computer via a MIDI port. In this case, Wings Platinum is also run in Slave Mode. See Slave mode with MIDI timecode synchronization

Master Mode with SMPTE timecode

You can use Wings Platinum to output SMPTE timecode to synch up other devices. For this purpose, a timecode object is placed in an audio track and the timecode output via a soundcard channel. If you need stereo sound at the same time you need a multi-channel sound card.

And this is how it is done:

1. Right-click an audio track and select **Insert SMPTE timecode**.
2. The Properties Dialog allows the following settings:
    - **SMPTE Timecode** ...output in the **left** or **right** channel of the output specified in the Track Properties.
    - Start value ...defines the time output at the beginning of the Timecode Object. Entry is in minutes and seconds; decimal entry for values below one second (not in frames).
    - Comment ...to enter any designation that becomes visible in the object info line.
    - Slider control ...to adjust the audio level. Please note that this level is also influenced by the sum and master level control. See also Sum Level.
3. For multi-channel sound cards you need to enter the corresponding audio output in the Track Properties. Otherwise the selected channel of your stereo sound card is used which does not allow any other audio objects to be added.

Info

- If timecode is to correspond exactly to Wings Platinum time, i.e. the time bar in the timeline, you need to enter **0:00.0** for **start value** and move the Timecode Object to the very beginning of the timeline on the left.

- Timecode offset can be implemented by choosing the corresponding start value and location of the Timecode Object. Keep in mind, that the start value must not be negative.
- Timecode is always output at 25 frames per second.

Slave mode with MIDI timecode synchronization

For synchronization with MIDI timecode you can use a MIDI port at the Wings Platinum computer. As timecode slave, Wings Platinum will synchonize with the supplied MIDI timecode. If you want to synchronize a multidisplay presentation with a number of networked computers, the master presentation computer simultaneously acts as timecode slave computer.

Creating a MIDI port for timecode

For Wings Platinum to be able to read MIDI timecode (MTC), you need to configure a MIDI port.

1. Click one Media Pool category **Devices**.
2. Right-click some free space and select **MIDI**.
3. In the dialog box under **MIDI port** select the corresponding port.
4. For **MTC Timeout** enter a period of time for Wings Platinum to continue playback when timecode is no longer available. MTC is only transmitted every two frames. Therefore, it does not make sense to enter values below 100 ms. The default setting is 1,000 ms.
5. If necessary, you can specify period of time next to **MTC Offset** which is to be added to the incoming timecode. It is also possible to specify negative times as offset. The resulting timecode value, however, must never fall below zero, as Wings Platinum automatically sets negative values to zero.
6. At **After MTC Timeout** you can define the activity to be performed after timeout:
    - **Reset timecode** ...causes the system to be without valid time; playback stops and the Locator jumps to the last starting position.

- **Keep last timecode value** ...the system retains the timecode value received last plus timeout and stops likewise.
- **Continue timecode** ...if timecode is no longer available playback is continued via the PC clock.

7. Finally, click on **OK**.
8. To check incoming timecode, you should now create a control panel field. Click tab **Control Panel**. It is located at the same place as the Audio Level.
9. Now drag the MIDI port from the Media Pool to the Control Panel and a control panel field for incoming timecode will be created.
10. Now connect your timecode source to the corresponding port and supply timecode. Activate the device control system by clicking on or pressing **F8**. When the time display on the control panel field is running, timecode is being read.

Playback with timecode synchronization

As mentioned before, Wings Platinum reads timecode and works in synchrony in slave mode. When a timecode is applied, Wings Platinum jumps to the corresponding location. However, there a some peculiarities to be considered that are explained further below.

1. First of all, you need to select the type of synchronization for the timeline that accommodates the show to be played. In the Media Pool click on category **Timelines**.
2. Right-click the corresponding timeline and select **Properties**.
3. For **Synchronization** select **Device port** and for **Sync port** select the device port the timecode signal is applied to. Finally, click on **OK**.
4. Enable the device control system by clicking on or pressing **F8**. When you start playback in Wings Platinum, it will start as soon as timecode is read.

For playback of presentation videos you should consider the following:

- If you want to start a presentation from the very beginning, the Locator should be placed to a location before the presentation video.
- When you press the **F5** key, Wings Platinum will change to fullscreen presentation and **Pause** mode. I.e. you need to press the space bar again to start playing back. However, playback will not start yet, as no timecode is applied.
- Start timecode and the Locator jumps 5 seconds forward, the presentation data are loaded and the Locator syncs up with timecode. This Preroll time can be preset in the **Project Options** - **Timecode**. It also allows entry of a time deviation for the type of syncing (jump or pitch), i.e. which difference in time between timecode and Locator position needs to be exceeded for syncing to be carried out by jumping.
- Reading of external timecode can be enabled and disabled during playback with trigger actions. See Trigger actions.
- When Wings Platinum works as timecode slave, the audio tracks are disabled and audio playback will not be possible.
- Please bear in mind that syncing by pitch shifting takes longer for presentations that include HD videos with a longer keyframe interval, e.g. WMV, H264. For synced playback the computer must never be close its performance limit.
- Any problems in synchronizing MPEG-2 videos may be resolved by performing a single frame check.

Slave mode with SMPTE timecode synchronization

For synchronization with SMPTE timecode you can use SC Master 2M, 4M or Lite with firmware 3.62 or up. Timecode is always applied via the CUE-IN or the OPTICAL-IN connector. Timecode transfer, however, can vary depending on the application:

- **RS 232** ...timecode signal is applied to the computer via a normal serial connection. The advantage is that DMX can continued to be output at the REMOTE connector.

- **MIDI** ...this converts incoming SMPTE timecode from the SC Master to MTC and makes it available at the REMOTE connector via a special cable. MTC is then applied to a MIDI port at the computer, which means that a MIDI port needs to be configured in Wings Platinum. This solution offers high stability and is the optimal solution for critical applications, such as video playback. In this mode, however, DMX (... or DALI light control systems, open collector switches, etc.) cannot be output at the REMOTE socket and may require additional SC Net modules.

As timecode slave, Wings Platinum will synchronize with the supplied timecode. If you want to sync up a multidisplay presentation to a number of networked computers, the master presentation computer simultaneously acts as timecode slave computer.

Creating an SC Net port for timecode

Unless you have already done so, configure an SC Net port. When an SC Net port is already available open the SC Net port properties and continue at item 3.

1. Click one the Media Pool category **Devices**.
2. Right-click some free space and select **Stumpfl SC Net**.
3. Under **Serial Port** select the port to which an **SC Master 2M**, **4M** or **Lite** is connected.
4. For **SMPTE timecode input**, select the corresponding port and mode:
    - **RS 232** ...transfers timecode from the SC Master to the computer via a normal serial connection. The advantage is that DMX can continued to be output at the REMOTE connector.
    - **MIDI** ...activates conversion of the incoming SMPTE timecode into MIDI timecode by the SC Master. MTC will then be available at the REMOTE connector via a special cable and is then supplied to a MIDI port at the computer. For this purpose, a MIDI port must be configured in Wings Platinum. This solution offers high stability and is the optimal solution for critical applications, such as video playback. In this case, however, output at the REMOTE socket is not possible and DMX, for instance, may have to be supplied via SC Net modules.

- **RS232 + MIDI** ...is a combination of the two above. It allows you, for example, to supply Wings Platinum with timecode via RS 232 and use MTC at the REMOTE connector for a sequencer or similar. Of course, DMX output at the REMOTE connector is not possible either.

5. If necessary, you can specify period of time next to **MTC Offset** which is to be added to the incoming timecode. It is also possible to specify negative times as offset. The resulting timecode value, however, must never fall below zero, as Wings Platinum automatically sets negative values to zero.
6. For **SMPTE timeout** enter a period of time for Wings Platinum to continue playback after timecode is no longer available. It does not make sense to enter values below 100 ms. The default setting is 1,000 ms.
7. At **After SMPTE timeout** you can define the activity to be performed after timeout:
   - **Reset timecode** ...causes the system to be without valid time; playback stops and the Locator jumps to the last starting position.
   - **Keep last timecode value** ...the system retains the timecode value received last plus timeout and stops likewise.
   - **Continue timecode** ...if timecode is no longer available playback is continued via the PC clock.
8. Finally, click on **OK**. If you transfer timecode to the computer via **MIDI** port, you need to configure a MIDI port. In this case, proceed here.
9. To check incoming timecode, you should now create a control panel field. Click tab **Control Panel**. It is located at the same place as the Audio Level.
10. Now drag the SD Net port from the Media Pool to the Control Panel to create a control panel field for incoming timecode.
11. Connect your SMPTE timecode source. Use connectors CUE-IN or OPTICAL-IN (...the latter only for digital audio signals with timecode in bit 16) of the SC Master and apply the timecode signal. Activate the device control system by clicking on or pressing **F8**. When the time display on the control panel field is running, timecode is being read.

Info Bear in mind that setting "**TC-In**" must be chosen in the SC Master menu "**Signal &endash; Cue-In**" for it to be able to read timecode. For MTC output to the REMOTE port additionally select **MIDIOut** in menu "**Options - RMT-Out**". More information can be found in the SC Master manual.

Playback with timecode synchronization

As mentioned before, Wings Platinum reads timecode and works in synchrony in slave mode. However, it does not make sense to remote-control and locate Wings Platinum to certain positions during playback of a presentation video by applying changing timecode values.

1. First of all, you need to select the type of synchronization for the timeline that accommodates the show to be played. In the Media Pool click on category **Timelines**.
2. Right-click the corresponding timeline and select **Properties**.
3. For **Synchronization** select **Device port** and for **Sync port** select the device port timecode is applied to. Finally, click on **OK**.
4. Enable the device control system by clicking on or pressing **F8**. When you start playback in Wings Platinum, it will start as soon as timecode is read.

Info **For playback of presentation videos you should consider the following:**

- If you want to start a presentation from the very beginning, the Locator should be placed to a location before the presentation video.
- When you press the **F5** key, Wings Platinum will change to fullscreen presentation and **Pause** mode. I.e. you need to press the space bar again to start playing back. However, playback will not start yet, as no timecode is applied.
- Start timecode and the Locator jumps 5 seconds forward, the presentation data are loaded and the Locator syncs up with timecode. This Preroll time can be preset in the **Project Options - Timecode**. It also allows entry of a time deviation for the type of syncing (jump or

pitch), i.e. which difference in time between timecode and Locator position needs to be exceeded for syncing to be carried out by jumping.

- Reading of external timecode can be enabled and disabled during playback with trigger actions. See Trigger actions.
- When Wings Platinum works as timecode slave, the audio tracks are disabled and audio playback will not be possible.
- Please bear in mind that syncing by pitch shifting takes longer for presentations that include HD videos with a longer keyframe interval, e.g. WMV, H264. For synced playback the computer must never be close its performance limit.

See also

MIDI timecode synchronization

Remote-controlling Wings Platinum

Wings Platinum can be remote-controlled in a variety of functions. For controlling a presentation (Play, Pause, Stop, etc.) you can use our simple Speaker Support remote control unit or special controllers, such as the Tascam US-224 or Mackie Control. In its functions, Mackie Control goes far beyond a simple remote control unit as it is highly versatile controller with touch sensitive slide controls. An SC Master/Event Control series unit also allows both certain remote control functions and simultaneous SC Net operation. Basically, Wings Platinum can also be controlled by any other devices able to output serial commands via RS 232 or TCP/IP, i.e. a variety of protocols is available for this purpose. Moreover, trigger actions can also be executed via RS 232 command or time-controlled via the scheduler.

How would you like to remotely control Wings Platinum?

Speaker Support remote control unit ...allows "Play" and "Stop" and cable-connected.

AV Prompter ...is a simple, yet comfortable remote control unit with Prompter based on Apple iPod or iPhone, which uses WLAN control. See Remote control via iPod and AV Prompter.

Stumpfl Iseo ...universal, programmable remote control system with touch panel. It offers faders and buttons, which can be arranged on any interface. See Interactivity with Iseo.

SC Master or Event Control ...are Show Controllers, which allow control of peripheral devices on the one hand and of Wings Platinum on the other. See Remote control via SC Master/Event Control.

Mackie Control (DAW-Controller) ...slider control, function keys, drive buttons, data wheel and many more. See also Mackie Control functions.

MIDI devices ...keypads and controllers with buttons, faders or rotary controls can be used, e.g. Behringer BCF2000. Wings Platinum supports various MIDI commands (Note On, Note Off, Program Change, Controller Change, Song functions and MMC). See Remote control via MIDI commands.

Via DMX signal ...allows execution of triggers for controlling numerous functions

Remote control via switches ...is also possible by trigger execution.

Via serial commands and EventPlayer protocol

Via trigger actions and serial commands or time-controlled

Remote control via Mackie Control

Mackie Control is a professional and comfortable DAW controller with touch-sensitive slider controls. It allows control of numerous functions of Wings Platinum, which can be split up into the following areas:

- **Audio Mode** ...Slider controls affect the audio bus master volume control.
- **Show Control Mode** ...Slider controls are used for recording data objects.

- **Dialog Mode** ...slider controls are used for adjusting parameters in dialog boxes.
- **Function keys** ...the convenient alternative to mouse or computer operation.

Info In order use Mackie Control, a device port must have been added under **Devices** and the device ports been enabled. See Port for Mackie Control. If your Mackie Control does not react, try re-enabling the device ports by releasing the button and clicking it again.

For Wings Platinum, the Mackie Control keys are assigned special functions. See Mackie Control Key Overlay.

Audio Mode

When key **AUDIO BUS** below ASSIGNMENT on the Mackie control was pressed (green LED is on and **Ab** is on the display) **slider controls 1 – 8** are linked up with the master controls for channels 1 – 16, i.e. one Mackie slider controls both the master volume controls of a stereo channel in Wings Platinum. Use the **SELECT keys** to move the slider controls to their zero dB position. The LEDs in the keys signalize the accurate zero dB position.

Use the Mackie Control **panorama controls** to individually or separately change the master volume controls of a stereo channel. Press the panorama control to resume the centre position of both controls.

Keys **MUTE** and **SOLO** above a slider control can be used for muting the corresponding channels or for setting them to SOLO. In Wings Platinum, however, these conditions are not displayed graphically.

The Mackie Control **Master Control** is permanently linked up with Wings Platinum Master control, no matter which mode has been selected.

Show Control Mode

When key **SHOW CONTROL** below ASSIGNMENT on the Mackie control was pressed (green LED is on and **SC** is on the display) **slider controls 1 – 8** are available for Show Control tasks. They can be linked up with switch or data objects, which makes them available for recording or live control. The basic approach is explained in detail under Live control and recording in objects.

Mackie Control also offers special operating modes selectable via keys below AUTOMATION:

- **LIVE Mode** ...one slider controls the pertaining control channels for the period of time a linked-up data object is running. The data object must be in Live Mode too. The control is operated automatically in accordance with the data object information. When touched it switches over to manual operation.
- **WRITE Mode** ...a slider control overwrites existing information in a linked-up data object, when it is in a Record Mode and recording was started. The pertaining control channels immediately output the new information.
- **TOUCH Mode** .....one slider control overwrites existing information in a linked-up data object only when it is touched. When the slider control is released, the existing information is immediately executed. For this purpose, the data object needs to be in a Record Mode and recording be started. The pertaining control channels immediately output the current information.
- **LATCH Mode** ...reacts just like TOUCH Mode, but recording remains enabled even after touching, and continues to overwrite the existing information even after releasing the control.

The slider control values on the display can be changed over between per cent, volts, DMX values, decibel and degrees via the panorama controls.

Dialog Mode

Dialog Mode is automatically activated whenever certain dialog boxes are opened. Under ASSIGNMENT the greed LED next to the **Display** key is on and the display shows **dL**. Which parameters can be set via slider controls is shown on the display and depends on the dialog box. Currently, the following functions are supported:

- **Position, Size, Rotation** ... in the key frame dialog carrying the same name. Here, the slider controls allow adjustment of **X position**, **Y position**, **zoom** and **rotational angle** for the **X**, **Y** and **Z** axes. In addition to this, the location of the **rotational centre** can be adjusted via **X** and **Y**.

- **Color** ... in the key frame dialog carrying the same name. The first three slider controls affect the colors **Red, Green** and **Blue.**

When the dialog box is closed, Dialog Mode is automatically terminated.

Key functions

On its right, the Mackie Control features some keys, which can be used for frequently used functions in Wings Platinum.

- **Scroll wheel** ...for precise positioning of the Locator
- **Arrow left/right** ...Jump to the next position marker
- **Arrow up/down** ...vertical scrolling in the timeline, i.e. display of other tracks
- **Rewind/Fast forward** ...jump to the next position marker
- **STOP** ...stops playback or recording
- **PLAY** ...to start playback
- **RECORD** ...starts recording in the timeline, e.g. for data objects in Record Mode.
- **Marker Mode** ...allows jumping to the next position marker by means of rewind/fast forward keys (... only when playback is stopped)
- **Set Marker** ...to set position markers
- **Set L-Marker** ...to set left track markers
- **Set R-Marker** ...to set right track markers
- **Loop** ...continuous playback within the marked timeline range
- **HOME** ...moves the Locator to a location before the first object or to the left edge of the track marker. See also Positioning the Locator.
- **END** ...moves the Locator to a location before the first object or to the left edge of the track marker. See also Positioning the Locator.
- **Undo** ...Punch In or Punch Out for data recording.

Remote control via SC Master/Event Control

You can use an SC Master or an Event Control device for remote controlling Wings Platinum. This is particularly interesting for HDAV presentations with Wings Platinum, as IR remote control allows you to start shows, continue paused playback (Speaker Support) and jump to position markers within the show. Moreover, it also allows simultaneous control of several peripheral devices via the SC Net, such as video projectors or lights. For a device with an audio mixer, the volume of sound track and microphone can also be controlled via an IR remote control unit. **Devices with audio mixer**.

- **SC Master 2M/4M** allows connection/control of sound track (2 stereo sources) and microphone.
- **SD Event Control 2M/4M** allows connection/control of sound track (2 stereo sources) and microphone.
- **SD EC 2x4 2PA/4PA** allows connection/control of one external source, e.g. sound track (1 stereo source) or microphone.

Info Please note that for the type of control system referred to in this topic, SC Master or Event Control **cannot run any shows from CF card**. If necessary, you need to send serial commands from the SC Master to the Wings Platinum computer (there is a driver available; ask for it, if necessary). **Essential differences between the two methods**.

Remote-control via remote control port and serial commands

- In this case, the SC Master unit serves as master and Wings Platinum is run like any other device that can be run by the SC Master via serial commands.
- The serial commands for remote controlling Wings Platinum are stored on the CF card as short shows and linked up with the corresponding keys. In Wings Platinum, these CF card shows are prepared in a separate project containing several timelines.
- The SC Master can run several CF card shows simultaneously. Any devices can be controlled in sync with MP3 audio (contents of a show) via DMX, RS232, switches, etc., but it is also possible to execute operations in parallel or independent via additional CF card

shows.

- During CF card operation, online operation of Wings Platinum timeline objects cannot be performed by the SC Master.

Further information on this remote control method can be found in Programming serial commands and Remote control via EventPlayer protocol.

Remote control via SC Net ports with acknowledgement

- In this case, Wings Platinum is the master, while the SC Master serves as the slave.
- SC Master passes the remote control commands received from IR remote controls or external keypads connected to the SC Master on to Wings Platinum, which, in turn, executes the commands.
- Via markers, Wings Platinum can set, modify and compare variables in the SC Master. Once the conditions are met, commands are passed on to Wings Platinum, which can also start timelines or triggers.
- SC Master executes the objects in the timeline programmed for show control or passes them on to other modules within the SC Net, e.g. DMX, switches, etc.
- In this case, the SC Master is used as a slave and **cannot execute any CF card shows**.

Any of the explanations in this topic following below refer to the latter method.

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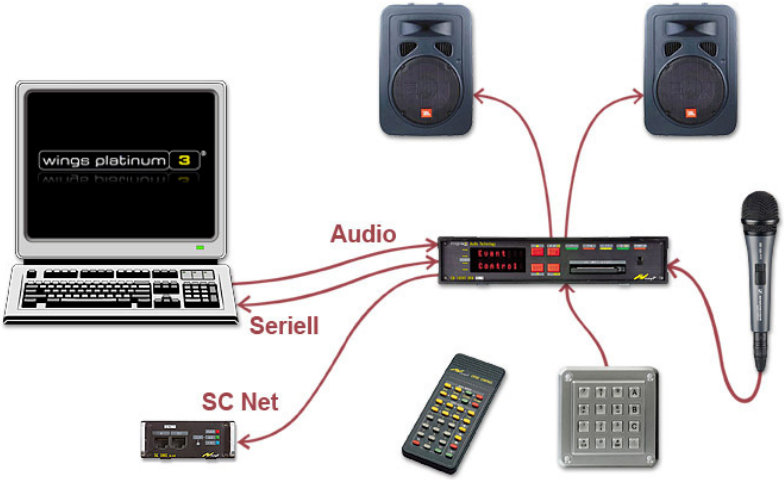


Setting up the system is easy although a variety of different options are possible. Instead of an IR remote control unit you can also use a keypad with up to 16 keys. More info on how to connect keypads can be found under Starting shows via keypads or switches.

In order to allow a Wings Platinum project to be remote-controlled via an SC Master (&ldots;although this is the only term used, it also refers to all sorts of other compatible models) an SC Net port needs to be configured accordingly and possibly a number of triggers set for the corresponding action be executed by pressing a key on the IR remote control.

The keys on the IR remote control unit produce the following effects:

- **1** to **0** ....start timeline playback via remote indexes **1** to **10** from position 0:00.000s in presentation mode. If no timeline with the specified remote index is available, the command refers to the trigger with the corresponding remote index. Specifying the remote indexes, therefore, allows you to define whether pressing the key starts timeline playback or executes a trigger. **How to start more than 10 shows.**

  Starting of timelines or triggers between **11** and **120** by pressing the **YES** key on the IR remote control (extended show selection) is possible but requires the latest firmware for SC Mas-

ter or Event Control.

5. Press the **YES** key on the IR remote control unit.
6. Enter the show number by pressing the corresponding number keys.
7. Press **YES** again to start the show.

Info External keypads connected to the SC Master or special 32-channel IR remote control units also allow starting of more than 10 shows.

- **Skip forward** ...jumps to the next position marker to the right of the Locator. **(*)**
- **Skip back** ..jumps to the previous position marker to the left of the Locator **(*)**
- **Stop** ...puts playback into pause mode; press again to resume playback. **(*)**
- **Play** ...starts playback from the current Locator position. **(*)**

Info

- The functions marked (*) may require a firmware update for the devices.
- To allow proper jumping to relative positions, the zoom setting must be zero. To do so, press the **X** key on the numeric keypad (multiplication).
- Triggers allow much more flexible and versatile key assignment. Virtually every type of trigger action can be executed by pressing keys **1** to **0.** Use of triggers requires the Advanced License or up or the Show Control Module.

This is how you prepare remote control for a project:

Configuring the SC Net port

Open the project the presentation of which you want to be remote controlled.

1. In the Media Pool click category **Devices** and select device port Stumpfl SC Net below it.
2. Right-click device port **Stumpfl SC Net** and select **Properties**. **If no SC Net port is available yet**.

   - Right-click some free space and select **Add port Stumpfl SC Net**.
   - In the dialog box under **Serial port**, click on and select a computer port for the corresponding device port, e.g. **Com 1**. Continue at item **3**.

3. Under **General settings** place a checkmark each next to **Enable SC Net feedback** and **Enable remote starts**.
4. Close the dialog by clicking on **OK**.

Creating triggers and assigning remote indexes

Trigger actions allow control of a huge variety of different things. Click here for an overview. For presentation of one or several shows, the following functions are mainly used:

- **Starting shows**, while a certain starting point may be defined by a position marker. The arrangement of your show program, i.e. whether all sequences are located on one timeline or distributed on several timelines, is is not really relevant, as the functions can be adjusted via the trigger actions.
- **Jumping to certain locations** within a show defined by position markers.

Now you need to think about what you would actually like to control. The most interesting features are the trigger actions in category **Timeline**. In principle, however, you can use all trigger actions and assign them to the above-mentioned keys.

Start by creating a trigger for starting the presentation with the first chapter, for example:

1. In the Media Pool, click category **Trigger**.
2. Right-click some free space and select **Add trigger** for the Properties Dialog to appear.
3. Now select category **Timeline** and action **Start presentation (Pause).** This means that the presentation starts in fullscreen mode and is waiting for command **Continue** to start playback. A possible name would be **Chapter 1**, for example.
4. The entered remote index could be **1**, for example, which allows execution of the command by pressing key **1** on the IR remote control unit.
5. On the right side of the dialog under **Parameters** you need to specify the playback position. For **Timeline** enter **21** as remote index. This remote index should not be between 1 and 10, otherwise the trigger could not be executed by pressing a key, and playback of the timeline from zero would start.
6. For Position marker enter **1**, for instance, and close the dialog by clicking **OK**.
7. Now assign the remote index to the timeline. In the Media Pool click category **Timelines**. Click the field in column **Remote index** twice and enter **21**. Confirm with **Enter**.
8. In the timeline, set a position marker at the location where playback of your show is to start. If no marker track is available yet, add one by right-clicking a track head, selecting **Insert track** ▶**Marker**.
9. Now right-click the corresponding location in the marker track, e.g. before chapter 1, and select **Insert Position Marker**. Double-click the marker, enter **1** for **Remote index** and confirm by clicking **OK**.
10. When the device ports are enabled and PC LED on the unit is on, you can start the presentation at chapter 1 by pressing key **1** on the IR remote control unit, following which playback pauses at the position marker. Continue or start playback by hitting the **Play** key on the IR remote control unit.
11. The same way you can create triggers and positions markers for other chapters in your show.

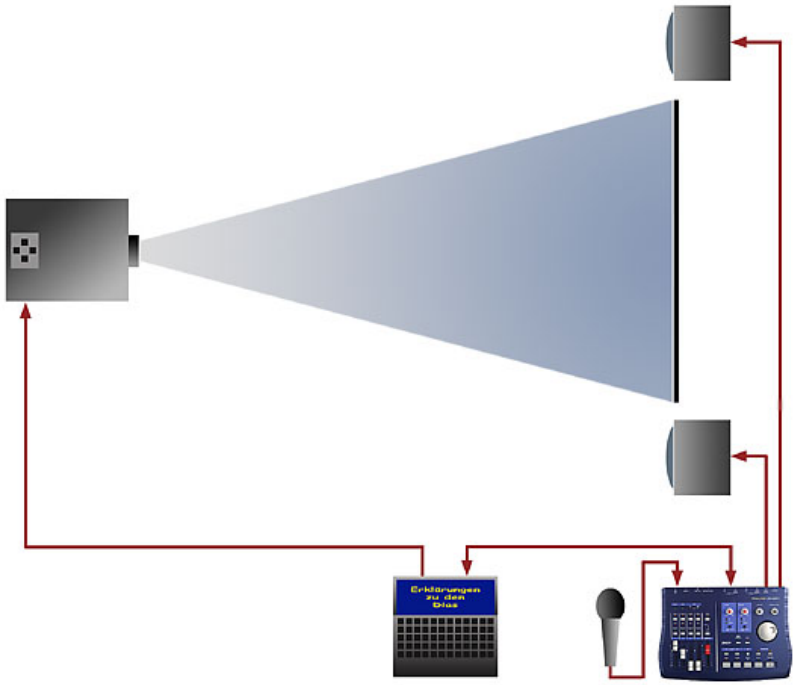
This way you can start any show located on other timelines or one particular show from different locations. To do so, you always create a trigger with the corresponding playback destination and a remote index to be accessed via a key on the IR remote control unit. For the destination set a position marker with the corresponding remote index in the timeline which must also have a remote index.

See also

Optimum show presentation (Workshop)

Remote control using Tascam US-224

The Tascam US-224 is an audio workstation controller which is no longer available new. If offers various ways of remote control which can be used for presentations with Wings Platinum. In addition to this, Tascam US-224 features a high-quality audio converter with up to 24 bits and 96 kHz and a number of analog and digital ports making a sound card superfluous. The US-224 is connected to a USB port and transmits its remote control data via MIDI.



A further audio source, e.g. a microphone can be mixed in and added to the sound track in mode "Input Monitor" (press corresponding key on US-224). Slider controls allow comfortable adjustment of the volume balance; it can also easily be adjusted during the presentation. The audio signal is directly applied to the active loudspeakers by the Tascam US-224. As an alternative, it is also possible to use passive loudspeakers and an amplifier.

The actual top feature, however, are the remote control functions. Open a presentation object and click on **Enable device ports** in the function bar below the main menu. After pressing the **F5** key and starting Presentation Mode the following functions are available via the keys on the US-224:

Playback → **Play** key, green Play LED is on

Pause → **Stop** key, green Play LED is blinking

Stop → Press **Stop** key twice, the green Play LED goes dark

Jump to position markers → **Locate** keys (not possible in Presentation or Pause Mode)

Volume external source → **Slider 1**

Overall volume → **Master slider**

The Playback status is indicated by the Play LED, thus allowing easy monitoring during the presentation. Moreover, the Play key can also be found in the darkness without any problems.

Info The Tascam US-224 must be registered with the Wings Platinum device control. By the way, this is also possible via the larger Tascam 428. ... .Registering and configuring Tascam US-224.

Remote control via MIDI commands

This function requires the Show Control Module. See Licenses and functions.

For remote-controlling Wings Platinum you can use all sorts of MIDI devices in addition to certain controllers, such as Mackie Control or Tascam US-224. The following MIDI commands are supported:

- **Song Select** ...preselects a timeline, the **Song Number** corresponds to the remote index.
- **Song Position** ...preselects a position marker, the **Position** corresponds to the remote index.
- **Start Song** ...starts playback in Presentation Mode and considers the preselected timeline and position marker.
- **Stop Song** ...puts running playback into Pause Mode.
- **Continue Song** ...continues paused playback.
- **System Reset** ...terminates playback. For video presentations, a possible background image is also removed and Fullscreen Mode terminated.
- **MMC Play** ...starts playback in Presentation Mode from the current Locator position and waits in Pause Mode; paused playback can be resumed by **MMC Play**.
- **MMC Stop** ...terminates playback; corresponds to the **Esc** key.
- **MMC Pause** ...puts running playback into Pause Mode.
- **MMC Fast Forward** ...makes the Locator jump to the next marker
- **MMC Rewind** ...makes the Locator jump to the previous marker
- **MMC Punch In** ...enables recording in objects. See also Live control and recording in objects.
- **MMC Punch Out** ...terminates recording in objects.
- **Program Change** ...executes a trigger. Allows all available trigger actions to be executed. The specified preset corresponds to the remote index. See also Trigger functions. The MIDI channel to be evaluated for trigger execution can be selected in the MIDI port Properties Dialog. See MIDI configuration.

- **Note On** ...executes a trigger. Allows all available trigger actions to be executed. The number (1...127) corresponds to the trigger remote index. See also Trigger functions. The MIDI channel to be evaluated for trigger execution can be selected in the MIDI port Properties Dialog. See MIDI configuration.

For remote control via a MIDI device, a MIDI port needs to be configured to start with:

1. In the Media Pool click category **Devices** .
2. Right-click some free space in the right Media Pool portion and select **Add port** ▶**MIDI**.
3. In the dialog appearing select the interface the MIDI commands are to be addressed to at **MIDI input**.
4. Under **Control of Platinum functions** enable the functions you want to use. With **MMC, Program Change** or **Note On** you need to specify the Device ID or MIDI channel to be evaluated.
5. Click on **OK** to close the dialog.
6. In order to be able to receive MIDI commands, you need to enable the device ports by clicking on button . It needs to appear depressed .

Info

- **Program Change** only allows one parameter. This is why position markers cannot be directly addressed but only timelines or triggers (Multimode Start). If you want to jump to a position marker, you need to work around this by creating a trigger and selecting the corresponding trigger action. See Trigger actions.
- In order to start a presentation at a certain location via Song commands, you need to send **Song Select** for timeline addressing, followed by **Song Position** for marker addressing. After this you send **Start Song** to start the presentation at the location that was previously specified.

Remote control via DMX signal

This function requires the Show Control Module. See Licenses and functions.

Wings Platinum can be controlled via DMX, which is an interesting feature for theatre operation. For this purpose, a value is transmitted on a DMX channel which must correspond to the remote index of the trigger to be executed. A possible DMX input is the Soundlight USBDMX-IN.

Before your can remote-control via DMX you need to create a DMX port first:

1. Click on category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool portion and select **Add port ▶ DMX**.
3. In the dialog box, place a checkmark next to **Interface for input** and **Execute trigger with DMX channel**. If you want to use several DMX interfaces you may have to enter a free ID number. See also Adding a DMX port for Soundlight interfaces.
4. Under **Control of Platinum functions** enter the DMX channel used for controlling Wings Platinum.
5. Close the dialog by clicking **OK**.
6. In order to be able to receive DMX commands, you need to enable the device ports by clicking on button . It needs to appear depressed

Once the device ports have been enabled, you can have your DMX device transmit a value on the specified DMX channel to execute a trigger. This transmission should be kept very brief, i.e. 0.5 to 1 second should ensure highest security. Following this, the trigger with the remote index corresponding to the DMX value is executed in Wings Platinum. This way, all trigger actions can be executed via DMX remote control. Information on how to create triggers and select actions can be found under Trigger functions.

Remote control via switches

Wings Platinum allows control via switches, keypads, motion detectors or light barriers. This requires an **SC LAN Remote 8in** Module which is connec-

ted to the computer via a LAN and features 8 switch inputs. The number of functions to be controlled can be increased by using several **SC LAN Remote 8in** Modules. The switch inputs can be linked up with any type of trigger actions, i.e. there is a vast range of functions available. See Trigger actions.

This is how you can add an SC LAN port in Wings Platinum: Configuration Stumpfl SC LAN

Remote control via EventPlayer protocol

For remote-controlling Wings Platinum a variety of different protocols can be used which can be selected in the Properties Dialog of the remote control port. This topic provides information on the protocol used for our **EventPlayer** software. The functions have been configured so as to achieve high compatibility with existing installations or devices, such as keypads, etc.

Info If you want to use Wings Platinum or an SC Master unit to control a presentation computer, the remote control commands can comfortably by programmed by means of a driver. If there is no Wings Platinum remote driver in folder **...Wings Platinum\Drivers**, please contact us. See also Using drivers for serial control.

Remote-control via serial commands

For remote control of Wings Platinum you can use a serial port or a network via TCP/IP. First of all, however, you need to Create a remote control port in the device control system using the EventPlayer protocol. The command syntax is as follows:

> **Start byte** | **Number of message bytes** | **Function** | **Parameters** | **End byte**

The following functions can be performed using the commands (Hex) listed below. **Important:** For all the commands list in this topic every byte is marked by **0x** for hexadecimal code. If you want to use the command for other applications than Wings Platinum you may need to modify the commands and leave out **0x**. The mere hex code for the **Play** command is therefore FF 01 05 FE.

> **Play** (current timeline from 0:00 s) 0xFF 0x01 0x05 0xFE

Pause	0xFF 0x01 0x03 0xFE
Continue	0xFF 0x01 0x07 0xFE
Stop	0xFF 0x01 0x02 0xFE
Esc	0xFF 0x01 0x02 0xFE
Terminate Presentation Mode	0xFF 0x01 0x01 0xFE

The following commands can optionally be addressed to timelines (**XX**) and position markers (**YY**). If no remote indexes have been specified, the Locator jumps to 0:00 s. If you want to start playback from the current locator position you enter **00** as remote index both for the timeline and the position marker.

Play	0xFF 0x03 0x05 0x**XX** 0x**YY** 0xFE
Start presentation in Fullscreen Mode	0xFF 0x03 0x19 0x**XX** 0x**YY** 0xFE
Start presentation in Pause Mode	0xFF 0x03 0x1A 0x**XX** 0x**YY** 0xFE
Locator to position marker	0xFF 0x03 0x06 0x**XX** 0x**YY** 0xFE
Scrub to position marker	0xFF 0x03 0x57 0x**XX** 0x**YY** 0xFE

(The Locator moves to the position marker at normal playback speed and stops)

This is an example for addressing a certain position:

Play timeline 4 position marker 15	0xFF 0x03 0x05 0x04 0x0F 0xFE

Timeline and position marker need to have a remote index (**XX** or **YY**) to be addressed. Specifying the position marker is optional, i.e. the Play command can also refer to the timeline only, e.g. **0xFF 0x02 0x05 0x01 0xFE** starts playback in the timeline with remote index 1 from Locator position 0:00 s. If you want to start playback from the current Locator position in the active timeline, enter 00 both for timeline and position marker, e.g. **0xFF 0x03 0x05 0x00 0x00 FE**.

The universal command **Multimode Start** takes a special position; depending on the project structure it performs different functions:

Multimode Start 0xFF 0x03 0x04 0x**XX** 0x**YY** 0xFE

- If there is an active video track in Exclusive Mode or a presentation track in the project, the video presentation is started automatically.
- If there is neither a video track in Exclusive Mode nor a presentation track, the timeline is played back in Presentation Mode, i.e. pictures and videos are displayed at high quality in fullscreen mode via hardware rendering.
- If there are neither tracks with visual contents nor a screen, i.e. with show control projects, the timeline is played back.

But also the specified destination **XX** may differ depending on the type of project:

- When there is a timeline with the specified remote index, it is played back as explained above.
- If no timeline with the specified remote index is available, Wings Platinum executes the trigger with the corresponding remote index. See also Trigger functions
- If there is neither a timeline nor a trigger with the specified remote index, the command refers to the control panel field with the corresponding remote index. See also Control panel for direct operation.

By specifying remote indexes you can therefore control whether a command is to take effect on a timeline, a trigger or a control panel field. This command is also compatible with our EventPlayer software; XX stands for the media folder to be started.

Further commands

Jump to the next position marker	0xFF 0x01 0x09 0xFE
Jump to the previous position marker	0xFF 0x01 0x0A 0xFE
Home (Functional description)	0xFF 0x01 0x13 0xFE

End (Functional description) 0xFF 0x01 0x14 0xFE

Show Control Panel page 0xFF 0x02 0x33 0xXX 0xFE
(XX = page)

Trigger action button (control panel field) 0xFF 0x02 0x34 0xXX 0xFE
(XX = remote index of the control panel field)

Execute trigger 0xFF 0x02 0x2E 0xXX 0xFE
(XX = remote index)

Enable trigger 0xFF 0x02 0x52 0x**XX** 0xFE

(**XX** = remote index; 0 = all triggers)

Disable trigger 0xFF 0x02 0x53 0x**XX** 0xFE

(**XX** = remote index; 0 = all triggers)

Enable trigger scheduler 0xFF 0x01 0x22 0xFE

Disable trigger scheduler 0xFF 0x01 0x23 0xFE

Run auto mute objects 0xFF 0x02 0x47 0x**XX** 0xFE

(**XX** = group; 0 = all auto mute objects)

Pause auto mute objects 0xFF 0x02 0x48 0x**XX** 0xFE

(**XX** = group; 0 = all auto mute objects)

Reset auto mute objects 0xFF 0x02 0x49 0x**XX** 0xFE

(**XX** = group; 0 = all auto mute objects)

Select next TV channel 0xFF 0x01 0x3D 0xFE

Select previous TV channel 0xFF 0x01 0x3E 0xFE

Select TV channel 0xFF 0x04 0x27 0x**XX** 0x**YY** 0x**ZZ** 0xFE

(**XX** = first byte (LSB) of the TV channel, **YY** = second byte of the TV channel, **ZZ** = Video input)

Enable network	0xFF 0x01 0x3F 0xFE
Disable network	0xFF 0x01 0x40 0xFE
Reenable network	0xFF 0x01 0x41 0xFE
Minimize window	0xFF 0x01 0x44 0xFE
Maximize window	0xFF 0x01 0x45 0xFE
Restore window	0xFF 0x01 0x46 0xFE
Terminate Wings Platinum	0xFF 0x01 0x1C 0xFE
Terminate and restart Wings Platinum	0xFF 0x01 0x1B 0xFE
Log off user	0xFF 0x01 0x1E 0xFE
Shut down and restart computer	0xFF 0x01 0x1D 0xFE
Shut down computer	0xFF 0x01 0x1F 0xFE
Shut down and switch off computer	0xFF 0x01 0x20 0xFE

Info

- Remote indexes can be defined in the Properties Dialog of the following items: Timelines, Triggers, Control panel fields and Position Markers.
- To use the remote control unit, the device control system needs to be enabled, which can be recognized by the button being highlighted in gray . For remote control via TCP/IP, the server or unit to be controlled needs to be activated before enabling the device control system.
- By defining a password a project can be protected against unauthorized editing and saving, as well as closing of the Control Panel. This is particularly important for permanent installations and presentation with touch panels. See Password protection.

Interactivity with SC TouchControl

Interaction with Stumpfl Iseo

These functions require the Advanced License and up. See Licenses and functions.

Iseo is a programmable remote control unit for the Stumpfl system, i.e. for presentation computers running Wings Platinum, SC Master with optional SC Net Modules, SC Video Player as well as any other devices that can be addressed serially or via TCP/IP. Suitable hardware for the Iseo are tablet PCs, pocket PCs or PDAs with a WLAN using Windows. The Iseo interface can be designed individually using the SC Designer, thus allowing intuitive control concepts to be implemented.

It is not only possible to control Wings Platinum in a variety of different functions, but also to have the SC TouchControl controlled by Wings Platinum. The necessary precondition for this type of interaction is configuration of a corresponding device port. See Configuration of Iseo port.

The following operations are possible:

- Remote control and control of a great number of Wings Platinum functions. The complete list can be found in the Iseo Help topic **Commands for Wings Platinum**.
- Texts and images can be sent to Iseo and be displayed on the touch panel interface. This way a Prompter Function with an image preview can be implemented. See Sending texts and pictures to Iseo.
- Specific pages within an Iseo project can be called up. For certain functions that are timeline-controlled, a page offering the corresponding options for operation can be displayed automatically at a certain point of time. See ControllingIseo via markers.
- Buttons can also be executed via timeline control. This may be very useful if the device cannot directly be controlled by Wings Platinum but only by Iseo. This refers to IR remote control units, control of building services technology via EIB or web resources. Buttons can also be used for setting variables in Iseo, i.e. conditional functions can be implemented. See Controlling Iseo via markers.

- Faders and buttons on an interface can be used as external input devices, e.g. for data recording. For this purpose, use commands **FaderLink** and **SwitchLink**. See also Using faders and buttons for recording or live control.
- Wings Platinum transmits its playback status to Iseo, which can be used as a condition for the execution of commands. The following status information is sent:
    - Idling Mode
    - Playback
    - Pause
    - Recording
    - Recording pause

  Information on how to evaluate and use the Wings Platinum operating states for controlling and conditional functions can be found in the Iseo Help topic **Conditional functions**.
- In addition to this, Wings Platinum also sends some other information to the Iseo:
    - Current timeline and Locator position. See also Timeline Properties.

Controlling Iseo via markers

These functions require the Advanced License and higher. See Licenses and functions.

Markers placed in the timeline can control the following Iseo functions or functions of the active touch panel:

- Calling up pages on the touch panel
- Clicking buttons to execute the corresponding functions
- Switching on or blinking the LED on the pocket PC, e.g. to indicate pause mode.
- Activating vibration may be a useful indication when a pause marker has been reached.

This is how you create a marker for Iseo:

1. If this has not already been done, set up a device port for the Iseo in the Media Pool under **Devices**. See Configuration Stumpfl Iseol.
2. Click the plus sign next to the corresponding device port in order to open folder **All devices**.
3. Drag the entry **Special Functions** into a marker track or the empty timeline space below the tracks.
4. Double-click the marker created thus to open the Properties dialog.
5. Select the corresponding function under **Command / Parameter**:
    - **Display page** ...in the number box additionally enter the remote index for the corresponding page on the touch panel (**1** to **250**).
    - **Click button** ...in the number box additionally enter the remote index of the corresponding button (**1** to **250).**
    - **LED** ...in the number box enter the corresponding LED (depending on the PDA hardware) and additionally select **On** or **Off**.
    - **Vibrate** ...additionally enter the period of vibration, e.g. **10** for one second. Vibration only works when it is supported by the hardware, e.g. for smart phones (PDA + mobile phone).
    - In field **Comment** you can name the selected function to keep an overview in the timeline later on.
    - Close the dialog by clicking **OK**.

The Iseo Help you provide further information on how to design touch panels.

Sending texts and images to Iseo

These functions require the Advanced License and up. See Licenses and functions.

Images and texts in the timeline can be sent to the Iseo and displayed on the touch panel. This way the next images in a show can be previewed or a prompter function be implemented.

Info There is a special Jukebox Module available for Iseo which allows playback of various timelines via playlists.

And this is how it is done:

6. Unless this has not already been done, set up a device port for the Iseo in the Media Pool under **Devices**. See Configuration Stumpfl Iseo.
7. Add a universal track by right-clicking a track head and selecting **Insert Track ▶Universal**.

Right-click the universal track and select **Insert Notes...**, following which the Properties Dialog of the note object will pop up.

In field **Text** enter the information to be sent to Iseo.

Enable **Display on Stumpfl Iseo text field** and enter a remote index between **1** and **250** in the number box. This remote index defines the text or image field of the interface the information is to be displayed on.

Close the dialog by clicking **OK**.

If you want to add a picture to the text, drag it from the Media Pool to the notes object.

In the touch panel project you now need to perform the following steps on the **SC Designer**:

Set up a device called **Wings Platinum** in the Device Pool.

Add a **text field** and, if appropriate, an **image field** with the corresponding remote index (as previously defined in the note object).

For further information refer to the Iseo Help topics.

Once this has been completed, enable the device ports in Wings Platinum and establish the connections in the SC Designer by pressing F5. Following this, start playback in Wings Platinum. When the Locator is moving across the note object, text and image will be displayed on the touch panel.

Using faders and buttons for recording or live control

These functions require the Pro License and up. See Licenses and functions.

For live control or data recording it is also possible to use faders and buttons on an Iseo interface. By adding some other functions, such as Play or Record as well, a highly functional interface can be designed.

And this is how it is done:

1. Unless this has not already been done, set up a device port for the Iseo in the Media Pool under **Devices**. See Configuration Iseo.
2. Right-click **Stumpfl Iseo**, select **Add devices** and the corresponding dialog box will appear.
3. Place a checkmark next to **Fader In** and **Switch In** and enter the corresponding number of faders and switches. Close the dialog by clicking **OK**.
4. For the device to be controlled, create a switch or data object by dragging the corresponding control channel from the Media Pool into a universal track. See also *Switch outputs* or *Analog/DMX control channels*.
5. Drag an Iseo fader or switch and drop it onto a switch or data object. The object info line will show the name of the allocated control element. You can also allocate the same control elements to several data or switch objects. For control or recording purposes, the corresponding devices can then be controlled jointly via one control element.

Info Please note that the control elements only work if the data or switch objects have actually been allocated to a control channel. Further information can be found in topic Live control and Recording in objects.

Preparatory steps for the Iseo interface

Set up the Wings Platinum computer as a device.

Create the necessary project with the corresponding buttons and faders. Use commands **SwitchLink** and **FaderLink**. For parameters enter the switch and fader addresses displayed in column **PC port / Address** in the Media Pool category Devices.

It would be a good idea to create also buttons for Record, Play, Pause and Stop at the same time.

Further information on how to design touch panel interfaces can be found in the Iseo Help topics.

Iseo commands for Wings Platinum

For controlling Wings Platinum, Iseo features numerous functions. In addition to the commands explained below some interactive functions can also be implemented, e.g. displaying timeline texts and images on the touch panel interface, executing buttons or calling up pages. See Interactivity with Iseo.

Info Please note that the Iseo Help system may contain a list which is more up-to-date. In cases of doubt, refer to the Iseo Help topics.

This is an overview of all available commands:

- **AudioChannelLink** ...links up a fade with the specified volume control in Wings Platinum: Master = 0, stereo output = 1...12.
- **Continue** ...continues paused playback.
- **CPFieldExecute** ...executes the action or override button on the specified Control Panel field.
- **CPSelectPage** ...calls up the specified page in the Control Panel.
- **DevicesDisable** ...disables the device with the specified remote index.
- **DevicesEnable** ...enables the device with the specified remote index.
- **End** ...executes the End key, i.e. it moves the Locator to the right edge of the marker or to the end of the last object, respectively. If there is no track marker, the Locator jumps immediately to the beginning or to the end of the show.
- **Escape** ...executes the Esc key; stops playback or closes the screen window, respectively when playback has already been stopped.

- **FaderLink** ...links up the faders added to an Iseo port in Wings Platinum, which may be used as external control units for data recording, for example. See also Using external input devices.
- **GetApplicationStatus** ...assumes the status value sent by Wings Platinum (Idling mode = 0, Playback = 1, Pause = 2, Recording = 3, Recording Pause = 4)
- **GetApplicationVersion** ...shows the current Wings Platinum version.
- **Home** ...executes the Home key. The Locator jumps to the left edge of the track marker. When the function is executed again, the Locator jumps to the beginning of the first object.
- **Locate** ...causes the Locator to jump to the specified position marker in the specified timeline. If the marker remote index is zero, the Locator jumps to 0:00 seconds. If the timeline remote index is zero, the command refers to the currently active timeline.
- **MarkerNext** ...causes the Locator to jump to the next position marker.
- **MarkerPrev** ...causes the Locator to jump to the previous position marker.
- **MarkerToggle** ...sets a position marker or deletes any existing marker at the Locator position, respectively.
- **MultiModeStart** ...starts presentation of the timeline with the specified remote index in full screen mode or executes the trigger with the corresponding remote index if the corresponding timeline is not available. Further information can be found in the Wings Platinum Online Help topics under "EventPlayer Protocol".
- **NetworkConnect** ...establishes a connection with other Wings Platinum computers.
- **NetworkDisconnect** ...terminates connection with other Wings Platinum computers.
- **NetworkReconnect** ...terminates connection with other Wings Platinum computers and re-establishes it again.
- **Pause** ...activates Pause Mode.
- **PCLogOff** ...terminates all running applications and logs off the current user.

- **PCReboot** ...terminates all running applications and restarts the computer (master) and any slaves that may be connected to it.
- **PCShutDown** ...terminates all running applications and shuts down the computer (master) and any slaves that may be connected to it.
- **PCSwitchOff** ...terminates all running applications and switches off the computer (master) and any slaves that may be connected to it.
- **PortDisable** ...disables the device port with the specified remote index.
- **PortEnable** ...enables the device port with the specified remote index.
- **PortsDisconnect** ...disconnects the device ports.
- **PortsReconnect** ...disconnects the device ports and reconnects them again.
- **PlatinumMaximize** ...enlarges the Wings Platinum program window to full monitor size.
- **PlatinumMinimize** ...minimizes the program window and "hides" it in the task bar.
- **PlatinumRestart** ...terminates the program and restarts it. This is done both on the local computer (master) and on the slaves connected to it. When the full screen presentation mode is activated, the program is restarted on a dark screen without the Windows desktop being visible.
- **PlatinumRestore** ...restores the individual size and position of the program window as previously set.
- **PlatinumTerminate** ...terminates the program on the local computer (master) and on the slaves connected to it.
- **Play** ...starts playback of the specified timeline. As an option, playback can be started from a position marker, provided a Marker Mode and remote index, if applicable, have been specified.
- **Presentation** ...starts the presentation in Fullscreen Mode. As an option, playback of the presentation can be started from a position marker, provided a Marker Mode and remote index, if applicable, have been specified.

- **PresentationPause** .....as above, but with presentation immediately changing to Pause Mode.
- **Record** ...starts recording in data objects.
- **Reset** .....terminates Presentation Mode and playback; the screen is closed, too.
- **SchedulerStart** ...activates the Trigger Scheduler.
- **SchedulerStop** ...deactivates the Trigger Scheduler.
- **ScrollDown** ...scrolls down in Wings Platinum.
- **ScrollLeft** ...scrolls to the left in Wings Platinum.
- **ScrollRight** ...scrolls to the right in Wings Platinum.
- **ScrollUp** ...scrolls up in Wings Platinum.
- **Stop** ...stops playback; a possible Fullscreen Mode is maintained.
- **SwitchLink** ...links up the switches added to an Iseo port in Wings Platinum, which may be used as external control units for data recording, for example. See also Using external input devices.
- **TriggerExecute** ...executes the specified trigger.
- **TVChannel** ...changes over to the selected TV channel.
- **TVChannelNext** ...changes over to the next TV channel.
- **TVChannelPrev** ...changes over to the previous TV channel.
- **VideoInput** ...changes over to the selected video input. This works also during playback.

Remote-controlling SC Master

Remotely controlling SC Master and CF card shows

Shows and sequences saved on CF card and played back via an SC Master can be remotely controlled in a variety of ways.

- Via **IR remote control**. More information can be found in the manual for your device.

- Via **RS 232 command** and the serial port RS 232 IN, e.g. if you want to remote-control an SC Master via a superordinated media control system. See Remote control of SC Master via serial commands
- Via **key or switching contact** and the REMOTE socket, DATA IN/OUT socket or via SC Net REMOTE Module. This way you can use keyboards, light barriers, motion detectors, etc. for show start. See Starting shows via keyboards or switches.
- **Autostart** after starting up the system. See Example of Automatic start from CF card

Which way you choose depends on your application and the SC Master or SD Event Control units used.

SC Master remote control via serial commands

SC Master and SD Event Control units can be remote-controlled via serial commands from a superordinated control system. Via the serial port **RS232-IN** the functions of the IR remote control can be simulated via ASCII commands. Moreover, this feature also allows selective control of shows played back from CF card.

Info

- If you want to control Wings Platinum via an SC Master unit, programming can conveniently be performed via drivers and you needn't deal with ASCII protocol. See Using drivers for serial control.
- Within an SC Net System, volume and sound can be remote-controlled via any SC Master and SD Event control units and programmed markers. See Remote-controlling volume and sound.

ASCII commands

No initialization is necessary before ASCII commands can be sent to the control unit. The communications protocol is 9600 Baud, 8 data bits, no parity bit and one stop bit.

ASCII command identification "a" (= 61 Hex, 97 Dec) must be sent as first character. ASCII command identification "#" (= 23 Hex, 35 Dec) must be sent as last character. No spaces are allowed. The maximum time interval bet-

ween two characters must not exceed 20 ms, otherwise the command is ignored.

Info This protocol applies to all SC Master, SD Event Control and SD EC 2X4 units alike. However, the corresponding units do not support all functions. Further information on the functional range of the devices can be found in the corresponding manuals.

ASCII Command	Function
aSNxxx#	Normal show start, the running show is not interrupted. xxx = Show number from 1 to 120
aSTxxx#	Terminate show start; only show which does not equal xxx is interrupted. xxx = Show number from 1 to 120
aSIxxx#	Interrupt show start; Current show is interrupted. xxx = Show number from 1 to 120
aSAxxx#	Add show start; another show is started in addition to the current show. xxx = Show number from 1 to 120
aSBxxx#	Beginning of show start; parallel show is started anew. xxx = Show number from 1 to 120.
aSNxxxMyyy#	Normal show start from marker; xxx = Show number from 1 to 120, yyy = Marker number from 1 to 255
aSIxxxMyyy#	Interrupt show start from marker; xxx = Show number from 1 to 120, yyy = Marker number from 1 to 255
aSS#	Show is stopped immediately
aSSMyyy#	Show is stopped when marker yyy is encountered. yyy = Marker number from 1 to 255
aV+#	Master Volume up
aV-#	Master Volume down
aV:xx#	Adjusts the Master Volume to the value specified in xx.

	xx = 0 to 31. Commands with values > 31 are ignored.
aB+#	Master Bass up
aB-#	Master Bass down
aB:xx#	Adjusts the Master Bass to the value specified in xx. xx = 0 to 14. 0 = -7dB, 7 = 0dB, 14 = +7dB
aT+#	Master Treble up
aT-#	Master Treble down
aT:xx#	Adjusts the Master Treble to the value specified in xx. xx = 0 to 14. 0 = -7dB, 7 = 0dB, 14 = +7dB
aL1+#	Line1 Volume up
aL1-#	Line1 Volume down
aL1:xx#	Adjusts Line1 Volume to the value specified in xx. xx = 0 to 31. Commands with values > 31 are ignored
aL2+#	Line2 Volume up
aL2-#	Line2 Volume down
aL2:xx#	Adjusts Line2 Volume to the value specified in xx. xx = 0 to 31. Commands with values > 31 are ignored
aC+#	Card Volume up
aC-#	Card Volume down
aC:xx#	Adjusts the Card Volume to the value specified in xx. xx = 0 to 31. Commands with values > 31 are ignored
aCy+#	Card Volume up for channel y; y = channel number from 1 to 8
aCy-#	Card Volume down for channel y; y = channel number from 1 to 8
aCy:xx#	Adjusts the Card Volume for channel y to the value specified in xx. xx = 0 to 31. Command with values >

	31 are ignored. y = channel number from 1 to 8.
aM+#	Micro Volume up
aM-#	Micro Volume down
aM:xx#	Adjusts the Micro Volume to the value specified in xx. xx = 0 to 31. Commands with values > 31 are ignored
aX#	Releasing an X-time
aP#	PAUSE function; corresponds to the PAUSE key on the remote control unit
aY#	YES function; corresponds to the YES key on the remote control unit
aRx#	Set Sound-Routing x. x = value from 1 to 7 in accordance with possible routings in Wings Platinum (1)
axPyyy#	Start Player x with track number yyy; X = Value from 1 to 8 corresponds to player 1-8 of the SC MASTER 16
aTKxxx#	Start track number xxx; xxx = Value from 1 to 256 corresponds to entry in SHOW.INI (player 1)
aTS#	Stop Track (Player 1)
aJMxxx#	Jump to Marker; xxx = Number of marker. Values from 1 to 255. Show is continued after Jump
aJMWxxx#	ump to Marker and Wait; xxx = Number of marker. Values from 1 to 255. After jump, additional entry via the keyboard is waited for
aActtt#	Set AUX relay; c = 1 to 4 corresponds to AUX 1 to 4, ttt = 0 -> open; ttt = 1 -> close; ttt >=2 and <= 255 -> switching pulse at a time of ttt in 1/10 seconds.

(1) 1 = Multi-channel 4 -> 2 / no micro

2 = Multi-channel 4 -> 4 / no micro

3 = Stereo 2 -> 2 /Micro and ducking

4 = Multi-channel 4 -> 2 / Micro

5 = Multi-channel 4 ->2 / Equalizer Line1

6 = Multi-channel 4 -> 4 / Split mode

7 = Stereo 2 -> 4 / no micro

Starting CF Card shows via contacts

With SC Master or SD Event Control units, shows can be started via external buttons, keypads or any switches actuated by light barriers, motion detectors, etc. For this purpose the devices feature a REMOTE socket (except for SD Event Control Light) and a DATA-IN/OUT socket. Moreover, various SC Net modules, such as **SC Remote 16 in** and **SC Remote 16 in-out** can also be used.

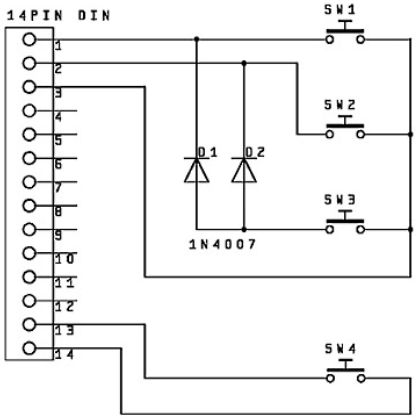
Show start via the REMOTE socket

Three different shows can be started via the REMOTE socket. To do so, you need to assign the corresponding shows to the first three Remote inputs in the Remote Table of CF Card Settings. See Remote properties for shows.

The first three Remote inputs at the REMOTE sockets can be wired as follows:

At the REMOTE socket the first three remote inputs are to be wired as follows:

- **IR 1** ...Pin 2 to Pin 3 (SW 2)
- **IR 2** ...Pin 1 to Pin 3 (SW 1)
- **IR 3** ...requires wiring in accordance with the following diagram (SW3):

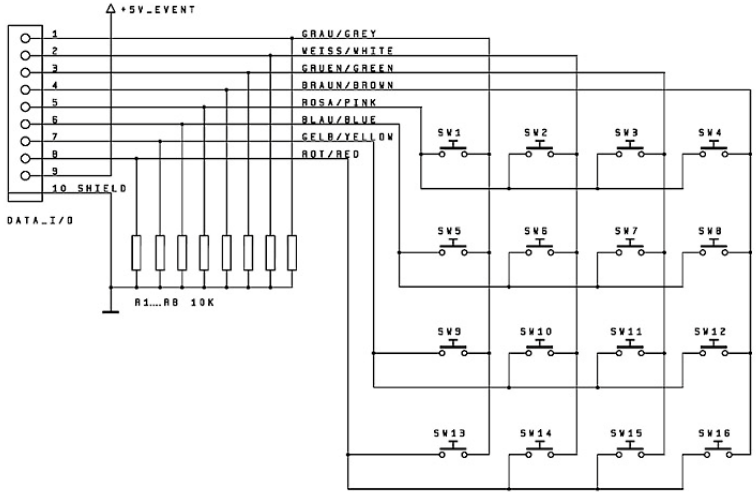


Moreover, switches SW 2 and SW 4 can also be used to continue after X-times or Pause Markers when playing back shows from CF card.

Show start via the DATA IN/OUT socket

The DATA IN/OUT socket allows connection of a keypad matrix for up to 16 keys for starting 16 different shows. The corresponding CF card shows can be freely assigned to the inputs **Remote 1** to **Remote 16** via the Remote Table. See Remote properties for shows. Here you can also define whether a show is to start upon closing or opening a switching contact.

The keys or switches, respectively must be connected in accordance with the following diagram:



Individual switches or motion detectors, etc. can also be connected as above. However, the eight resistors at 10 kOhm each must be available in any case. For connecting any switches you can purchase the SC Master Show Start Cable Data IO open end (Article SCF-SSK-DA-OE).

Info With a matrix configuration only one key must be pressed at a time. If several keys are pressed, only the first is detected and evaluated. In contrast to this, **Remote 16in Extension** also detects several simultaneously pressed keys.

SC Remote 16 in / in-out

Also the SC Net modules **SC Remote 16 in** and **SC Remote 16 in-out** are suitable for remote control of SC Master or Wings Platinum. Remote control of Wings Platinum is only possible in combination with an SC Master or an Event Control unit. Startup of these modules is described in the SC Net Module manual, where you can also find a wiring diagram. But you should also consider the following items:

- The inputs need not be registered in the Media Pool under **Devices**. Therefore, the **SC Remote 16 in** are not registered at all, while only the switch outputs are registered for the **SC Remote 16 in-out**.

- The lower SC Net addresses must be assigned to modules **SC Remote 16 in** and **SC Remote 16 in-out**, i.e. address **2** for one module, addresses **2** and **3** for two modules, addresses **2**, **3**, **4** for three modules, etc.
- The module with address **2** starts shows **1** – **16**, the module with address **3** starts shows **17** – **32**, etc.
- A show is started when one of the pins **1** to **16** is connected to pin **25** (+ 12 V). Via a sensor input (pin 17 to ground) you can define that the show be started via a negative pulse, i.e. by connecting one of the pins **1** to **16** to ground.
- There are further options for starting CF Card shows, such as free allocation of switch inputs to any show and a response to opening or closing a contact. See Remote Show Properties.
- Wings Platinum allows you to start playback of a timeline with the corresponding remote index by switching a contact. If no timeline with the specified remote index is available, the command refers to the trigger or the control panel field with the corresponding remote index. See Remote control of Wings Platinum via SC Master/Event Control.

Interactive control

Wings Platinum and all SC Master units allow interactive control of shows and courses of action. There is, first of all, the possibility to evaluate external inputs, such as switches, keyboards, light barriers or similar or to allow control via variables that enable conditional actions. Basically, there are two different applications:

- Control of shows to be run on an **SC Master via CF card**. This is, audio playback and in-sync control of any other type of device, for example.
- Control of shows to be run on a **computer with Wings Platinum**. This covers the whole spectrum, i.e. audio, picture, video and show control.

Interactive control of SC Master

We are sorry but this chapter has not been completed yet...

Related topics:

Special functions

External show start (example)

If you need additional information, download the latest Help version from the Internet or contact us.

http://www.stumpfl.com/LinkE/WPHelp.html

Interactive control of Wings Platinum

Interactive control of Wings Platinum

Wings Platinum offers various ways of implementing interactive functions, such as markers in the timeline for pause, jump, etc. or Triggers or Screen Objects. Interactive control via variables is currently only possible in combination with a second system, such as Iseo or SC Master. The following functions allow interaction:

- Markers in the timeline for playback control and trigger execution. See Markers and Trigger functions.
- Screen Objects which, by clicking them, execute a trigger. See Trigger actions and Executing triggers via Screen Objects.
- Conditional functions through variable control of Iseo. See Interactivity via Iseo.

An interactive project using several timelines can also be output as EXE presentation and played on PCs without Wings Platinum. In this case control of/via other devices is not possible. See Interactive multi-timeline EXE presentation.

Interactivity via SC Master

Interactive control of Wings Platinum is possible via an SC Master that does the saving and evaluation of variables. In such a case, a show start causes a certain timeline to be played or triggers or control panel fields to be executed via so-called Multimode Starts. Programming is similar to that for the SC Master and CF Card shows.

Configuring the SC Net port for control of variables

In order to utilize the Variable Function of an SC Master for control of Wings Platinum, the SC Net port must be configured correspondingly:

Open the project the presentation of which you want to control interactively.

1. In the Media Pool, click the plus sign next to category **Devices** and select the device Stumpfl SC Net below it.
2. Right-click device port **Stumpfl SC Net** and select **Properties** **if no SC Net port is available yet**.

   - Right-click some free space in the right Media Pool part and select **Stumpfl SC Net**.
   - In the dialog box under **Serial port**, click on and select a computer port for the corresponding device port, e.g. **Com 1**. Continue at item **3**.
3. Under **General settings** place a checkmark each next to **Enable SC Net feedback** and **Enable remote starts**.
4. Close the dialog by clicking **OK**.

Via command markers (Special functions for SC Master) variables can be set, queried in the SC Master and certain actions be linked up with this. The SC Master sends these actions to Wings Platinum as **Multimode Start**s. This universal command allows starting of timelines as well as executing triggers or control panel fields and works as follows:

- If there is an active video track in Exclusive Mode or a presentation track in the project, the video presentation is started automatically.
- If there is neither a video track in Exclusive Mode nor a presentation track, the timeline is played in Presentation Mode, i.e. pictures and videos are displayed at high quality in Fullscreen Mode via hardware rendering.
- If there is neither a tracks containing visuals nor a screen available, i.e. for pure show control projects, the timeline is played back.

The playback target, i.e. timeline, trigger or control panel field, depends on the type of project:

- If there is a timeline with the specified remote index, it is played back as explained above.
- If no timeline with the specified remote index is available, Wings Platinum executes the trigger with the corresponding remote index. See also *Trigger functions*.
- If there is neither a timeline nor a trigger with the specified remote index, the command refers to the control panel field with the corresponding remote index. See also *Control panel for direct operation*.

By specifying remote indexes you can therefore control whether an action refers to a timeline, a trigger or a control panel field.

Restrictions and special features:

For show control in Wings Platinum, certain restrictions apply with regard to CF card shows played on an SC Master:

- In Wings Platinum only one timeline can be played at a time. Actions **Add show**, **Jump show** and **Restart show** only cause jumping into another show or timeline or cause execution of a trigger or control field.
- The above actions do not refer to the current timeline but only to other timelines. If you need for the action to refer to the current timeline, you need to use a trigger or a control panel field.
- Actions such as **End show**, **Continue show** or **Pause show** do not take effect. Use triggers for these functions
- **Random Jump** is not available.

Related topics:

Special functions for SC Master

Interactive control of SC Master

External show start

Trigger functions

Control Panel for direct operation

Special functions for SC Master

To open the Properties dialog of a Special Functions Marker, right-click the marker and select **Properties**.

This dialog allows you to assign the vast range of SC Master functions to one marker. When the show is played back from CF Card these functions are then carried out at the corresponding point of time. Six functional ranges can be selected, with entries only being possible after selecting a range.

The following ranges can be selected:

- **Volume** and **Equalizer** are used for programmed remote control of card player and mixer of an SC Master or SD EC 2X4.
- **Variable** ... to define the variables and specify their values. These variable values can be used for logical comparisons the results of which trigger conditional functions.
- **Decision** ...compares variable values with preset values and starts a show when condition is fulfilled.
- **Actions** .... allows starting of shows from CF Card.
- **Random Jump** ....randomly selects shows for show start.
- **Key Mask** ...is used for selective activation or deactivation of keys and switch inputs.

Remotely controlling volume and sound

SC Master and Event Control units allow remote-control of volume and sound via markers. This is only possible for SC Net operation.

1. In the Media Pool, click the plus sign next to category **Devices** and select the corresponding SC Net device port below it.
2. From the device folder **All devices** drag **Special functions** into a marker track.
3. Right-click the marker, select **Properties** and the dialog will appear.

4. First of all, the **SC Net address** of the module receiving the information is to be entered. As this normally refers to the Master Module, address 1 can usually be maintained.
5. Click on **Volume** or **Equalizer** to enter the corresponding settings:
    - Under **Volume** you can select the **controller**, the card player **output** (stereo), the volume **value** and the **time** to reach the specified value. All parameters are similar to those you know from the device menus. There is only one exception: **FlashCard left** and **FlashCard right** also allows you to control individual channels of a stereo output.
    - Under Equalizer you can also select the controller, the card player output (stereo) and the volume value. *Unfortunately, these functions are not available yet*.
6. In field **Comment** you can enter any appropriate designation to become visible in the timeline. Usually it makes sense to enable option **Auto comment**, which generates some suitable labelling depending on the chosen function.
7. Finally, click on **OK**.

Information about any other functions can be found under Special functions for the SC Master.

Setting variables

Variables are used for programming interactive sequences. By setting and comparing variables and values, conditional functions can be performed. This function is only available for SC Net operation via an SC Master or Event Control unit.

1. In the Media Pool, click the plus sign next to category **Devices** and select the corresponding SC Net device port below it.
2. From the device folder **All devices** drag **Special functions** into a marker track.
3. Right-click the marker, select **Properties** and the dialog will appear.
4. Click **Variable** to enter the corresponding settings:

- Under **Variable** select the variable. Please consider that variables **E1** to **E30** are memory variables, which, after deactivating SC MASTER remain stored in the EEPROM. Variables **R1** to **R70**, on the other hand, are runtime variables which are no longer available after deactivating the device or removing the CF card. Variable R70 has a special function. Upon activating SC Master and successfully establishing SC Net communication it is set to 1. For show control, the variable values can be compared with preset values. ...See Decision &endash; conditional show start.
- Under **Operator** you specify what is to happen. In addition to **Set**ting a value it is also possible to **increment** (increase) or **decrement** (decrease), to **multiply** or **divide** a variable value. Moreover, **Assign value** can be used to assign values from another variable.
- Under **Value** you enter the value for the operation chosen before. If you chose **Assign value** you need to specify the variable whose value is to be assigned.

5. In field **Comment** you can enter any appropriate designation to become visible in the timeline. Usually it makes sense to enable option **Auto comment**, which generates some suitable labelling depending on the chosen function.
6. Finally, click on **OK**.

Info

- You can have variables displayed on the SC Master display. See Displaying information on the SC Master display.
- Moreover, it is also possible to display variables in the Wings Platinum Control Panel. For this purpose, you simply drag entry **Special functions** from the Media Pool into the Control Panel and, in the control field created thus, you select the corresponding variable by clicking on . See also Control Panel for direct operation.
- Please remember that memory variables (E1 to E30) need to be initialised by setting them a first time. They can only be compared with other values or variables after that. Also display on the control panel field or on the SC Master display requires initialisation of the memory variables.

See also

Displaying variables on the SC Master display

Example Automatic start from CF Card

Decision – conditional show start

Decision allows you to compare variable values with preset values or other variable values and perform a conditional show start.

1. In the Media Pool click category **Devices**.
2. From the device folder **All devices** drag **Special functions** into a marker track.
3. Right-click the marker, select **Properties** and the dialog will appear.
4. Click **Decision** to enter the corresponding settings:
    - Under **Variable** you enter which variable is to be compared.
    - Under **Condition** you specify the type of comparison and whether comparison is to be with a value or a further variable.
    - In the field on right, **Value** or **Variable**, you enter the second value or variable for comparison.
    - Under **Start Show** you select which show is to be started from CF card. For reasons of compatibility, the maximum admissible number for comparison of values is **120** and for comparison of variables **200**. If in a comparison a values a value higher than 120 needs to be entered to start a show, there is a simple **Workaround.**

      Start by setting a variable to the required value and use a comparison of variables for starting the show.
    - When you compare two variables you can enter the corresponding action under **Mode**.

Restart starts a show; a running show is started again from the beginning.

Add is for adding an extra show which is to be played back simultaneously with any other running shows. With the SC Master 6/16 a maximum of 18 shows can be run simultaneously. For all other SC Master units the maximum is 6 shows. Please bear in mind, that this Start Mode interrupts the sound of other shows that uses the same stereo output.

End stops show playback.

Pause stops playback; it can be resumed from this location at a later time.

Continue continues paused playback.

Info Comparing a variable with a value causes the show to be started in **Add** Mode.

5. In field **Comment** you can enter any appropriate designation to become visible in the timeline. Usually it makes sense to enable option **Auto comment**, which generates some suitable labelling depending on the chosen function.
6. Finally, click on **OK**.

Info Please remember that memory variables (E1 to D30) need to be initialised by setting them a first time. They can only be compared with other values or variables after that. Also display on the control panel field or on the SC Master display requires initialisation of the memory variables.

See also

Example Combining interval music with shows

Example Automatic start from CF card

Show actions

This function allows specific shows saved on CF Card to be started via command markers in the show.

This is how you add a Command Marker for starting and terminating additional shows:

1. Click one category **Devices** in the Media Pool.
2. From the device folder **All devices** drag **Special functions** into a marker track.
3. Right-click the marker, select **Properties** and the dialog will appear.
4. Click **Action** to make the corresponding settings:

- As target for this action you can directly enter a show number next to **Show** or click **Variable** and choose a variable. In the latter case, the variable value, i.e. the current content, is regarded as show number.
- Under **Mode** you select the action to be taken.
    - **Restart** starts a show; a running show is started again from the beginning
    - **Add** is for adding an extra show which is to be played back simultaneously with any other running shows. With the SC Master 6/16 a maximum of 18 shows can be run simultaneously. For all other SC Master units the maximum is 6 shows. Please bear in mind, that this Start Mode interrupts the sound of other shows that use the same stereo output.
    - **End** stops show playback.
    - **Pause** stops playback; it can be resumed from this location at a later time.
    - **Continue** continues paused playback.
    - **Jump** jumps to the specified show and terminates the current show.

5. In field **Comment** you can enter any appropriate designation to become visible in the timeline. Usually it makes sense to enable option **Auto comment**, which generates some suitable labelling depending on the chosen function.
6. Finally, click on **OK**.

Information about any other functions can be found under Special functions for the SC Master.

Info If you are using a DLC Port you should disable the transfer of the start status for the shows to be jumped to. See Show Properties.

Random Jump &endash; random show start

This function allows a randomly selected show to be started, while the range of available shows can be specified.

1. In the Media Pool, click the plus sign next to category **Devices** and select the corresponding SC Net device port below it.
2. From the device folder **All devices** drag **Special functions** into a marker track.
3. Right-click the marker, select **Properties** and the dialog will appear.
4. Click **Random Jump** to enter the corresponding range of shows available for this purpose.
5. In field **Comment** you can enter any appropriate designation to become visible in the timeline. Usually it makes sense to enable option **Auto comment**, which generates some suitable labelling depending on the chosen function.
6. Finally, click on **OK**.

Information about any other functions can be found under Special functions for the SC Master.

Key Mask - Enabling/disabling remote inputs

The Key Mask function allows temporary activation or deactivation of the remote inputs of SC Net devices and their connected keys, depending on the requirements.

1. In the Media Pool, click the plus sign next to category **Devices**.

2. From the device folder **All devices** drag **Special functions** into a marker track.
3. Right-click the marker, select **Properties** and the dialog will appear.
4. Click **Key Mask** to specify the corresponding remote input:
    - For **Sub address** you enter the range, i.e. **1** for remote inputs and **2** for IR keys. See also Remote Properties of Shows.
    - Under **Mode** you can choose the way the Key Mask is to be changed.

      Set ...to set the mask and overwrite old masks. Here the following applies: **1** = remote input is enabled and **0** = remote input is disabled.

      Or ...enables the remote input in the current mask; **1** enables a remote input, while **0** causes the current status to be maintained.

      And ...disables the remote input in the current mask; **0** disables a remote input, while **1** causes the current status to be maintained.
    - Under **Mask** you can enter the values for the 16 first inputs the mask is to be changed with. This is done in groups of four, starting with input 1...4, 5...8, 9...12 and finishes with 13...16. More than 16 remote inputs cannot be influenced via the Key Mask function.
5. In field **Comment** you can enter any appropriate designation to become visible in the timeline. Usually it makes sense to enable option **Auto comment**, which generates some suitable labelling depending on the function chosen.
6. Finish by clicking on **OK**.

Displaying information on the SC Master display

You can have texts and variables of up to 16 characters displayed on the SC Master or SD Event Control display. For this purpose you need to configure a serial port as a display in the Media Pool.

1. In the Media Pool, click category **Devices**, right-click the device folder, e.g. **SC Master** and select **Add devices**. Select **Serial** and click on **OK** to add a serial port.
2. In the Media Pool, double-click the new port to open the corresponding Properties Dialog. Enter **Display** as a name as well as the display address:
   - **1/2** ...for **SC Net Port** and a Master unit with device address **1**
   - **C1** ...for a **DLC-Port**
3. Close the dialog by clicking **OK**.

Displaying text

1. Drag the new device **Display** into the timeline and a marker track containing a command marker will be created. Double-click the marker and enter the text and the display duration under **Command/Text**, e.g.

   "Text" 240

   The text to be displayed (with a maximum of 16 characters) is in quotation marks followed by a space and **240** (hexadecimal value for 240) for a display duration of 2.4 seconds. With an entry of **255** the text is displayed continuously until the next message arrives.
2. Click on **OK**. You can check text output by playing the command marker with the device control system being enabled.

Displaying variables

For displaying variables you take the same steps as for the text display. But you also need to specify the variable to be displayed, which is preceded by a percent sign:

"Text %X" 240

Text and variable are in quotation marks, **%** signalises that variable **X** (entered in **ASCII** code; see table) is to be displayed, followed by the display duration, e.g. **240** for 2.4 seconds.

Example:

"Service in %4 Tg" 255

This command reads out memory variable E4 and would be displayed as follows, if the variable had a value of 26, for example:

Service

in 26 days

This message continues to be displayed because **255** was entered as display duration.

This way the values of previously set variables can be displayed. See Setting variables. The list below will tell you the variables to be displayed, as well as the corresponding ASCII and hex code values.

Variable	**ASCII → Hex**
Memory variable E1	**1 →15**
Memory variable E2	**2 →16**
Memory variable E3	**3 →17**
Memory variable E4	**4 →18**
Memory variable E5	**5 →19**
Memory variable E6	**6 →1A**
Memory variable E7	**7 →1B**
Memory variable E8	**8 →1C**
Memory variable E9	**9 →1D**
Memory variable E10	**10 →1E**
Memory variable E11	**11 →1F**
Memory variable E12	**12 →20**

Variables E13 to E30 cannot be displayed.

Runtime variable R1	**31 →01**
Runtime variable R2	**32 →02**
Runtime variable R3	**33 →03**
Runtime variable R4	**34 →04**

Runtime variable R5 **35 →05**

Runtime variable R6 **36 →06**

Runtime variable R7 **37 →07**

Runtime variable R8 **38 →08**

Runtime variable R9 **39 →09**

Runtime variable R10 **40 →0A**

Runtime variable R11 **41 →0B**

Runtime variable R12 **42 →0C**

Runtime variable R13 **43 →0D**

Runtime variable R14 **44 →0E**

Runtime variable R15 **45 →0F**

Runtime variable R16 **46 →10**

Runtime variable R17 **47 →11**

Runtime variable R18 **48 →12**

Runtime variable R19 **49 →13**

Runtime variable R20 **50 →14**

Runtime variables R21 to R70 cannot be displayed.

Info Please remember that memory variables (E1 to E30) need to be initialised by setting them a first time. They can only be displayed on the SC Master display after that.

Presentation media

A whole show or parts of it can be exported in the form of different media. This can be a presentation medium that allows you to present the show independently of the project or just part of a project that you want to reuse in different programs. But it may also be useful to prepare a separate presentation file if a show is very complex and contains a great number of simultaneously running videos.

What presentation medium is appropriate?

You can play back the show at any time during the design to check the results of your creative activities. Certain situations, however, require a separate presentation file to be produced. This may be the case when the show contains a great number of simultaneously running videos or when the show is to be played on a different computer. But it may also be necessary to pass on the show to a customer for acceptance or for participation in a competition or festival.

Wings Platinum offers a variety of options for output of media: Which type of output media you choose depends on the application or on the media and functions used in the show:

Media / Output	Timeline	Video file	Video DVD	EXE Pres.
Pictures	●	●	●	●
Videos	●	●	●	◎
Picture sequences	◎	●	●	-
Live video/TV	●	◎	-	-
Stereo sound	●	●	●	●

Multi-channel sound	●	⊙	⊙	-
Controlling devices	●	⊙	-	-

●possible, ⊙ with restrictions only, - not possible; advantages and restrictions are explained below:

Playback from the timeline

Except for a few restrictions for videos and picture sequences, everything contained in a timeline can be played back at full quality and controlled.

Restrictions/conditions:

- Extremely complex picture and video arrangements, as well as high-resolution output put very high demands on the computer hardware, frequently pushing it to its limits.
- Depending on the computer performance, currently about two to five DV videos can be played on one computer at full quality. Also HD videos in MPEG-2 or WMV format can directly be played at high quality.
- A picture sequence, as a rule, consists of an extremely high number of high-resolution pictures (25 to 60 per second). Therefore, playback from the timeline is exclusively possible on the basis of low-resolution display data. Full quality requires output as video file.

Playback via video file (MPEG, WMV or AVI)

A mixdown of show into a high-resolution video file contains the entire visual information. So even highly complex shows can be played back this way. In principle, all types of player software can be used for playing, provided the corresponding decoder (MPEG, WMV, DivX, etc.) is installed on the computer. Usually, however, playback in Wings Platinum works much more reliably in Presentation Mode, with more extra options, such as multi-channel sound or control of peripheral devices being available. For high quality video creation you should preferably use MPEG 2 or WMV compression. The results are distinctly better than for an AVI video compressed with DivX. Wings Platinum includes the MPEG 2 codec by MainConcept, which ensures high quality. Creation and presentation of HD videos requires the Advanced License as a minimum.

Restrictions/conditions:

- Multi-channel sound and device control are only possible for playback via Wings Platinum. The mixdown video can be played from a video track in Exclusive Mode. In practice, virtually all tracks for audio and show control are played in addition to the mixdown video. Moreover, all functions for remote control, Control Panel and Trigger Scheduler are invariably available.
- If the video is played from a presentation track, live video/TV import is only possible in a static window or area. See Live video/TV in a static window.

See Methods for producing videos

Video DVD – the World Standard

A video DVD is the ideal medium for circulation of even very complex shows. Although the resolution is limited, it is a perfect means to give an impression of a show, for acceptance or applications, for example. What speaks for video DVD is worldwide compatibility and easy playback – there is hardly a place where a DVD player and a TV set are not available. And what's more, this way also multidisplay shows can be output as single screen variants.

Restrictions/conditions:

- Multi-channel sound is only available after multi-channel export of the sound track and processing into a Dolby Digital or DTS Stream via an external encoder. In this case, the DVD must also be created via an external authoring program.

See Producing a video DVD

Playback via EXE presentation

An EXE presentation is an executable file containing all images and the sound track, as well as a "Wings Platinum" player. Videos are located in a separate folder. The fullscreen presentation can be started by double-clicking the file and should runs on every modern Windows computer with XP and Vista. A current DirectX 9.0C version and VC Runtime must, however, be installed. See also What do I need to know if I want to pass on an EXE presentation?

Playback is via hardware rendering at very high quality and can also be controlled via markers, e.g. pause markers for Speaker Support or position markers for jumping to certain chapters. The available options like password protection and expiry date make the EXE presentation an ideal medium to be passed on, as they allow the author to largely protect his show from misuse and unauthorized use.

Restrictions/conditions:

- Playback is restricted to pictures, videos and stereo sound; all picture effects are of course supported. **Important**: Integration of videos requires some preconditions to be met. For more information click here.
- No device ports or remote control ports are supported. The presentation is exclusively controlled via mouse and computer keyboard.

See Creating EXE presentations

EXE presentations

Creating EXE presentations

An EXE presentation is an executable file which contains the display data for all images, the sound track, as well as a "Wings Platinum" player. Videos are located in a separate folder. The presentation can be started by double-clicking the file and runs on every modern Windows computer (XP or Vista). For playback Wings Platinum uses 3D graphics cards hardware acceleration, thus ensuring a high quality. To prevent unauthorized usage by third parties after passing on an EXE presentation, it can optionally be provided with password protection and an expiry date.

An EXE presentation supports the following media and functions:

- For **Pictures** it supports the full range of functions contained in Wings Platinum incl. camera movement and zoom, as well as picture effects.
- **Videos** and **picture sequences** are automatically integrated in the form of intermediate video data which require no codec installation for playback. Please note that video loops are not supported.
- Certain functions, such as transparency masks or picture effects, such as Chroma/Luma Keying require a very powerful graphics card in the

presentation computer. The video tracks in an EXE presentation are always set to "Automatic" to play the presentation at full quality.

- The **Soundtrack** is mixed down to a stereo file in MP3 format. Multichannel sound, loop for audio files and asynchronous sound are therefore not possible.
- Audio is always output at the audio output chosen by default in the Windows Control Panel.
- Navigation in an EXE presentation via the Navigation Bar requires the Starter version or higher. Right-clicking the screen causes a bar to be displayed which represents the current location. By clicking the corresponding location on the bar you can jump to that location. This function is available with the Starter version or up. **Note:** The colors in the navigation bar can be customized. See Screen Properties.
- Depending on the full version used, however, certain markers such as **Pause**, **Position** or **Jump to** are available for **playback control**. See Licenses and functions.
- Triggers and linked screen objects allow you to create menus for playback control. During the presentation you can trigger certain functions, such as **Pause**, **Continue** or **Jumping** to markers with a mouseclick only. This function is available with the Advanced License or up. Please note that normal EXE presentations may contain one timeline only, i.e. jumping to other timelines is not possible. See Trigger actions and Executing triggers via screen objects.
- Jumping to various other timelines via an extended trigger function is possible as **interactive multi-timeline EXE presentations** using the corresponding additional module. This type of output can already be tested with the Pro License and up. In this case, however, the screen shows a large logo to start with and the text "Created with Wings Platinum" later on. See also Interactive multi-timeline EXE presentation.
- **External control** via a remote control port (Speaker Support) or control of other devices is not supported.
- **Important:** An EXE presentation is a presentation medium and **no backup** of your project! You need to generate a separate backup of your project incl. all the media for the show to remain editable. This

gives you the chance to create new EXE presentations later on to reflect changed operating conditions, e.g. if you get hold of a better video projector or any other operating system. See Backup of project files.

Info

- **Important:** For playback of an EXE presentation, the multimedia interface **DirectX 9.0c of November 2008** must be installed in Windows. If necessary, write a folder containing the installation files on the CD/DVD used for passing on the EXE presentation. Folder **DirectX 9.0** can be found an any current Wings Platinum CD-ROM under **Software**.
- We have prepared start pictures showing the most important operating instructions which you can be used at the beginning of an EXE presentation.Show start picture Moreover, there is also a ***readme file*** containing all the important bits of information for playback of EXE presentations. You can write this readme file onto the CD/DVD together with your EXE presentation, if you want to pass it on. Start pictures and readme file can be found in the Wings Platinum program folder **Exe Presentation\English**, unless you deselected "Sample pictures" when installing the program from DVD. Open the folder by clicking **Extras** in the main menu followed by **Open folder ▶Media Samples** and double-clicking folder **Exe Presentation/English**.

  This picture is available in Photoshop format with editable levels and different aspect ratios.

- For navigation and playback control you can use various markers. See Playing EXE presentations.

And this is how you create an EXE presentation:

1. Open your show. Unless you have already done so, take the following preparatory steps:
    - **Optimize the picture size** ...achieves better sharpness of the pictures and reduces the burden on the computer. See Optimizing display data for pictures.
    - **Optimize the soundtrack level control** ...ensures lossless and correct audio playback. See Sound track peak level.
2. Save the alterations.
3. In the main menu, click **Output** &endash; **EXE presentation...**
4. For normal shows, the settings for **Start Timeline** and **Screen** can remain as they are. You only need to choose the corresponding screens or timelines, when you are using several screens and timelines for your project. See also Interactive multi-timeline EXE presentation.

5. Under **Timeline portion**, select the portion to be output as presentation. The following options are available:

   - **Complete timeline from 0:00 seconds** ... Just like the timeline, the show starts at zero seconds, so that a possible trailer up to the first object is also included. It finishes after the last object
   - **Complete timeline starting with first object** ...The show starts before the first and finishes after the last object. (... recommended for standard presentations)
   - **Only selected portion of timeline** ...Only the portion marked in the timeline is considered. When no portion is marked, this option is not available. **...Marking a portion.**

6. The next section allows you to specify the position where playback of the presentation is to be started. The following options are available:

   - **At the beginning of the created presentation** ...normal start of the presentation at the beginning.
   - **At the current locator position** ...starts the presentation at the current locator position. You may have to terminate this process and position the locator before your can continue.

   Under **Start mode** you can choose whether the presentation is to be started immediately or to wait in Pause Mode to be started by pressing a button.

   Tip Usually, fullscreen mode is maintained at the end of playback. If, however, the Windows Desktop is to reappear at the end of an EXE presentation, you can set a reset marker at the end of the show. See Using markers.

7. Usually right-clicking the screen causes a navigation bar to show up, which allows jumping within the EXE presentation. If you want to prevent the navigation bar from appearing, remove the checkmark next to **Allow navigation bar**.

   Note: The colors in the navigation bar can be customized. See Screen Properties.

8. Under **Settings for picture display data** you can choose the resolution for the presentation. Next to **Reference size** enter the corresponding value. In order to achieve optimum quality, the value should be identi-

cal with the monitor or video projector resolution. In this case, the screen touches the left and the right margin.Show example. If the screen touches the top and the bottom, on the other hand, you need to calculate the optimum entry. Show example.

9. You can have the image data compressed, thereby distinctly reducing the file size of the EXE presentation. Place a checkmark next to **Compress pictures** and enter the degree of compression below. We recommend values between **1** and **10**. Too high values will lead to quality losses.

Info

- Images containing an alpha channel or transparent background cannot be saved as JPG file, as JPG format does not support transparency. In such cases image files are not compressed.
- In the Media Pool, you can specify that a picture is always to be used uncompressed. This setting is only appropriate for pictures with a critical progression, as JPG compression may cause steps in the progression to become visible. See Picture Properties.

10. The **data rate** for MP3 is preset to **128 kBit/s**, which corresponds more ore less to CD quality. If your demands to the audio quality are very high, increase the data rate.

11. Under **Save exe file as** enter a name and the desired folder for saving your presentation. Click on **Select file name** and enter the required target directory and file name, e.g. ***My Holiday***. The checkmark next to **Copy intermediate video data to destination folder** should usually be in place for the necessary intermediate video data to be copied to an automatically created folder. This folder, which contains the presentation name, e.g. ***My Holiday Data***, must be passed on along with the EXE presentation.

12. Under **Security** you can take precautions against unauthorized usage:

- Next to **Allow presentation only until.....** you can enter an expiry date. If the presentation is started after the date has expired, the file ***Name*.exe**, which is essential for the presentation, deletes itself. For safety reasons, the folder **Name Data** containing the video files, that may possibly have been created, will not be

deleted. It is up to you to inform the recipient of a show about this or not.

- When you add a checkmark next to **Presentation requires password**, you can enter a password in the field below. When starting this presentation this password needs to be entered to execute the presentation.

13. Click **Start** to create the EXE presentation. If this is not the case and a message is displayed saying that intermediate video data still need to be created, click **Yes**. Once creation of intermediate video data is completed (to be recognized by the status display below the locator time) start creation of the EXE presentation again.

14. Finally, some tips for passing on the presentation: As explained above DirectX 9.0c of November 2008 or later is required for playback. However, most of the time you can save yourself the effort of installing this version by starting the EXE presentation from a folder that contains the file **d3dx9_40.dll**. It is usually copied to the folder containing the EXE presentation when the presentation is created. It would therefore make sense to pass on the EXE presentation in a folder that contains the EXE presentation, the data folder with the intermediate video data and the file **d3dx9_40.dll** and not just the presentation on its own.

Info

- An EXE presentation must not be larger than 4 GB, otherwise it cannot be executed by Windows (limit by the operating system). In such a case you need to reduce the size through JPEG compression. The size of its original pictures and the file format (TIF, JPG, etc.) are **irrelevant** for the size of an EXE presentation. The decisive factors are only output size, i.e. the entry at **Max. picture size (long edge)**, the compression of the display data and the MP3 data rate for the soundtrack.
- Any cues for show control devices or slide projectors contained in the project will be ignored for the EXE presentation. An EXE presentation exclusively supports images, sound and video, as well as a few marker types for playback control. See also Playing EXE presentations.
- When an EXE presentation is larger than one Gigabyte, the standard file symbol will appear instead of the Wings Platinum file symbol. This is due to Windows and has no further consequences.

Playing EXE presentations

Playing an EXE presentation is plain sailing; it can be started just like any other program on the hard disk

- by double-clicking the presentation file.

Following this, the presentation is run in Fullscreen Mode without any windows. Depending on your setting, the presentation either starts immediately or is in Pause Mode and needs to be started, for instance, by hitting the Enter key.

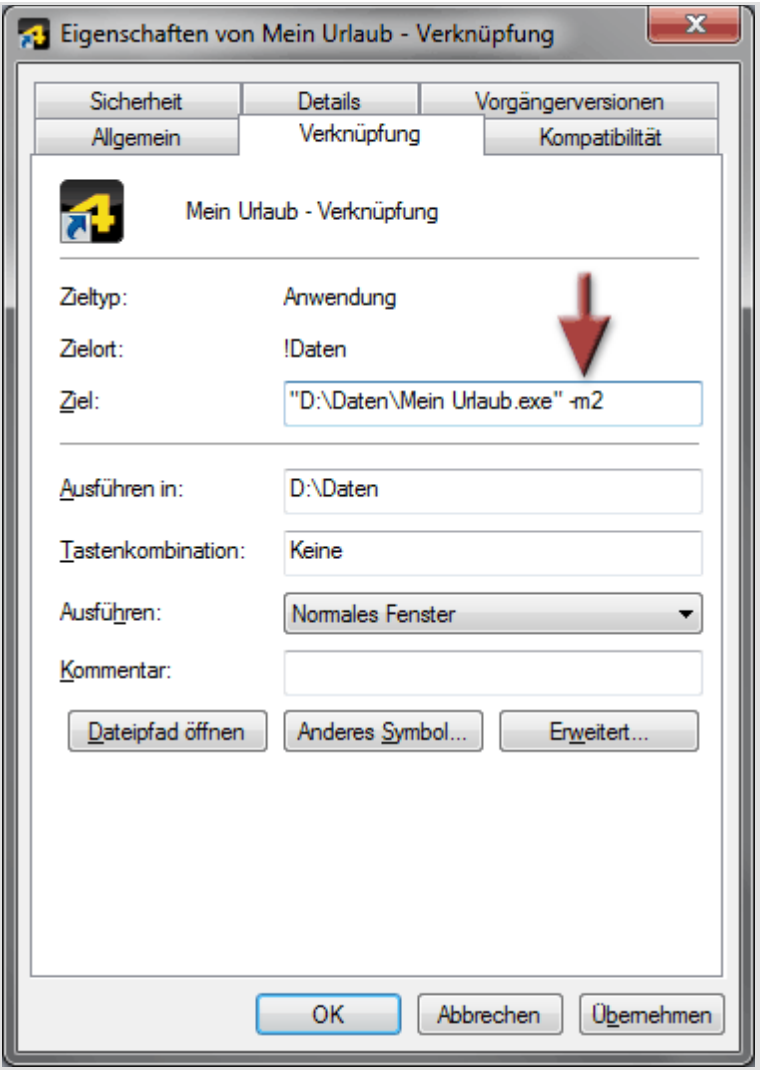
Info

- In Dual Monitor Mode, playback starts on the corresponding monitor where the EXE presentation was started by double-clicking it. As an alternative, it is also possible to specify the monitor to be used. For this purpose the command line is provided with the addition **-mX** (**X** = monitor), e.g. in the shortcut properties **Show example** . This is quite convenient if you want to place the start shortcut for starting on one monitor and run the fullscreen presentation on the other monitor or video projector.

  Via the addition **-m2** the EXE presentation **Urlaub Mallorca** is started o
  the second monitor, i.e. the shortcut can also be located on the first mo
  nitor.

  Important:

  - After the quotation mark there must be a space before **-m2**!
  - The monitor can only be specified for EXE presentations produce
    with version 2.40 or up.



- Audio is always output at the audio output chosen by default in the Windows Control Panel.

- When an EXE presentation is larger than one Gigabyte, the standard file symbol will appear instead of the Wings Platinum file symbol. This is due to Windows and has no further consequences.
- EXE presentations should not be started in Wings Platinum via file markers since this causes two instances of Wings Platinum to be running that use up each other graphics resources such as the full screen. This will only be successful if you do without the screen in Wings Platinum.

Playback can be controlled as follows:

Start playback ... via the **space bar** (alternating with **Pause**)

Pause ...space bar (alternating with **playback**) **Futher keys compatible with PowerPoint**

...keys **P**, **PageUp**, **Cursor left** or the **Backspace key**.

Resume paused playback ...**Enter** or **space bar**, **Futher keys compatible with PowerPoint**

...keys **N**, **Page Down**, **Cursor right** or **Cursor down**.

Stop ...press **Esc** once (fullscreen mode is maintained) / **Futher keys compatible with PowerPoint**

simultaneous pressing of **Ctrl** and **Pause**.

Terminate ...press **Esc** twice (Wings Platinum reappears)

Navigation ...after right-clicking the screen a navigation bar appears representing the current Locator position. Click the corresponding area in the bar and the presentation jumps to that location in the presentation. Click the screen above the bar and it will disappear (at the next slide change at the latest). **Note:** The colors in the navigation bar can be customized. See Screen Properties.

Any position markers in the show can be used for navigation purposes:

Jump to the next position marker ...by simultaneously pressing **Ctrl** and cursor keys ← or →.

Jump to a position marker with remote index ...by pressing number keys **1** to **9** (corresponding to the remote indexes 1 to 9).

After a jump to a position marker playback stops and can be restarted at the current location by pressing the space bar.

Jump to the beginning ...by pressing the **Home** key and start playback by pressing the space bar.

Info

- In combination with the Advanced License or higher you can also use other markers for playback control, e.g. **Jump Markers** for continuous loop playback. See Markers.
- Use screen objects and the pertaining trigger actions to implement **graphic menus** for controlling EXE presentations. These functions are available with the Advanced License and up. See Executing triggers via screen objects.
- Usually, fullscreen mode is maintained at the end of playback. If, however, the Windows Desktop is to reappear at the end of an EXE presentation, you can set a reset marker at the end of the show. See Using markers.

What you need to consider in playing back EXE presentations

As an author you are responsible for informing the receiver of an EXE presentation about the preconditions for trouble-free playback. Failure to do so is asking for trouble and your show may cause more frustration than enjoyment.

- For playback of an EXE presentation, the multimedia interface **DirectX 9.0c of November 2008** or higher and **VC Runtime** must be installed in Windows. If necessary, write a folder containing the installation files on the CD/DVD as well. The **Direct X** folder can be found an any current Wings Platinum CD-ROM under **Software**.
- **Tip:** As mentioned above, playback requires DirectX 9.0 of November 2008 or later. However, most of the time you can save yourself the effort of installing this version by starting the EXE presentation from a folder that contains the file **d3dx9_40.dll**. It is usually copied to the folder containing the EXE presentation when the presentation is crea-

ted. It would therefore make sense to pass on the EXE presentation in a folder that contains the EXE presentation, the data folder with the intermediate video data and the file **d3dx9_40.dll** and not just the presentation on its own.

- For optimum performance EXE presentation and the pertaining ***XXX Data*** folder containing the video files should be copied onto the hard disk and started from there.
- Certain functions, such as transparency masks or Chroma/Luma Keying require a very powerful graphics card. Make sure that the presentation computer is equipped correspondingly or do not use these functions.
- If you are using ticker objects to display text in an EXE presentation the font types used must be available on the presentation computer. Otherwise replacement fonts are used automatically. It is useful to use standard Windows fonts, such as Arial or Times New Roman.
- An EXE presentation must not be larger than 4 GB, otherwise it cannot be executed by Windows. If this is the case, reduce the data volume during creation of the EXE presentation by JPEG compression of the images. See Creating an EXE presentation.
- We have prepared start pictures with the most important operating instructions which you can use at the beginning of an EXE presentation. Moreover, there is also a readme file containing all the important bits of information for playback of EXE presentations. You can write this **readme file** onto the CD/DVD together with your EXE presentation, if you want to pass it on. Start pictures and readme file can be found in the Wings Platinum program folder **Exe Presentation\English**, unless you deselected "Example pictures" when installing the program from DVD. Open the folder by clicking **Extras** in the main menu followed by **Open folder ▶Media Samples** and double-clicking folder **Exe Presentation/English**.

Producing a video

Methods for video output

It is possible to produce video files from completed shows to be used as presentation medium. Wings Platinum features several methods to do so:

- **AVI** is not restricted to a certain codec, but the corresponding codec can be set, e.g. DivX, DV or Motion JPEG.
- **MPEG** are world-wide standardized methods used for DVD and HDTV, among other things. This method allows high quality. See also MPEG Standard.
- **H.264** is the new and modern standard for efficient video creation. The H.264 codec ensures best quality at a low data rate. It is compatible with HD-DVD and Blu-ray disc, and with Internet capable players, such as Adobe Flash, etc. Output of H.264 videos is possible with a Pro License and higher. See Output of H.264-video.
- **Windows Media Video**, called WMV for short, is a modern format developed by Microsoft which allows high quality at a low data rate and is well suited for HDAV videos. See also MPEG-2, H.264 or WMV format ?

Output of AVI videos

Once a show has been provided with digital pictures and videos, you can create a video file from it containing everything you need to run it on any other computer without Wings Platinum. Only the corresponding Codec used for video rendering needs to be installed on the playback computer.

Info Unless you have already done so, take the following preparatory steps:

- **Optimize the picture size** ...achieves better sharpness of the pictures and reduces the burden on the computer. See Optimizing display data for pictures.
- **Optimize the soundtrack level control** ...ensures lossless and correct audio playback. See Sound track peak level.

This is how you can output an AVI video of your show:

Timeline

1. Open your show. If you have just finished editing your project, save the alterations.
2. In the main menu, click **Output** – **Create AVI Video...**
3. For normal shows the default settings for **Timeline** and **Screen** as well as **Display** can remain as they are. You only need to choose the corresponding screens or timelines, if you are using several screens and timelines for your project. For multidisplay projects with several networked PCs you can select one single display for output, which allows acceleration via hardware rendering.
4. Checkbox **Fill output frame** usually remains unchecked, to avoid distortion of screen or pictures. When the aspect ratios of screen and video to be produced differ, a black border is formed. To avoid black borders, check checkbox **Fill Output Frame**. In this case the picture may be distorted as the full output format is forced.
5. For Multidisplay projects using a number of networked computers, you can have the **softedge mask** additionally rendered into the picture. If applicable, place a checkmark next to this option.
6. Option **Allow usage of intermediate video data** can be enabled if you encounter problems, e.g. if H.264 videos cannot be rendered on the basis of original data. When this option is checked, intermediate video data are used for rendering, provided they are available for the videos in question.
7. Option **Adjust picture display data manually** should only be checked if you have important reasons to do so. It deactivates automatic creation of suitable display data for the chosen output size. A manual reduction of the display data size may, for instance, be necessary when there is not enough graphics memory for rendering the picture sequence and certain media are not displayed in the picture sequence.
8. If the video is to be presented on a monitor or video projector, leave the value for **Black border** at **0 %**. Only if you would like to present the video on a TV monitor, should you add a black border. Otherwise the picture is cropped. ...Show example. At **Black border** enter a value of 5 % (... corresponds to 2.5 % along the periphery) which should be suitable for most TV sets.
9. Select the portion to be computed as video. The following options are available:

- **Complete timeline from 0:00 seconds** ... Just like the timeline, the show starts at zero seconds, so that a possible trailer up to the first object is also included. It finishes after the last object
- Complete timeline starting with first object ...The show starts before the first and finishes after the last object. (... recommended for standard videos)
- Only selected portion of timeline ...Only the portion marked in the timeline is considered. When no portion is marked, this option is not available....Marking a portion.

10. The target directory is your project folder, the preset filename is "Video 001". You can change these settings by clicking on and selecting folder and filename. Finally, click **Next**.

Video

1. Click on the arrow and select the required **video compressor** to compress the video data. ...Tips for selecting and using codecs.

   Info If the Canopus DV codec cannot be selected although a Canopus video editing system has been installed on your computer, you need to activate the codec first. See **Global Options** – **Output**.

2. Click **Setup** to enter the settings for the selected codec. The type of window displayed depends on the codec.

3. For **Video settings** enter the required picture size for the video. Please note that pixel values should be dividable by 4 or even better by 16 when using Intel Indeo 5.1 or DivX codecs. ...More about video sizes. If you have entered a screen output size in the Wizard for Mixed Media Projects you can transfer the values by clicking on **Assign standard screen output size**.

   Info When the screen aspect ratio and the video output size differ, a black frame is formed. If, in this case, the output frame is to be filled by distorting the picture, you click checkbox **Fill Output Frame** on page **Timeline**.

4. Enter the required **Frame rate** for the video. For soft dissolves, choose a minimum of 20 frames, or even better 25 or 30 frames. See also Frame rate.
5. Use **Field Order** to influence the way the lines of video pictures are created. Select **Progressive (full picture)** for playback on a computer monitor. For DV videos it makes sense to use interlaced pictures. In this case choose **Interlaced, bottom field first**. A setting of **Interlaced, top field first** is only necessary when the device evaluates the interlaced pictures in a different order.
6. The video can be optimized for playback on a TV screen by reducing interline flicker via the **Anti-flicker filter.** It usually affects horizontal, high-contrast image details. According to the image content set values choose 100 % or less. Please bear in mind that this will lead to reduced sharpness and you will have to compromise.
7. Click **Next**.

Audio

1. Make the settings for the video file audio information as required. The default setting is CD quality: sampling rate of 44.1 kHz, resolution of 16 bits and stereo. Any other settings may be useful for certain formats (e.g. DV) or when audio data should be reduced in volume.
2. Click **Next**.

Further actions

1. You can plan actions to be carried out directly after video rendering:
    - **No further action** ...nothing happens, the AVI file is stored on the hard disk for further use.
    - **Show Options dialog** ...will show you the Options dialog again at a later time for further selection of actions and provides information about video creation.
    - **Start playback** ...starts the video with the player specified under **Options** – **Global Options** – Media Editors.
    - **Insert as presentation into the current project** .... creates a video track in Exclusive Mode (...requires the Advanced License

or up) in the current project containing the new AVI video. You can start it in presentation mode by pressing the **F5** key.

- If you want to shut down and switch off the computer at the end of video rendering, you need to check **Afterwards** and select the corresponding action by clicking on .

Click on **Start** to begin video rendering. This may take up to several hours, depending on picture size, show length and codec used. Progress and cumulative speed at x-times real time can be recognized in the progress dialog. The screen window shows the image that is currently being rendered.

Info

- Display of the images on the screen at an incorrect aspect ratio during rendering does not mean that the outcome of rendering calculation will be faulty, provided the screen is correctly configured.
- Experimenting with certain codec settings or larger video pictures with PAL resolution may cause some codecs to crash or cause error messages. In this case, you should try out other codecs or settings.
- When you terminate video rendering before it is finished, the file is stored on the hard disk, though and the completed section can also be played back.
- In rendering the picture sequence the active mix grouping is also considered. Therefore, you need to call up the required mix preset or define the corresponding standard mix grouping in the timeline properties before rendering. See also Presenting with mix groups.
- If you want to create AVI videos from shows containing screen field movements, panning and zoom movements, you should choose a relatively high frame rate. See Tips for video rendering. Moreover, excessively sharpened pictures or pictures with high-contrast structures may cause a flickering effect or interference pattern during the movement. In this case you should reduce sharpening of the picture and possibly change the speed of movement or zoom.
- High-resolution AVI videos with fast moving picture elements make high demands on the data projector signal processing system. For production you should use a tube monitor for reference purposes. Being

an analog device it is able to display the video signals virtually without any delay – which is not true for LCD monitors. This is the only way to find out whether what you have produced with Wings Platinum is played without any jerks on your computer. See also Valuable information about data projectors.

- You can produce simple CDs or DVDs which autoplay the video after being inserted in the drive. See CD/DVD-ROM Autoplay.

MPEG Standard

In order to be able to store the massive amounts of data arising for digital videos, the **Motion Picture Expert Group** has developed and standardized highly effective ways for data compression. The following methods have become established world-wide:

- **MPEG-1** is the older and widely known method which allows medium quality and demonstrates good scalability and compatibility.
- **MPEG-1 Layer 3** is a method for audio data compression, which is known as **MP3** and has become very successful. It is also supported by our SC Master and Event Control units. ...See also MP3 audio compression.
- **MPEG-2** allows a distinctly better quality than MPEG-1 and is the standard for DVDs. Moreover, it permits a distinctly higher resolution ranging up to HDTV (1920 x 1080 pixels) and data rates of up to 80 MBits/s.
- **MPEG-4** is a relatively new method with a very high degree of compression, which, however, also renders good quality. It was standardized under **H.264**, which is valid all over the world. See also Output of H.264 videos.

Wings Platinum allows direct output of your show as MPEG-1 or MPEG-2 video files as it contains MPEG codecs by **Main Concept**, which are one of the best codecs on the market.

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Output of MPEG videos

Once a show has been provided with digital pictures and videos, you can output it as an **MPEG** video file in order to run it on any other computer or write it on DVD. Wings Platinum contains codecs by **MainConcept**, which are one of the best codecs on the market.

Info

- To find out about a fast and simple way of producing a **video DVD for playback of your show on TV** refer to the topic A fast way to produce your first video DVD.
- Unless you have already done so, take the following preparatory steps:
- **Optimize the picture size** ...achieves better sharpness of the pictures and reduces the burden on the computer. See Optimizing display data for pictures.
- **Optimize the soundtrack level control** ...ensures lossless and correct audio playback. See Sound track peak level.

This is how you can produce an MPEG video of your show:

1. Open your show. If you have just finished editing your project, save the alterations.
2. In the main menu, click **Output** - **MPEG-1/2 Video...** and the MPEG Dialog will appear.
3. For normal shows the default settings for **Timeline** and **Screen** as well as **Display** can remain as they are. You only need to choose the corresponding screens or timelines, if you are using several screens and timelines for your project. For multidisplay projects with networked computers you can select one single display for output, which allows acceleration via hardware rendering.
4. Checkbox **Fill output frame** usually remains unchecked, to avoid distortion of screen or pictures. When the aspect ratios of screen and video to be produced differ, a black border is formed. To avoid black borders, check checkbox **Fill Output Frame**. In this case, the picture may be distorted as the full output format is forced.

Settings for DVD/TV

Fill output frame must be enabled.The show screen must have a DVD-compatible aspect ratio, i.e. 4 : 3 or 16 : 9.

Settings for HDAV

Do not enable **Fill output frame**

5. For Multidisplay projects using a number of networked computers, you can have the **softedge mask** additionally rendered into the picture. If applicable, place a checkmark next to this option.
6. Option **Allow usage of intermediate video data** can be enabled if you encounter problems, e.g. if H.264 videos cannot be rendered on the basis of original data. When this option is checked, intermediate video data are used for rendering, provided they are available for the videos in question.
7. Option **Adjust picture display data manually** should only be checked if you have important reasons to do so. It deactivates automatic creation of suitable display data for the chosen output size. A manual reduction of the display data size may, for instance, be necessary when there is not enough graphics memory for rendering the picture sequence and certain media are not displayed in the picture sequence.
8. For playback on a TV monitor, you can add a **black border**, otherwise the picture is not fully displayed but cropped. Detailed background information can be found under Border for playback on TV screens. **Note:** This option is only available if **Fill output frame** is disabled.
9. Select the portion to be computed as video. The following options are available:
    - **Complete timeline from 0:00 seconds** ... Just like the timeline, the show starts at zero seconds, so that a possible trailer up to the first object is also included. It finishes after the last object (... recommended for normal presentation CDs).
    - Complete timeline starting with first object ...The show starts before the first and finishes after the last object. (... recommended for standard videos)

- Only selected portion of timeline ...Only the portion marked in the timeline is considered. When no portion is marked, this option is not available....Marking a portion.

10. The target directory is your project folder, the preset filename is "Video 001". You can change these settings by clicking on and selecting folder and filename. Finally, click **Next**.

Video

1. Under **Preset** click on the arrow and select the required preset. Which preset you choose primarily depends on the further usage of the video or the medium. In Europe, it's mainly the **PAL** standard at 25 frames/s that is used, which has slightly larger pictures than the US **NTSC** standard which basically uses 30 frames/s (29.970 frames/s to be exact). For Europe the following media can be chosen:
   - **PAL MPEG-1** for files to be played back on computer
   - **PAL VCD** for Video CDs
   - **PAL MPEG-2** for files for playback on computer
   - **PAL SVCD** for Super Video CDs
   - **PAL DVD** for video DVDs to be presented on DVD players and TV sets.
   - **PAL DVD Low Rate** as above, but with a lower data rate that offers improved compatibility with simple DVD players. Due to the lower data rate, quality is slightly lower.
   - **HDAV 25 fps** and **HDAV 30 fps** are special presets for high-resolution shows to be presented on computer.
   - **PAL MPEG-2 SC Video Player** and other presets containing the term **SC Video Player** are presets for the CF Card player by Stumpfl.
2. After choosing a preset, all the most important settings for the corresponding medium should be correct. Depending on medium and application, the following parameters need to be set additionally:

   Settings for **DVD/TV**

Choose preset **PAL DVD** (European standard) or **NTSC DVD** (US standard).

For **Aspect ratio** choose the DVD output format **4 : 3** or **16 : 9**. It should possibly correspond to your screen, otherwise the images may be distorted.

Info For direct output of DV videos or other videos based on interlaced pictures in the original size, i.e. 1 : 1 without any changes in size, you need to set the anti-flicker filter to zero per cent. In this case the video material should not be deinterlaced by Wings Platinum either, otherwise quality problems may come up due to faulty line build-up. See also Deinterlacing of videos.

Settings for **HDAV**

For HDAV presentations choose preset **HDAV 25 fps** (25 frames/second) or **HDAV 30 fps** (30 frames/second). What type of preset you select depends on the frame rate of the incorporated video. Without videos in your show, select **HDAV 30 fps** as it allows better synchronisation with the video projectors and acts favorably on camera movements, for example. See also Media integration.

Enter output size **Width** and **Height**;up to a maximum of 1920 x 1080 pixels are possible. Please note that the pixel values for width and height must each be dividable by 2. If you have entered a screen output size in the Wizard for Mixed Media Projects you can transfer the values by clicking on **Assign standard screen output size**.

Tip for MPEG-2 videos at 60 frames/second

Basically, it is possible to render HD videos at 60 f/s. In this case, the picture size, however, may be restricted to 1280 x 720 pixels depending on Codec version and operating system. Windows Vista is clearly better suited for such tasks. Use **HDAV 30 fps** as preset and change frame rate and picture size accordingly.

Info

If you have chosen **Use hardware rendering** on page **Timeline** you should make sure that the textures are sufficiently large to match the selected output size. Otherwise the image quality is reduced by the texture size. See also Changing the display data quality for individual pictures.

When the screen aspect ratio and the video output size differ, a black border is formed. If, in this case, the output frame is to be filled by distorting the picture, you click checkbox **Fill Output Frame** on page **Timeline**.

For MPEG the **aspect ratio** for playback can be chosen independently from the pixel values for the video picture. For HDAV you should therefore choose **4 : 3** or **16 : 9**, according to which is closer to the actual aspect ratio. For player software that does not allow any correction of the aspect ratio and distorts the picture, choose a setting of **1:1**.

Info Settings of **1 : 1** and **2.21 : 1** may cause playback problems. In this case choose a different aspect ratio for video production, e.g. **4 : 3** or **16: 9**.

If the video image is distinctly larger than 1024 x 768 pixels, you can increase the **data rate** to achieve optimum quality. For a video image size of 1400 x 1050 pixels, for example, enter a variable bit rate of about 28000/24000/2000 kbits/s. Maximum and mean data rate have an effect on the quality. The minimum data rate, on the other hand, can be kept rather low, otherwise problems may creep up during rendering in particular for larger video image sizes.

Info For multidisplay shows the selected data rate refers to one single MPEG file presented on a multidisplay computer.

When you have finished making the recommended settings, you can move on to Further actions by clicking on button **Further Actions** on the left side of the dialog box.

Any further information refers to specialists and power users only. More information can be found in the Help topics.

With a Basic or Starter License the following extended settings are not possible. Continue at Further actions.

Extended settings

These settings are for experts only. If you have no idea about the meaning of these parameters, you should not change them. More information can be found in the help topics.

Click **Next**.

Audio

The default settings match the selected profile, so that you don't actually have to make any changes. More information can be found in the help topics.

Click **Next**.

Multiplexer

Use this dialog to define whether audio and video are to be combined (multiplexing) in the MPEG file to be exported or whether separate files are to be created for video and audio. Once you have chosen a profile, you don't normally have to make any changes here. More information can be found in the help topics.

Click **Next**.

Further actions

1. You can plan actions to be carried out directly after video rendering.
    - **No further actions** ... nothing happens, the MPEG file is stored on the hard disk for further use.
    - **Show Options dialog** ...will show you these options again at a later time and provides some information on video production.

- **Start playback** ... starts the video with the player specified under **Options** - **Global Options** - Media Editors.
- **Insert as presentation into the current project** .... creates a video track in Exclusive Mode which contains the new MPEG video (...requires the Advanced license). You can start it in presentation mode by pressing the **F5** key.
- If you want to shut down and switch off the computer at the end of video rendering, you need to check **Afterwards** and select the corresponding action by clicking on .

2. Click on **Start** to begin video rendering. This may take up to several hours, depending on picture size and show length. Progress and cumulative speed at x-times real time can be recognized in the progress dialog.

Info

- Should the dialog **Error in MPEG Settings** appear, we advise you to study the English error report for the codec and try to change the MPEG settings.
- Display of the images on the screen at an incorrect aspect ratio during rendering does not mean that the outcome of rendering calculation will be faulty, provided the screen is correctly configured.
- When you terminate video rendering before it is finished, the file is stored on the hard disk though and the completed section can also be played back.
- In rendering the picture sequence the active mix grouping is also considered. Therefore, you need to call up the required mix preset or define the corresponding standard mix grouping in the timeline properties before rendering. See also Presenting with mix groups.
- If you want to create videos from shows with screen field movements, panning and zoom movements, you should choose a high frame rate. See Tips for video rendering. Moreover, excessively sharpened pictures or pictures with high-contrast structures may result in a flickering effect or interference pattern during the movement. In this case you should reduce sharpening of the picture and possibly change the speed of movement or zoom.

- High-resolution videos with fast moving picture elements make high demands on the data projector signal processing system. For production you should use a tube monitor for reference purposes. Being an analog device it is able to display the video signals virtually without any delay which is not true for LCD monitors. This is the only way to find out whether what you have produced with Wings Platinum is played without any jerks on your computer. See also Valuable information about data projectors.
- You can also create video DVDs and CDs containing a DVD for selecting individual videos. See Producing video DVDs/CDs.
- You can produce simple CDs or DVDs which autoplay the video after being inserted in the drive. See CD/DVD-ROM Autoplay.

Output of video DVDs

Every Wings Platinum versions allows output of video DVD with autoplay function. If you want to output a DVD with a menu you need the Advanced License as a minimum. Currently, creating a menu is restricted to the basic functions, which, however, should do for most applications. You may well know that the DVD standard is rich in variants and very complex. This is why we cannot guarantee compatibility with every type of device. Normally, however, it should be possible to play a video DVD on any DVD player, e.g. on a TV screen. See also Valuable information about DVD systems and blank DVDs.

The following steps are necessary in order to create a video DVD:

1. You produce a DVD compatible MPEG-2 video of all the shows to be stored on DVD. The number of shows or videos depends on the length of the shows, as you can store about 60 minutes on a standard, recordable DVD. For menu control only a maximum of 9 videos are allowed.
2. You create a DVD menu which allows you to start the videos individually. A menu is a very brief video with buttons on the video picture, which can be linked up with videos to be started. We have prepared a sample project which you can open by clicking **Extras** in the main menu followed by **Open folder ▶Sample Projects** and double-clicking project **Example DVD menu**.

3. Alternatively, you can also create an **autoplay DVD without menu,** which is definitely the fastest and simplest way to create a video DVD. See A fast way to produce your first video DVD.
4. Finally, you need to create and write the DVD file structure. The files can also be saved on hard disk if you want to play back the videos on PC via a software DVD player.

Creating an MPEG-2 video

The basic procedure for producing an MPEG 2 video can be found at Producing an MPEG video. Mind the following when the video is to be stored on a DVD:

- In dialog **Timeline** under **Timelines and Screens** check **Fill Output Frame**. This results in the correct distortion typical for DVDs which is again corrected during playback. If you want to add a black border for playback on TV screens, refer to Border for playback on TV screens.
- In dialog **Video** choose preset **PAL DVD** (for Europe) or **NTSC DVD** (for USA)and under **Aspect ratio** either format **4 : 3** or **16 : 9**, depending on the format you want to use.
- All videos to be placed on one DVD must be absolutely identical in their image size, aspect ratio, TV standard, etc. The same applies to introduction and menu video. The only thing that may vary is the bit rate for video and audio, which, however must not exceed 10 MBits/s. It is essential to use one of the above presets to ensure that these conditions are complied with.

Designing a DVD Menu

As mentioned above, the visual menu part is nothing but a short video. It contains buttons and possibly one or several background images. Every button is displayed in a screen field, i.e. a button may also be a short preview of the actual video. Menu design requires the Advanced License as a minimum. If you want to create a DVD with only one video without menu, you can proceed to Creating and writing the DVD file structure.

Info Creation of a menu in Wings Platinum is possible but rather complicated. If you tend to create DVDs with menus we recommend getting hold of a DVD authoring program.

This is how your create the menu:

In the project in question, add a second timeline. In the Media Pool, right-click category **Timeline** for the timelines will be displayed on the right.

1. Right-click some free area in the Media Pool and select **Add...** This produces a second timeline which can be renamed if necessary.

2. In the Media Pool click on category **Screens** and the screens will be displayed on the right. Right-click in the Media Pool and select **Add menu screen**. It produces a menu screen with an aspect ratio of 5:4 and the screen field **Standard** can later be used to display the background picture.

   Info **Important note:** For technical reasons the menu screen has the prescribed aspect ratio of 5:4. Since this aspect ratio would be stretched to 4:3 or 16:9 during playback, you images or menu graphics would be distorted during playback depending on the settings during menu graphics creation. For your images to be displayed correctly in the menu you need to compress the menu contents in width, i.e. to 93.75 % for 4:3 and to 70.31 % for 16:9. In other words: you prepare the images at an aspect ratio of 4:3 (e.g. 768 x 576 pixels) or 16:9 (e.g. 1024 x 576 pixels) and compress them to 5:4 (e.g. 720 x 576 pixels).

3. Right-click the menu screen in the Menu Pool and select **Add menu button**, which causes a screen field with button function to be created. Enter an appropriate name, e.g. **Play Video 1**.

4. Right-click the menu button and select **Properties**. In the **Menu functions** click on **Select file name** and enter the video to be started by clicking on this button.

5. Under **Video end action** you can choose the action to take place at the end of the video:

   - **Display menu** ...useful for selecting further videos.

- **Pause** ...appropriate if the DVD contains only one video.
- **Loop** ...for loop operation. Make sure this is clear from the button labelling.

6. Repeat steps 3 to 5 if you want to add further buttons or videos to be started. You can also create two buttons for one video, e.g. one for normal playback and one for continuous loop playback. Further buttons can be added without any problems at a later time.

   Important note: A video DVD with a menu must only contain 9 videos to be started via buttons.

Creating the button layout

Now you need to do the visual design of your menu. This requires a short show with a background picture or video and a few buttons. The buttons are nothing but pictures or videos located on top of the background picture. You therefore need to prepare the buttons in the form of pictures (...or videos) with text or symbols.

1. In the timeline, add one track for every button and for the background picture. Click into the empty timeline and select **Add tracks...**. Specify the required number of tracks and click **OK**.
2. Depending how you would like to design the menu, you can now allocate a picture track or video track to every screen field or button, respectively. To do so drag the screen field from the Media Pool and drop it onto the track head of the corresponding track. Every button requires a track with the appropriate button screen field.
3. Place the background picture or video as an object onto the bottommost track (screen field **Standard**). You can also place a background sequence with a number of pictures of videos on this track. See also Placing objects and Editing objects.
4. Choose size and position of the buttons so as to produce the desired layout. For this purpose you should enable the display of screen field frames. Right-click the corresponding screen and select **Display screen field frames**. You will see that the buttons are displayed as blue frames which are currently still located on top of each other.

5. In the Media Pool, in category **Screens** select your menu screen. In the right Media Pool section, right-click one of the menu buttons and select **Size + Position**. In the dialog box popping up, reduce the pink frame in size and move it until size and location of the button correspond to your requirements. To do so, grab the frame at one of the small squares and drag it. Finally, click on **OK**.

6. If the button aspect ratio does not match the prepared button graphics (.... i.e. pictures with text, e.g. **Holidays in Tuscany**) you should adjust it. Enter the corresponding aspect ratio in the category **Screens** in column **Aspect Ratio** as a quotient, e.g. **3**, or as a ratio, e.g. **10/2**.

7. Now, if you place the picture object containing the prepared button graphics on the corresponding track, it will appear at the desired location on the screen. If this is not the case, correct the parameters via the above mentioned dialog box **Size + Position** or make a numerical entry in the Media Pool in columns **X** and **Y position**, as an alternative.

   Attention! The screen fields for the buttons must not overlap or extend beyond the screen edge. Otherwise the button function cannot be guaranteed. Moreover, the graphics for buttons (images or videos) in menus must not be key frame controlled, otherwise the location of screen field or button and graphics no longer correspond.

8. Add further buttons to your menu as desired and as explained above. Arrange the buttons so that there is enough distance from the border for the buttons to be fully displayed during TV playback. Later, when the video is created, it is no longer possible to add a black border.

9. Once you have completed designing the menu, you produce an MPEG-2 video using the same settings for picture size and format as for the other videos on the DVD (...use presets).

Info

- The length of the short menu video can be defined via track markers. See Marking Portions.
- On the DVD player this menu video will run in a loop. This is why there should be a hard cut at the beginning and the end. If you are using movement in the background, it would be a good idea to use the same picture at both the beginning and the end. See Creating a loop file.

Creating and writing the DVD file structure

A video DVD or video CD must have a certain file structure, otherwise it cannot be played by DVD players. The next step is to create this standardized file structure, which you can either save in a folder, use it to prepare an ISO image for writing with any type of software or write it directly onto DVD in Wings Platinum.

Info Please note that video CDs are only rarely recognized by DVD players. So you'd better write the data of a video DVD onto a DVD instead of a CD.

If you want to create a DVD with menu control, continue at **DVD with menu control**.

Single videos with Autoplay

1. In the main menu, click **Output** &endash; **Create Video DVD...**
2. Click on **Single Video with Autoplay**.
3. Under **Autoplay video** click on **Select file name** and enter the video in question.
4. Under **Video end action** you can choose the action to take place at the end of the video:
   - **Pause** ...appropriate if the DVD contains only one video.
   - **Loop** ...for loop operation. Make sure this is clear from the button labelling.
5. Under **Output options** select the way to save the DVD file structure:
   - **ISO image** ....creates a disk image to be written onto a DVD via external software. **Important note**

     The created ISO file must be written onto the DVD as an 1 : 1 ISO image and by no means as a normal data DVD. A data DVD cannot be recognized or read by a DVD player.

- **Store files in a new folder** ....creates folders AUDIO_TS and VIDEO_TS; they are suitable for playback on PC via Software DVD player or for further processing with other writing software.
- **Write DVD** ...for direct writing in Wings Platinum.

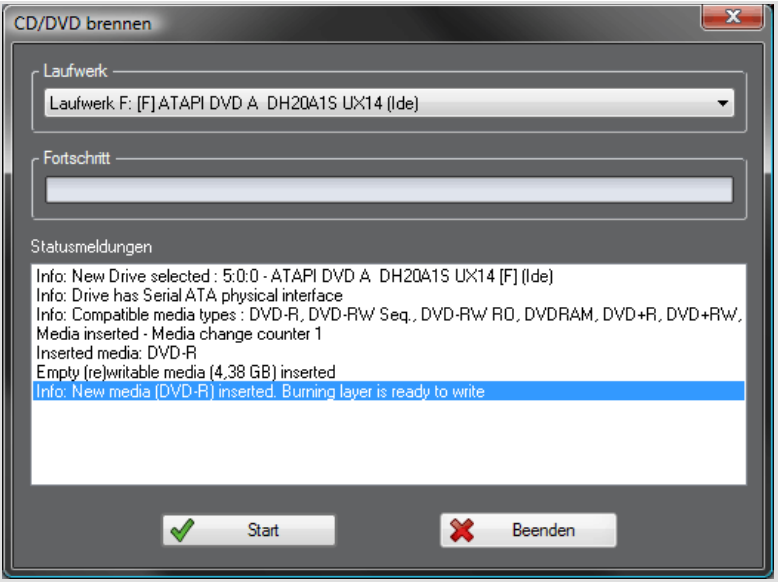
For storage on hard disk click on and specify a file name and and an empty folder.

6. Now click on **Start** to create the file structure or DVD. First of all, you will be presented with a List Dialog displaying the current working steps for creation of the file structure.

   Further steps after selecting **Write DVD...**

   Info When you use the Writer Engine for the first time you will be requested to install a driver. Click **OK** and, in Windows 7 or Vista, answer any further questions by clicking **Allow** or **Install driver software anyway**.

7. After preparing the data dialog **Write CD/DVD** appears. Insert a suitable blank DVD in your writer and wait until the writer has detected the blank.



8. Click **Start**. The DVD is now being written, while the progress is displayed in a dialog box.
9. After completion, the writer ejects the DVD. Remove it, click **Terminate** and **OK**.

Info If a message is displayed saying that the video file could not be added, the video may not correspond to the DVD standard. Make sure to use presets **PAL DVD** or **NTSC DVD** for creation of the MPEG 2 videos.

DVD with menu control

1. In the main menu, click on **Output** &endash; **Video DVD...** and select **With menu control** in the dialog box.
2. Under **Menu** click on **Select file name** and enter the video in question.

3. Under **Menu screen** choose the menu screen used for creating the menu video. This ensures the functionality of the buttons.
4. Under **Output options** select the way to save the DVD file structure:
   - **ISO image** ....creates a disk image to be written onto a DVD via external software. **Important note**

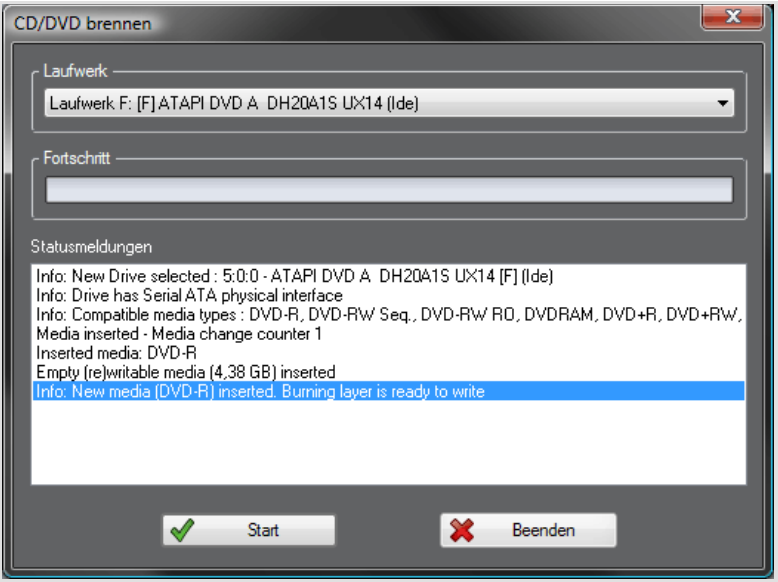
     The created ISO file must be written onto the DVD as an 1 : 1 ISO image and by no means as a normal data DVD. A data DVD cannot be recognized or read by a DVD player.
   - **Store files in a new folder** ....creates folders AUDIO_TS and VIDEO_TS; they are suitable for playback on PC via Software DVD player or for further processing with other writing software.
   - **Write DVD** ...for direct writing

   For storage on hard disk click on and specify a file name and an empty folder.
5. Now click on **Start** to create the file structure or DVD. First of all, you will be presented with a List Dialog displaying the current working steps for creation of the file structure.

   Further steps after selecting **Write DVD...**

Info When you use the Writer Engine for the first time you will be requested to install a driver. Click **OK** and, in Windows Vista, answer any further questions by clicking **Allow** or **Install driver software anyway**.

6. After preparing the data dialog **Write CD/DVD** appears. Insert a suitable blank DVD in your writer and wait until the writer has detected the blank.



7. Click **Start**. The DVD is now being written, while the progress is displayed in a dialog box.
8. After completion, the writer ejects the DVD. Remove it, click **Terminate** and **OK**.

Info

- If a message appears saying that the video file could not be added, the video may not correspond to the DVD standard. Make sure to use one of the DVD presets **PAL DVD** or **NTSC DVD** for creation of MPEG 2 videos.
- When creating a DVD or an ISO image, huge files will be buffered in the Wings Platinum **TMP** folder. Make sure that about a storage capacity of 10 GB are available on the corresponding drive (which is usually drive C:). If necessary change the location of the **TMP** folder. See **Options** &endash; **Global Options** &endash; **Save**.

A fast way to produce your first video DVD

This topic will you show you a quick and easy way to produce a video DVD for playback of a show on a TV screen. However, if you have special demands, such as a selection menu for starting several shows or videos on a DVD you should refer to the following, more extensive topics:

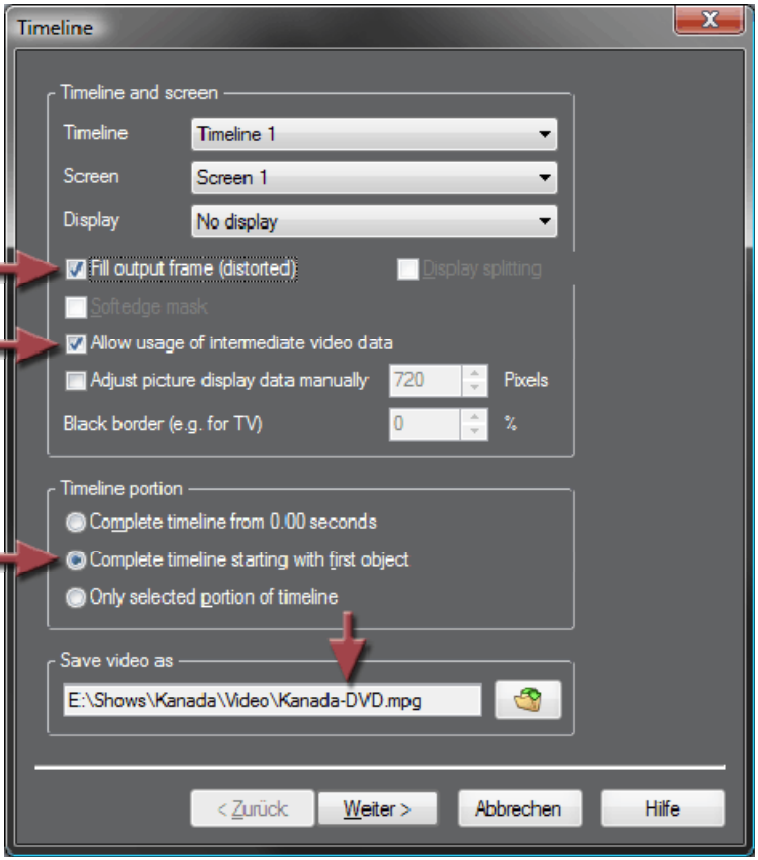
Producing an MPEG video

Producing a video DVD

Producing a video DVD with autoplay

First of all, produce the video in MPEG-2 format:

1. Open your show. The show screen must have a DVD-compatible aspect ratio, i.e. 16 : 9 or 4 : 3. If necessary change the aspect ratio by right-clicking the screen and selecting **Properties**. Save the modified show under a different name and check whether it runs without any problems with the new aspect ratio.
2. In the main menu, click **Output - MPEG-1/2 Video...**and the MPEG dialog will appear.
3. Enter a **Black border** of about **5** percent, otherwise the picture is cropped too much by the TV set. Detailed background information can be found under Border for playback on TV screens.
4. Under **Timeline portion** select **Complete timeline starting with first object** for the video to contain the entire show.
5. Click on and enter the required target directory and file name. Make sure that all settings are identical with those shown below:

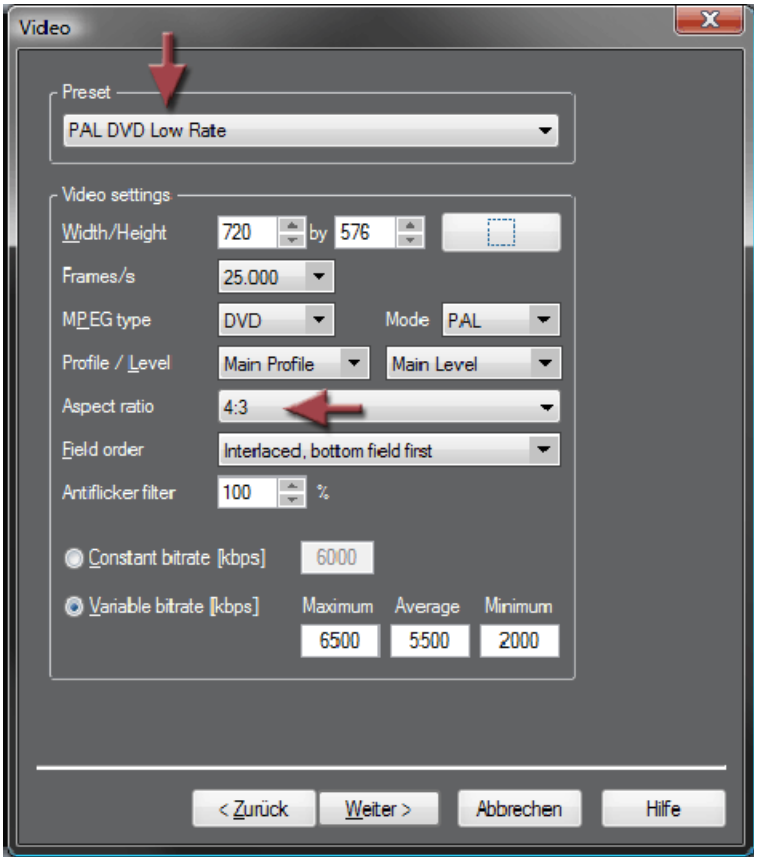


6. Click **Next** for the next page **Video** to appear.

7. Under **Preset** click on the arrow and select preset **PAL DVD Low Rate** (Europe) or **NTSC DVD Low Rate** (USA). Compared to PAL DVD or NTSC DVD, these presets are better compatible with simple DVD players.

8. For **Aspect ratio** choose the DVD output format **4 : 3** or **16 : 9**. in accordance with your screen.

9. Compare whether all settings have been made and then click **Further actions** on the left of the dialog.



10. Click Next four times until dialog **Further actions** appears. Select **No further actions**, followed by clicking **Start** in the bottom left corner for video creation to be started.

Depending on the length of the show this may take a while. Progress and cumulative speed at x-times real time are shown in the progress dialog. Once the video has been created, the standardized structure for the video DVD must be created and written onto DVD.

1. In the main menu, click **Output - Video DVD...**
2. Select **Single video with autoplay**, unless it has already been selected.

3. Under **Autoplay video** click on **Select file name** and enter the video you have just created.
4. Under **Video end action** choose **Pause** for the video to end as usual.
5. Under **Output options** choose **Write DVD** for direct DVD writing.

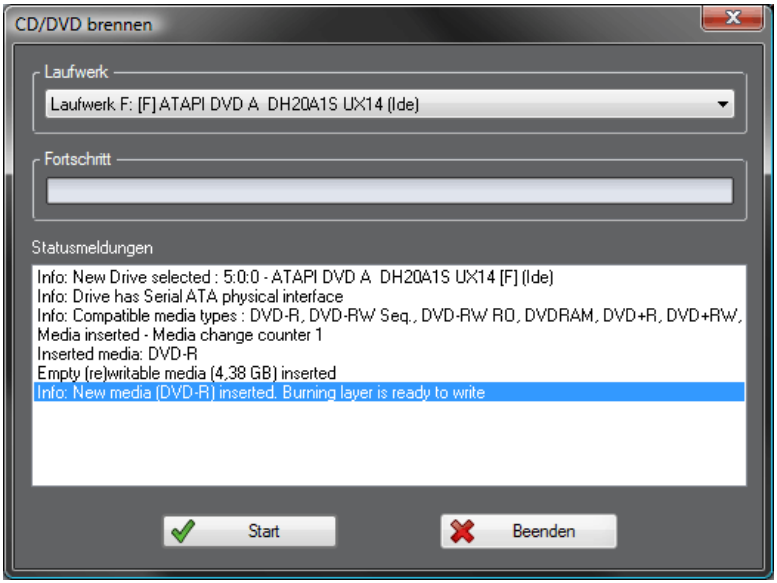
   Info If you do not want to write the DVD in Wings Platinum, choose **ISO image**. This ISO image can be written onto a DVD using external software. In such a case the writing process in Wings Platinum is completed after item 6. **Important remark for using external writing programs**.

   The created ISO file must be written onto the DVD as an 1 : 1 ISO image and by no means as a normal data DVD. A data DVD cannot be recognized or read by a DVD player.

6. Now click on **Start** to create the file structure or DVD. First of all, you will be presented with a list dialog displaying the current working steps for creation of the file structure.

   Info When you use the Writer Engine for the first time you will be requested to install a driver. Click **OK** and answer the queries under Windows Vista or Windows 7 by clicking **Allow** or **Install driver software anyway**.

7. After preparing the data dialog **Write CD/DVD** appears. Insert a suitable blank DVD in your writer and wait until the writer has detected the blank.



8. Click **Start**. DVD writing is started and the progress is displayed in a dialog box.
9. After completion, the writer ejects the DVD. Remove it, click **Terminate** and **OK**.

Output of H.264-video

This function requires the Pro License or higher. See *Licenses and functions*.

Once a show has been provided with digital pictures and videos, you can create an **H.264** video file from it in order to run it on any other computer or to create a Blu-ray disk. Output of H.264-videos requires a **Pro License** or higher. Wings Platinum uses codecs by **MainConcept**, which are one of the best codecs on the market.

This is how you proceed:

1. Open your show. If you have just finished editing your project, save the modifications.
2. In the main menu, click **Output** - **H.264-video...** and the following dialog will appear.
3. For standard shows the default settings for **Timeline**, **Screen** and **Display** can remain. You only need to choose the corresponding screens or timelines, if you have several screens and timelines in your project. For multidisplay projects and networked computers you can select one single display for output, which allows acceleration via hardware rendering.
4. Checkbox **Fill output frame** usually remains unchecked, to avoid distortion of screen or pictures. If the aspect ratios of screen and video to be produced differ, a black border is formed. To avoid black borders, check box **Fill Output Frame**. In this case the picture may be distorted as the full output format is forced.
5. For Multidisplay projects using a number of networked computers, you can have the **Softedge mask** additionally rendered into the picture. If applicable, place a checkmark next to this option.
6. Option **Allow usage of intermediate video data** can be enabled if you encounter problems, e.g. if H.264 videos cannot be rendered on the basis of original data. When this option is checked, intermediate video data are used for rendering, provided they are available for the videos in question.
7. Option **Adjust display data manually** should only be checked if you have important reasons to do so. It deactivates automatic creation of the corresponding display data for the chosen output size. A manual reduction of the display data size may, for instance, be necessary if there is not enough graphics memory for rendering the video and certain media cannot be displayed in the video.
8. For playback on a TV monitor, you can add a **black border**, otherwise the picture is not fully displayed but cropped. Detailed background information can be found under Border for playback on TV screens.

Settings for playback on TV sets

Enter a value of 5 % for **Black border** (corresponds to 2.5 % along

the periphery). This should be suitable for most TV sets.

Important: For a menu video no border must be specified, otherwise button and graphics are shifted towards each other.

Settings for HDAV

As HDAV is presented on a computer, you should not select a border. Therefore, enter a value of **0** % for **Black border**.

9. Select the portion to be rendered as video. The following options are available:
   - **Complete timeline from 00:00 seconds** ... just like the timeline, the video starts at zero seconds, so that a possible leader up to the first object is also included and finishes after the last object.
   - **Complete timeline starting with first object** ...the show starts before the first and finishes after the last object (recommended for standard videos).
   - **Only selected portion of timeline** ... the video will only contain the selected portion of the timeline. If no portion is highlighted this option cannot be selected. See ***Marking a portion***.
10. The target directory is your project folder, the preset filename is "Video 001". You can change these settings by clicking on and making the corresponding modifications. Finally, click **Next**.

Video

1. Start at **Frames/s** by entering the number of frames per second the video is to have. This setting is evaluated when choosing the preset. In Europe 25 **p**rogressive or 50 **i**nterlaced pictures per second are used. The US **NTSC** standard, on the other hand, uses a frame rate of 30p or 60i. For a presentation on a computer or a video projector you should choose 30 or 60 f/s.

2. Under **Preset** click on the arrow and select the required preset. Which preset you choose primarily depends on the further usage of the video or the medium.

- **HDTV 1280x720p** ...produces a 720p-standard video with progressive pictures of 1280 x 720 pixels and a constant data rate of 8,000 kb/s.
- **High Profile 1920x1080i** ... produces a full HD standard video with interlaced images of 1920 x 1080 pixels and a low variable data rate of 6,000...8,000 kb/s. **Important:** The frame rate must not exceed 30 f/s which corresponds to 60 interlaced images.
- **DVD** ... produces a video at standard quality for DVD player with interlaced images and a variable data rate of 3,000...8,000 kb/s. The image size depends on the frame rate or the TV standard, respectively. NTSC: 720 x 480 pixels and 30 f/s (60 interlaced pictures), PAL: 720 x 576 pixels und 25 f/s (50 interlaced pictures). **Important:** The frame rate must not exceed 30 f/s which corresponds to 60 interlaced images.
- **HD DVD** ... produces a full-HD-standard video for writing on HD DVDs. It uses interlaced pictures with 1920 x 1080 pixels and a high variable data rate of 20,000...24,000 kb/s. **Important:** The frame rate must not exceed 30 f/s which corresponds to 60 interlaced images.
- **Blu-ray Disc (Main Video)** ... produces a Full-HD-Standard video for writing on Blu-ray discs. It uses interlaced pictures of 1920 x 1080 pixels and a high variable data rate of 20,000...24,000 kB/s. **Important:** The frame rate must not exceed 29.97 f/s which corresponds to 59.94 interlaced pictures.
- **DivX** ... produces a Full-HD video at highest quality in accordance with a DivX profile. It uses progressive pictures with 1920 x 1080 pixels and a high variable data rate of 20,000...30,000 kb/s. **Important:** The frame rate for 1920 x 1080 pixels must not exceed 30 f/s, 1280 x 720 pixels allow a frame rate of up to 60 f/s.
- **AVCHD** ... produces an AVCHD-standard video for playback on the corresponding players or AVCHD Cams. It uses interlaced pictures of 1920 x 1080 pixels and a high variable data rate of 20,000...20,999 ? XXX kb/s. **Important:** The frame rate must not exceed 30 f/s which corresponds to 60 interlaced images.
- **Apple iPod** ... produces a small video for playback on an Apple iPod. It uses progressive pictures of 320 x 240 pixels and a low

variable data rate of 600...899 kb/s. **Important:** The frame rate must not exceed 30 f/s.

- **Apple iPod 640x480** ... produces a "large" video for playback on an Apple iPod. It uses progressive pictures of 640 x 480 pixels and a low variable data rate of 970...1.200 kb/s. **Important:** The frame rate must not exceed 30 f/s.
- **Adobe Flash (Low Resolution)** ... produces a small video for playback on Adobe Flash players, which is ideal for Internet purposes. It uses progressive pictures of 320 x 240 pixels and a very low variable data rate of 300...400 kb/s.
- **Adobe Flash (High Resolution)** ... produces a "large" video for playback on Adobe Flash players, which is ideal for Internet purposes. It uses progressive images of 640 x 480 pixels and a very low variable data rate of 670...872 kb/s.

Info For all presets the audio data are MPEG4 AAC-compressed at a data rate of 160 kb/s and 16 bits.

3. After choosing a preset, all the most important settings for the corresponding medium should be correct. Depending on the application you can still change the video settings. However, you should only do so for very important reasons:
   - **Width/height** ...enter the appropriate size of the video image. By clicking on you can **Assign standard screen output size**, which is appropriate for split videos and multidisplay shows. Please note that pixel values must be dividable by 4.
   - **Frames/s** ... here you have already entered the appropriate frame rate.
   - **Field coding** ... defines whether the video is to be based on **progressive** or **interlaced** pictures. Preferably select **Progressive** (full pictures) for playback on a computer monitor.
   - **Antiflicker filter** ... can be set to 100% for playback on old TV sets. This setting prevents flickering but the image becomes also somewhat softer and unsharp.

- **Bit rate [kbps]** ...for **Average** enter the aspired mean data rate and for **Maximum** the highest admissible date rate.. The data rate that can actually be achieved depends on the video contents.

4. After you have made all the settings, click **Next**.
5. You can plan actions to be carried out directly after video rendering.
    - **No further actions** ... nothing happens, the video file is stored on the hard disk for further use.
    - **Show Options dialog** ...will show you the Options dialog again at a later time and provides information about video creation.
    - **Start playback** .... starts the video with the player specified under **Options** - **Global Options** - **Media Editors**.
    - **Insert as presentation into the current project** .... creates a video track in Exclusive Mode in the current project using the new H.264 video. You can start it in Presentation Mode by pressing the **F5** key.
    - If you want to shut down and switch off the computer at the end of video rendering, you need to check **Afterwards** and select the corresponding action by clicking on .
6. Click on **Start** to begin video rendering. This may take up to several hours, depending on picture size and show length. Progress and cumulative speed at x-times real time are shown in the progress dialog.

Info A faulty configuration is detected by the MainConcept codec which recommends canceling the process. However, it makes sense to click on **Auto Correction** beforehand because the system will attempt to correct the values. Only if this fails should you terminate the process and try to find the reason for the problem. The message text provides some clues.

Output of Windows Media Videos

Once a show has been provided with digital pictures and videos and been completed, you can create a video in WMV format. Output of WMV videos, however, requires the Advanced License. Wings Platinum also supports WMV

multi-channel audio in 5.1 and 7.1 mode, provided the Pro License is installed.

Info

- An installation file for Windows Media codecs can be found on the Wings Platinum DVD in folder **Software\ Video Codecs\ Windows Media Runtime** or at the Microsoft website www.microsoft.com.
- Unless you have already done so, take the following preparatory steps:
- **Optimize the picture size** ...achieves better sharpness of the pictures and reduces the burden on the computer. See Optimizing display data for pictures.
- **Optimize the soundtrack level control** ...ensures lossless and correct audio playback. See Sound track peak level.

This is how you can produce a Windows Media Video of your show:

1. Open your show. If you have just finished editing your project, save the modifications.
2. In the main menu, click **Output** - **Windows Media Video...** for a dialog to pop up.
3. For standard shows the default settings for **Timeline** and **Screen** as well as **Display** can remain as they are. You only need to choose the corresponding screens or timelines, when you are using several screens and timelines for your project. For multidisplay projects with several networked PCs you can select one single display for output, which allows acceleration via hardware rendering.
4. Checkbox **Fill output frame** usually remains unchecked, to avoid distortion of screen or pictures. When the aspect ratios of screen and video to be produced differ, a black border is formed. To avoid black borders, check checkbox **Fill Output Frame**. In this case the picture may be distorted as the full output format is forced.
5. For Multidisplay projects using a number of networked computers, you can have the **softedge mask** additionally rendered into the picture. If applicable, place a checkmark next to this option.

6. Option **Allow usage of intermediate video data** can be enabled if you encounter problems, e.g. if H.264 videos cannot be rendered on the basis of original data. When this option is checked, intermediate video data are used for rendering, provided they are available for the videos in question.
7. Option **Adjust picture display data manually** should only be checked if you have important reasons to do so. It deactivates automatic creation of suitable display data for the chosen output size. A manual reduction of the display data size may, for instance, be necessary when there is not enough graphics memory for rendering the picture sequence and certain media are not displayed in the picture sequence.
8. If the video is to be presented on a monitor or video projector, leave the value for **Black border** at **0 %**. Only if you would like to present the video on a TV monitor, should you add a black border. Otherwise the picture is cropped. ...Show example. At **Black border** enter a value of 5 % (... corresponds to 2.5 % along the periphery) which should be suitable for most TV sets.
9. Select the portion to be rendered as video. The following options are available:
    - **Complete timeline from 0:00 seconds** ... Just like the timeline, the show starts at zero seconds, so that a possible trailer up to the first object is also included. It finishes after the last object (... recommended for normal presentation CDs).
    - **Complete timeline starting with first object** ... The show starts before the first and finishes after the last object. (... recommended for standard videos)
    - **Only selected portion of timeline** ...Only the portion marked in the timeline is considered. When no portion is marked, this option is not available....Marking a portion.
10. The target directory is your project folder, the preset filename is "Video 001". You can change these settings by clicking on and making the corresponding alterations. Finally, click **Next**.

Video

Next to **Profile** click on the arrow and select the required profile. Which preset you choose primarily depends on the further usage of the video or playback (PC, Internet, etc.). In the field below you will find a few remarks on the profile after selecting it.

Profiles for stereo sound track

- **HDAV - CBR - 44,1 kHz Stereo** ...uses a constant data rate. The value next to **Quality** should be **100** (maximum) for a highest possible picture quality. This however, requires more power for playback than with lower values. Moreover, good quality requires the data rate to be adapted to picture size and frame rate. Examples: For 1400 x 1050 pixels and 60 f/s you choose a **Bitrate** of up to 20000 kbps (maximum), while for 1024 x 768 pixels and 30 f/s a **Bitrate** of 8000 kbps will suffice. For Internet applications you can enter a much lower data rate although this also means inferior picture quality. For sound, CD quality is used, i.e. 16 bits and a sampling rate of 44.1 kHz.
- **HDAV - CBR - 48 kHz Stereo** .....as above but with a sound of 16 bits and a sampling rate of 48 kHz. Choose this preset if most audio files are already available in this format, e.g. DV videos or DVDs.
- **HDAV - VBR - 44,1 kHz Stereo** ...uses a variable data rate. The value at **Quality** affects the picture quality and, indirectly, the data rate. The higher the value, the better the quality, and the higher the data rate. We recommend values between 80 and 100 (1 = worst, 100 = best quality). For sound, CD quality is used, i.e. 16 bits and a sampling rate of 44.1 kHz.
- **HDAV - VBR - 48 kHz Stereo** ...as above but with a sound of 16 bits and a sampling rate of 48 kHz. Choose this preset if most audio files are already available in this format, e.g. DV videos or DVDs.

Profiles for surround sound track 5.1 or 7.1

- **HDAV - CBR - 44.1 kHz 5.1 Channel**...uses a constant data rate. The value next to **Quality** should be **100**

(maximum) for a highest possible picture quality. This however, requires more power for playback than with lower values. Moreover, good quality requires the data rate to be adapted to picture size and frame rate. Examples: For 1400 x 1050 pixels and 60 f/s you choose a **Bitrate** of up to 20000 kbps (maximum), while for 1024 x 768 pixels and 30 f/s a **Bitrate** of 8000 kbps will suffice. For Internet applications you can enter a much lower data rate although this also means inferior picture quality. For sound, CD quality is used, i.e. 16 bits and a sampling rate of 44.1 kHz.

The sound is processed at 24 bits and a sampling rate of 44.1 kHz. Channel assignment within the project for WMV multi-channel output must always be in accordance with the following:

1L⇢ front left

1R⇢ front right

2L⇢ center

2R⇢ LFE (Subwoofer)

3L⇢ back left

3R⇢ back right

4L⇢ LC for 7.1 cinema or SL for 7.1 music

4R⇢ RC for 7.1 cinema or SR for 7.1 music

- **HDAV - CBR - 48 kHz 5.1 Channel** .....as above but with a sound of 24 bits and a sampling rate of 48 kHz. Choose this preset if most audio files are already available at 48 kHz sampling rate.
- **HDAV - VBR - 48 kHz 7.1 Channel** ...as above but with a sound of 7.1 and a sampling rate of 24 bits / 48 bits.

1. After selecting the profile you need to enter **Width** and **Height** for the corresponding video picture size. By clicking on you can **Assign standard screen output size**, which is appropriate for split vi-

deos and multidisplay shows. Please note that pixel values must be dividable by 4.

2. The appropriate frame rate for playback from the computer is 25, 30 or 60 **frames/s**. The appropriate frame rate also depends on the videos integrated in the show. See also Media integration. The best results can be achieved at 60 f/s, which has a particularly positive effect on fast moving picture elements but which, on the other hand, requires more computing power for playback.
3. If you have made the corresponding setting, click **Next**.

Further actions

1. You can plan actions to be carried out directly after video rendering:
   - **No further actions** ...nothing happens, the MPEG file is stored on the hard disk for further use.
   - **Show options dialog** ...will show you the Options dialog again at a later time and provides information about video creation.
   - Start playback ...starts the video with the player specified under Options - Global Options - Media Editors.
   - **Insert as presentation into the current project** ...creates a video track in Exclusive Mode (...requires the Advanced License or up) in the current project containing the new video. You can start it in presentation mode by pressing the **F5** key.
   - If you want to shut down and switch off the computer at the end of video rendering, you need to check **Afterwards** and select the corresponding action by clicking on .
2. Click on **Start** to begin video rendering. This may take up to several hours, depending on picture size and show length. Progress and cumulative speed at x-times real time can be recognized in the progress dialog.

Info

- Display of the images on the screen at an incorrect aspect ratio during rendering does not mean that the outcome of rendering calculation will be faulty, provided the screen is correctly configured.

- When you terminate video rendering before it is finished, the file is stored on the hard disk though and the completed section can also be played back.
- In rendering the picture sequence the active mix grouping is also considered. Therefore, you need to call up the required mix preset or define the corresponding standard mix grouping in the timeline properties before rendering. See also Presenting with mix groups.
- If you want to create videos from shows with screen field movements, panning and zoom movements, you should choose a high frame frequency, e.g. 60 f/s. See Tips for video rendering. Moreover, excessively sharpened pictures or pictures with high-contrast structures may result in a flickering effect or interference pattern during the movement. In this case you should reduce sharpening of the picture and possibly change the speed of movement or zoom.
- High-resolution videos with fast moving picture elements make high demands on the data projector signal processing system. For production you should use a tube monitor for reference purposes. Being an analog device it is able to display the video signals virtually without any delay – which is not true for LCD monitors. This is the only way to find out whether what you have produced with Wings Platinum is played without any jerks on your computer. See also Valuable information about data projectors.
- You can produce simple CDs or DVDs which autoplay the video after being inserted in the drive. See CD/DVD-ROM Autoplay.

MPEG 2, H.264 or WMV format?

The Starter License already allows output of videos in MPEG 2 or WMV format. Videos with H.264 codec can only be output with the Pro License. The question is "What are the advantages and disadvantages of these formats?". WMV is the latest format - it has been developed by Microsoft and is based on MPEG 4, but is not yet supported by any hardware and can, therefore, only replace MPEG-2 and H.264 in special cases.

MPEG 2 format

Advantages

- Widely used standard and used all over the world.
- Widely supported by hardware such as DVD players, professional MPEG-2 HD players and the new HD video cameras (HDV standard)
- Good quality, excellent quality only at high data rates
- Features relatively short rendering times

Disadvantages

- Decoders are not for free and are therefore not available on every computer.
- High quality requires a very high data rate and correspondingly large video files.
- Resolution of details is lower than with H.264; moving details result much earlier in blockiness.

H.264 Format

Advantages

- Standard that is valid and used all over the world.
- Widely supported by hardware such as Blue-ray players and the new AVCHD video cameras (AVHDV standard)
- Very good quality even at a relatively low data rate.
- Relatively short rendering times

Disadvantages

- Decoders must usually be purchased and are therefore not available on every computer.
- Required performance for playback on older computers is high; the MainConcept H.264 decoder works much more efficiently on new quad core computers.
- Due to the very long keyframe interval, editing (cutting, etc.) of AVCHD videos is not easy.

WMV format

Advantages

- A free decoder is available on nearly all Windows computer or can be installed.
- Good quality at a relatively low data rate (twice or three times lower than for MPEG 2)
- Quality is higher than for MPEG 2.

Disadvantages

- The rendering time is two to five times longer than for MPEG 2.
- Currently, there is hardly any hardware (DVD players, etc.) that supports it.
- For still pictures which are not moving or animated, the quality drops with a lower data rate.
- The long keyframe interval reduces the locating speed, which has a negative effect e.g. on cutting.

Border for playback on TV screens

TV sets crop the picture by 5 to 15 %, which means that only a section of the actual video picture is visible. Unfortunately, cropping is sometimes unsymmetrical and frequently depends on the picture content for older or cheaper TV sets. Darker motifs are cropped to a lesser extent than brighter ones. If possible, you should take all this into consideration when designing the show and, for instance, position title bars at a sufficient distance from the edges.

The picture in the screen window.

Picture trimmed by the TV screen.

Correction by adding a black border in the video.

Wings Platinum allows you to add a black border to the video. It should be smaller than 5 % so that it does not show on the TV screen during playback. If the picture contents are more important to you and a black border on the TV monitor is acceptable to you, you should choose 10 %. ..See also Output of AVI videos, *Output of Windows Media Video* and Output of MPEG videos.

CD/DVD ROM Autoplay

Although Wings Platinum does not feature any direct function for producing autoplay video CDs, there is some small software which allows you to produce autoplay CD/DVDs.

- This requires some files to be written onto CD or DVD in addition to the video files. These files and a short instruction (***Video AutoPlay.txt***) can be found in the Wings Platinum program folder, which is usually located at **...\My Documents\AV Stumpfl\Wings Platinum\Tools\Video Autoplay.** Use the files in those folders that correspond to your video, i.e. **AVI**, **MPG, MPEG** or **WMV** (the extension is the decisive factor).

With an Autoplay CD, the video is started automatically upon inserting the CD/DVD into the corresponding drive. Mind that the Autoplay function for the drive must not be disabled.

Valuable information about DVD systems

DVD standard has been around for some time, but in no other area have producers and syndicates managed to create such a lot of incompatible and competing systems and formats. That doesn't make it any easier either for us as software producer or for you as user. We would like to provide a few basic tips on to how to deal with this situation and on the usage of video DVDs.

DVD writer

Basically, every type of functional DVD writer installed in your computer will do for production of video DVDs. Depending on your type of writer you will have to decide on a certain type of blank DVDs, e.g. DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM etc. Of course, the chosen format should be compatible with the DVD player. But even the different reflectivity of the various types of blank DVDs may be blamed for the fact that some video DVD can be read by one player but not by another.

In addition to compatibility between writer and player, some practical considerations may influence the format you choose. Finalizing DVD-Rs or -RWs, for instance, takes about three minutes, while it's only a few seconds for DVD+Rs or +RWs.

To those who are thinking of buying a new DVD writer, we recommend systems that can write on all sorts of blank DVDs and formats. In case of incompatibility problems you will then be able to simply use a different blank DVD or a different format.

DVD player as stand-alone unit

The DVD players to be connected to your TV set or your home cinema system are only compatible with certain formats, which are usually listed in the technical documentation. Older units, very often cannot read "homemade" DVDs. We have found that simple, low-cost no name players frequently offer higher compatibility than expensive branded equipment. As mentioned above, it may be quite useful to try out a different DVD format if you have problems reading a DVD.

Some DVD player have problems handling data rates of nearly 10 MBit/s and tend to slow down during playback. In this case you should reduce the variable data rate of the DVD presets, e.g. to 6500/5000/2500. This may cause a slight drop in quality but may help your DVD player to play the DVD without intermissions.

Please note that video CDs are only rarely recognized or played back without any problems by DVD players. So you'd better write the data of a video DVD onto a DVD.

DVD player software

For video DVD playback on computer you require a DVD ROM drive and DVD player software which installs a corresponding MPEG 2 decoder in the sys-

tem. This player does not only allow you to play DVDs but also high-resolution MPEG 2 videos.

Installing several DVD players on one computer may cause problems. In this case several MPEG 2 decoders are installed in the system and a player may select the least suitable. You should therefore try to specify a decoder via the Player Options. If this is not possible, uninstall any decoder that does not work properly.

Creating picture sequences

A show or parts of a show can be exported as a number of consecutive pictures. This function is very useful for lossless editing in other programs or for producing "screen shots" of certain project scenes.

This is how you proceed:

Timeline

1. Open your show.
2. In the main menu, click **Output** - **Picture Sequence**...
3. For normal shows the default settings for **Timeline** and **Screen** as well as **Display** can remain as they are. You only need to choose the corresponding screens or timelines, when you are using several screens and timelines for your project. For multidisplay projects you can select one single display for output, which allows acceleration via hardware rendering.
4. is a feature that is only interesting for multidisplay productions with networked PCs.
5. For Multidisplay projects using a number of networked computers, you can have the **softedge mask** additionally rendered into the picture. If applicable, place a checkmark next to this option.
6. Option **Allow usage of intermediate video data** can be enabled if you encounter problems, e.g. if H.264 videos cannot be rendered on the basis of original data. When this option is checked, intermediate video data are used for rendering, provided they are available for the videos in question.

7. Option **Adjust picture display data manually** should only be checked if you have important reasons to do so. It deactivates automatic creation of suitable display data for the chosen output size. A manual reduction of the display data size may, for instance, be necessary when there is not enough graphics memory for rendering the picture sequence and certain media are not displayed in the picture sequence.

8. If you want to output the picture sequence as a video at a later time, you should **consider TV-specific features**.

   When the screen aspect ratio and the video output size differ, the picture is provided with a black border, so as to maintain the proportions of the picture. If you want to avoid black borders, you can stretch the picture to full size. To do so, check checkbox for **Fill Output Frame**. In this case the picture may be distorted as the full output format is forced.

   If you would like to present the video on a TV monitor, you should add a black border. Otherwise the picture is cropped. ...Show example. Under **Black border** enter a value of 5 % (... corresponds to 2.5 % along the periphery) which should be suitable for most TV sets.

9. Select the portion to be output as picture sequence. The following options are available:

   - **Complete timeline from 0:00 seconds** ... Just like the timeline, the show starts at zero seconds, so that a possible trailer up to the first object is also included. It finishes after the last object.
   - **Complete timeline starting with first object** ...The show starts before the first and finishes after the last object. (... recommended for standard videos)
   - **Only selected portion of timeline** ...Only the portion marked in the timeline is considered. When no portion is marked, this option is not available....Marking a portion.

10. The target directory is your project folder, the preset filename is "Video 001". For picture sequence output you should select an empty folder. After all, it's usually a large number of pictures that is output. Click on and create a new folder, if applicable. Finally, click **Next**.

Info If you want to output one picture as **Screen Shot** only, you need to highlight the corresponding portion in the timeline (via track marker) and place a checkmark next to **Save the first frame only as single picture**. In this case, the screen content visible on the screen at the track marker beginning will be output.

Picture sequence

1. Click on the arrow and select the corresponding **File format**. You may have to alter the compression for **JPEG**.
2. For **Width** and **Height** enter the corresponding picture size for the picture sequence. If you have entered a screen output size in the Wizard for Mixed Media Projects you can transfer the values by clicking on **Assign standard screen output size**.

   Info When the aspect ratios of screen and picture sequence output size differ, black borders are created. If, in this case, the output frame is to be filled by distorting the picture, you click checkbox **Fill Output Frame** on page **Timeline**.
3. Enter the number of frames to be output per second.
4. Under **Field order** you should choose **Progressive (full pictures)** for normal applications. If you want to further edit the pictures in a video system it may be useful to select a particular way the lines of the interlaced pictures are to be created. For interlaced pictures choose **Interlaced, bottom field first**. A setting of **Interlaced, top field first** is only necessary when the device evaluates the interlaced pictures in a different order.
5. Under **Anti-flicker filter** choose zero, i.e. deactivate it, to achieve a high image quality. If, however, you want to optimise the pictures for playback on a TV screen you can reduce interline flicker via the **anti-flicker filter**. It usually affects horizontal, high-contrast image details. According to the image content, choose 100 % or less. Please bear in mind that this may result in reduced sharpness, which means that you may have to compromise.
6. Click **Next**.

Further actions

1. You can plan actions to be carried out directly after video rendering.
    - No further actions ...nothing happens, the picture files are stored on the hard disk for further use.
    - Show Options dialog ...will show you the Options dialog again at a later time and provides information about settings.
2. Click on **Start** to start creation of the picture sequence. This may take a while, depending on picture size and sequence length. Progress and cumulative speed at x-times real time can be recognized in the progress dialog.

Info In rendering the picture sequence the active mix grouping is also considered. Therefore, you need to call up the required mix preset or define the corresponding standard mix grouping in the timeline properties before rendering. See also Presenting with mix groups.

See also

Adding a sequence of pictures to a video track

Tips for video rendering

The right codec

For video rendering choosing the right video codec (**co**mpressor / **de**compressor) is a decisive factor. It reduces the data volume to a tolerable amount, but also increases the rendering period and reduces the quality compared to the original picture. This can become a vicious circle, where compromise is the only way out!

Windows is usually supplied with a number of codecs. However, it is frequently useful to install further codecs, e.g. **DivX**, which is very fast in rendering, produces low data rates and offers satisfactory picture quality. The

latest version can be found on the Internet at www.divx.com/divx. **Intel Indeo 5.10** renders quite sufficient quality but is considered to be outdated.

For superior video quality we recommend the **MPEG 2 codec** by MainConcept or the WMV codec by Microsoft which is based on MPEG-4 and allows good quality at a low data rate. See also MPEG-2, H.264 or WMV format?

Parameters for video rendering

Picture size

A larger picture requires longer rendering time and, consequently, produces a higher data rate. Moreover, playback requires increased computer capacity and a data source which maintains a constant data rate. The latter is particularly important for Internet applications. For most codecs, e.g. DivX and Intel Indeo 5.10 and WMV, pixels for height and width must be dividable by 4. This means that a picture with a resolution of 750 x 500 pixels would not be admissible, but only one with a resolution of 752 x 496 pixels. Below you can find out about the dependencies between required computer performance, processor clock and picture size for a video of 25 f/s produced with the DivX codec:

Processor clock 500 MHz ➔ 592 x 400 pixels

Processor clock 800 MHz ➔ 912 x 608 pixels

Processor clock 1200 MHz ➔ 1024 x 672 pixels

Processor clock 1800 MHz ➔ 1280 x 848 pixels

Processor clock 2500 MHz ➔ 1400 x 932 Pixel

In accordance with the computer configuration, sometimes even larger, but sometimes even only smaller picture sizes are possible. This depends on a variety of factors, as you will notice.

Frame rate

The frame rate has a direct effect on rendering duration, data rate and computing speed required for playback. Too low a frame rate results in jerky dissolves or movements. For a dissolve show with still images 20 to 30 frames/second would be a good solution. For shows containing screen field

movements, panning or zoom movements via high-resolution still images, you should choose a minimum of 30 frames per second or possibly 60 frames/s for fast movements - modern WMV codecs and fast computers easily come up to this task. When videos are to be integrated, too, it is a good idea to choose the original or double the original frame rate, i.e. 25 or 50 frames/s for integrated PAL videos. See also Media integration.

Key Frames

A video, just like a film, consists of a number of consecutive pictures. When a video is compressed, for some pictures only the keyframes (also called I-frames) are saved instead of the complete pictures. For all the other pictures, the codec only saves the differences compared to the previous picture, which has a favorable effect on the data rate. When there are longer intervals between the keyframes, the video is difficult to scroll and you may have problems starting it from any possible location. The default setting of the DivX saves one keyframe for every 300 pictures, which corresponds to an interval of 12 seconds at 25 frames/second. This has an unfavorable effect on scrolling, but allows a low data rate. In DV videos, on the other hand, each picture is one frame, i.e. it virtually consists of keyframes only. For MPEG-2, the keyframe interval is usually 15 pictures.

Data rate / compression quality

As explained above, the data rate depends on a variety of factors. Another one of these factors is the compression quality, which can be adjusted for some codecs. Avoid high values as the improvements in quality will no longer be visible and rendering will take unnecessarily long. Other codecs feature a data rate adjustment, which in turn has an influence on the compression when picture size and frame rate are predefined. The data rate actually produced also depends on the show (type of media, number and type of dissolves, etc.) and can not be specified exactly in advance. In DV videos, on the other hand, each picture is one frame, i.e. it virtually consists of keyframes only.

Keep experimenting

This is particularly true for video rendering. Usually, presets are a good basis for your own experiments. Start with shorter videos and smaller pictu-

re sizes and try out various settings until you have found the optimum solution. Choosing too large a picture size to start with will cause jerky playback and you may not be able to find out what parameter settings cause this. You may also have to consider that somebody else's playback computer may not be as powerful as your own computer. Do not push your computer to its limits. You may need some "spare capacity" during a presentation to avoid jerky display and intermittent sound and this might wreck your show.

By the way: Windows 2000/XP features a task manager which provides information on the system resources (open by right-clicking the task bar). This may come in handy for video playback tests. It will tell you about the available resources of your computer during playback. What is also important is the performance of the graphics card and the memory throughput. Tab "System Resources", however, does not provide sufficient information on this. Notebooks in particular may have distinct weaknesses in that respect ... See also Computer configuration and Optimizing the presentation PC.

Well, have fun Producing your video!

Producing a CF card

Once you have finished programming your show and want to play back your project using a Stumpfl MP3 unit, e.g. SD Event Control, Event 2x4 or SC Master, you need to generate the data to be transferred onto CompactFlash Card (called CF Card for short) first. There are two steps to produce a CF Card to be used as a presentation medium:

1. **Producing the presentation data**and saving them in a card directory on your hard disk. In doing so, the data including control information are generated and the sound track is compressed in accordance with the MP3-procedure. More about MP3 compression
2. **Copying the presentation data onto a CF Card**. The presentation data of all shows to be copied onto CF Card must already be available in the same card directory during show production. One card directory always stands for the contents of one CF card, i.e. it is the inverted image of a CF card on the hard disk.

Info

- Important: In order to make full use of all the functions of the latest Wings Platinum version, you need to get hold of the current **firmware version** for Stumpfl devices. To find out about the corresponding firmware version for your unit, refer to Documentation Status.
- In the project, all devices and objects required for presentation need to be enabled. Disabled tracks, objects and devices will not be considered when creating presentation data.

Generating data for the CF Card

If you haven't checked the peak level for the whole soundtrack yet, do so now. Audio levels above zero dB cannot be output. ...This is how you check the soundtrack peak level.

This is how it is done:

1. Load the project you want to generate presentation data for and click **Output** – **Create FlashCard...** in the main menu.

   Info Before doing that, you need to deactivate those marker tracks which contain superfluous position markers, e.g. for a timing pattern. Otherwise the high number of position markers will prevent you from navigating properly on the CF card.

2. Under **Card directories** mark the card directory you want the new data to be copied into. Or create a new card directory, by clicking .

3. In field **Show name** enter a new name for your show which is not used by any other show in the selected card directory.. The maximum number of characters is eight. No special characters are allowed. Now click on **Create single show**.

4. Select the required timeline under **Timeline and Portion**. The preset **Timeline1** only needs to be changed when there are several timelines. See also Generating CF Card data for several timelines.

5. Select the project portion for which presentation data are to be generated. The following options are available:

- Complete timeline from 0:00 seconds ... Just like the timeline, the show starts at zero seconds, so that a possible trailer up to the first object is also included. It finishes after the last object
- Complete timeline starting with first object ...The show starts before the first and finishes after the last object. (... recommended for CF Cards)
- Only selected portion of timeline ...Only the portion marked in the timeline is considered. When no portion is marked, this option is not available....Marking a portion.

6. If your show is to be saved with a timecode offset (...deviating from the timeline in Wings Platinum), place a checkmark next to **Use timecode offset** and enter the time delay. This may be necessary if a show is to be run with a time shift in sync with external timecode.
7. Under **Control data on flashcard** select the device port the control data of which are to be used. Normally, you can leave the settings. Alterations may only be necessary when there are several device ports being used. Now click on **Start**.
8. Select an MP3 encoder (**Lame DLL** recommended) and a **data rate**. Usually, 128 kbit/s should be sufficient for CD quality. If you are not satisfied with the quality try to improve the result by choosing a higher data rate.

If no MP3 Encoder can be selected.

...you need to first install an MP3 encoder on your computer. If you want to find out how this is done, click here.

...you need to first install an MP3 encoder on your computer. If you want to find out how this is done, click here.

Difference between **Encoder (direct)** and **Encoder (via wave file)**.

The encoders listed under **Encoder (direct)** will generate MP3 files without saving any temporary data on hard disk. **Encoders (via wave file)** will temporarily save the sound track as wave file on the hard disk, use it to produce MP3 files and finally delete the wave file again. You only need to make sure that the drive used for storage of temporary files has enough memory capacity.

If necessary change this folder under **Options** – **Global Options** – **Save**.

9. Click on **OK** and the presentation data will be generated.

Info

- A CF Card can normally hold up to 120 different shows. If you prepare applications requiring a high number of shows on CF Card (e.g. Show control applications) in a project with on a number of different timelines, you can have the corresponding presentation data created automatically. See Generating CF Card data for several timelines.
- In case you require more than 120 shows for a project, you can enabled this feature under **Options** - **Project Options** - **SC Net**.
- While creating the presentation data, several windows will appear, in accordance with the MP3 encoder used, and disappear again.
- When presentation data have already been generated for a project, any alterations to the picture objects can easily be updated without renewed sound track computation: Simply mark the corresponding show in the FlashCard Dialog Box and check **Update show file only (without audio files)** followed by clicking **Create individual show.**
- Only change the contents of card directories via the FlashCard dialog in Wings Platinum. When using Windows Explorer to do so, pieces of information relevant for the SD Event Control or SC MASTER may be lost and you might end up with problems running the shows.
- Usually, the default folder for FlashCard files is automatically created in the program folder when installing Wings Platinum. It is, however, also possible to define a special location globally for the FlashCard folder under **Options** – **Project Options** – **SC Net** or under **Options** – **Project Options** – Default folders for a specific project.
- You can transfer old Wings 4.x and new Wings Platinum shows together onto a CF card, if you specify the same folder for Event Control data in both programs. In the FlashCard dialog of both programs, all presentation data of your shows will then be visible. Change the location of the FlashCard folder under **Options** - **Global Options** - **Output**.

Copying the show data onto a CF Card

1. In the main menu, click **Output** – **Flash Card...**
2. Insert the CF Card into the CF Card drive of your computer.
3. Under **Card directories** highlight the card directory you want copied onto CF Card and click **Copy directory to flashcard**.
4. Select the letter for your CF Card drive. If you don't remember, look it up in Windows Explorer.
5. Click on **OK**. The data are then transferred onto the CF card.

Info

- **Important:** In order to make full use of all the functions of the latest Wings Platinum version, you need to get hold of the current **firmware version** for Stumpfl devices. For information on the corresponding firmware version for your unit, refer to *Documentation Status*.
- If you transfer a card directory onto the CF card, the existing files on this CF card will be erased!
- The situation is different for updating a show or a directory located on the CF Card: In this case, only the altered or new files are transferred. This is a great advantage for editing shows as data transfer and transfer time are reduced to the absolutely necessary.
- Should there be an error during the file transfer, the CF card must be formatted (... exclusively using the FAT file system and not FAT 32!) and the presentation data be transferred again. A failure to do so may result in problems while playing back the shows.

FlashCard Dialog

The FlashCard Dialog is the central tool for generating, transferring onto CF Card and managing presentation data.

The **left field** contains a list of **available card directories**. One directory always stands for the contents of one CF card, i.e. it is the inverted image of a CF card on the hard disk.

....generates a new card directory.

...copies a card directory onto CF Card.

...deletes a card directory and its contents.

The **centre field** lists the **shows** contained in the marked card directory. The number in front of the show refers to its position on the CF Card. The plus sign indicates that the required data for the show are available. A question mark would indicate that the data are missing. At the top, next to **All** you can see the volume of data contained in the marked card directory.

...deletes a show and the pertaining MP3 files

The **field on the right** lists all **MP3 compressed audio files** used in the marked show. The plus sign indicates that the required data for the show are available. A question mark would indicate that the data are missing.

...plays back an MP3 file

Double-click the show name or MP3 files to open a **Properties Dialog** where you can specify the names and other characteristics for shows ...More about Show Properties

By checking **Update show file only** you can update the display data without having to recompute the sound track. This saves a lot of time. To do so, mark the show to be updated in the centre column and click **Create single show**.

Attention! Use option **Update show file only (without audio files)** only if you have not made any changes to the sound track! Otherwise show playback may no longer be in sync.

There are two ways of creating presentation data:

- **Create single show** ... for a show created in one timeline containing all program parts. See Generating presentation data for CF card.
- **Create complete project** ...for projects containing several timelines with different program parts which you want to automatically combine into presentation data in one go. See Generating CF Card data for several timelines.

Show Properties

In this dialog you can assign certain control properties or audio functions, which SD Event control or SD Master evaluates during show presentation. Open this dialog by double-clicking the show name (central window in the FlashCard dialog).

Open the **Show Properties** dialog by double-clicking a show in the **FlashCard dialog**.

- The show name can be changed in field **Name**. This name, which is displayed on the SD Event Control or SC Master, must only consist of 8 characters. No special characters are allowed. Please bear in mind that this name is always displayed in full in capital letters on the SC Master display.
- Field **Position** defines the position of the show on the CF Card. This is the number you can enter later on via the IR remote control to start the show.
- By activating **Autostart**, the show is automatically started after powering up SD Event Control or SC Master. See also Example Automatic show start from CF Card.

- Click on the arrow in field **Audio Routing** to see the selectable settings. To find out about the suitable settings for your device refer to the corresponding manuals, e.g. SD Event Control Pro or SC Master 4M.
- In field **Additional data signal** you can specify whether another data signal is to be output at CUE-IN in addition to the DLC signal. If you want to synchronize further multi-media components via timecode, select **Timecode** and the corresponding frame rate. More information can be found in the manual for your device. The widely used control signal **MateTrac**, which is well advanced in years, cannot be used with Wings Platinum. More information can be found in the manual for your device.
- Under **Create Start Status** you can lay down whether the start status of the show is to be transferred to the control system or whether playback is to start on the basis of the individual status of the control system. This parameter is only relevant for DLC signals. For normal shows the checkbox should be checked. However, it should be unchecked, if jumps from one show to another are included. See also Show actions.
- Click **OK** to save all properties within your show.

Generating CF Card data for several timelines

For projects containing several timelines all data for storage on CF Card can be created in one go. Lets assume you want to implement a show control application via an SC Master and need a number of shows on CF card to be run interactively and in parallel. In this case you can prepare each of these shows in a separate timeline within one project and then create the CF card data for all shows by one mouse-click only. In principle, this is identical to generating the CF card data for one timeline. If you have never created CF card data before, click here for some basic information. Automatic generation of data for several shows, however, requires a few preparatory steps.

First of all, create every show or every control sequence in a separate timeline and define a few parameters in the **Timeline Properties** for creation of CF card data:

1. In the Media Pool click category **Timelines**. Right-click the corresponding timeline and select **Properties**. As an alternative, you can

also open the Properties Dialog by double-clicking while pressing the **Ctrl** key.

2. Under **Automated output to FlashCard** enter the corresponding name of the show on CF card. The maximum number of characters is 8; no special characters are allowed. Please bear in mind that this name is always displayed in full in capital letters on the SC Master display.

3. For **Show number** enter the position of the show within the list of shows on the CF Card. A fixed show number is relevant, for example, for starting shows via command markers. If you leave the default setting of **zero**, the numbers are assigned automatically. The order of shows in the FlashCard Editor can also be changed at a later time.

4. For **Control data** select the device port the control data of which are to be evaluated and saved. If during playback, the show is to be synced up with timecode by the SC Master, you need to add a checkmark for **Synchronization to external timecode.**

5. Now select the timeline portion for which presentation data are to be generated. The following options are available:

   - **Complete timeline from 0:00 seconds** ... Just like the timeline, the show starts at zero seconds, so that a possible trailer up to the first object is also included. It finishes after the last object
   - **Complete timeline starting with first object** ...The show starts before the first and finishes after the last object. (... recommended for CF Cards)
   - **Only selected portion of timeline** ...Only the portion marked in the timeline is considered. When no portion is marked, this option is not available....Marking a portion.

After completing the dialog by pressing **OK**, the information you have just entered is displayed in the Media Pool **FlashCard** column. Proceed by making the corresponding settings for the other timelines.

Attention! Before you have the presentation data rendered, you should check the audio level of the various soundtracks and ensure optimum settings. As function **Output &endash; Audio Peak Search** uses the master control for normalizing, which affects all timelines, you should not click button **Normalize** but only note down the correction value. Make the correction by marking all sound ob-

jects in a timeline, right-clicking one of the sound objects and selecting **Special Functions** &endash; **Change volume**. See also Adjusting the volume for several objects.

6. Once the audio level is correct, you can create the presentation data. Open the FlashCard Editor by clicking **Output** &endash; **FlashCard...** in the main menu.

7. Create a new card directory, by clicking or highlight the card directory under **Card directories** that you want the new data to be copied into.

8. Now click **Create complete project.** Select the device port whose control data are to be used for CF card data generation and click **OK**.

9. Select an MP3 encoder (...**Lame DLL** is recommended) as well as the corresponding data rate. **If no MP3 encoder can be selected**.

   ...you need to install an MP3 encoder on your computer first. Click here to find out how this is done.

10. Click **OK** to start generating the CF card data for all the timelines linked up with the corresponding device port chosen in the Timeline Properties.

11. After generation of presentation data has been completed, the individual shows are displayed in the central window **Shows** and can be copied onto CF Card. See Copying data onto CF Card.

Installing an MP3 encoder

For compression of audio data for CF Card an MP3 encoder is required. Wings Platinum supports numerous MP3 encoders, which can all be downloaded from the internet. We would recommend the **Lame** encoder. A lot of information on MP3 and encoders can be found at mp3-tech.org.

For any encoders that do not feature a setup menu or any other installation tool, pasting into the following directory will usually do:

...\Documents and Settings\ ***User name***\ Local settings\ Application data\ AV Stumpfl\ Wings Platinum 4**MP3**".

All the correctly installed MP3 encoders will be available for selection in the Wings Platinum MP3 selection dialog.

MP3 audio file compression

...Unbelievable, but true!

Strictly speaking this compression technology developed by the Fraunhofer Institute is called MPEG 1 Layer 3. In the meantime, however, it's only called MP3 for short among experts. That's what we do, too.

But more important is what there is to it: It is hardly conceivable that a reduction of audio data by up to 90% does not result in an audible loss of quality. This compression technology is based on psychoacoustics, i.e. perception of sound by people. In long series of scientific tests it has been found out what a person can actually hear, what is essential in hearing. And this is exactly what MP3 compression is about. All other, unimportant signals clearly fall victim to the compression!

However, the result is really worth hearing. Only trained ears will be able to notice the difference between the compressed music and the original one although this also depends on the type of music. The compression of solo instruments is more critical than that of pop arrangements. Your can choose the extent of compression yourself, which means that you can influence the quality and choose the right compression suitable for your music.

Gaining first experience with MP3 is something to look forward to!

Remote Properties for Shows

When shows are to be started simultaneously or interactively via certain buttons or remote commands from an SC Master/Event Control unit, you need to specify this on the CF Card remote table. The following operations are possible:

- Linking up keys on an IR remote control with a show

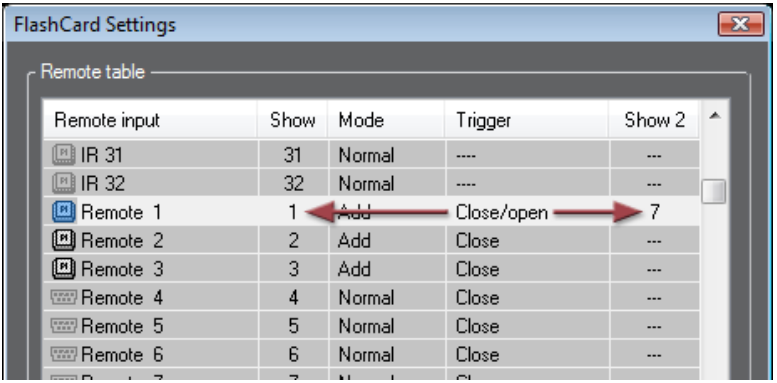
- Linking up remote inputs for a keyboard with a show
- Allocating a mode for show start.
- Defining a trigger mode for the switch or button

And this is how it is done:

1. In the main menu, click **Output** – **Create FlashCard**... and the Flash-Card dialog will appear.
2. Double-click the corresponding FlashCard directory and the dialog **FlashCard Settings** will appear. Under **Remote Input** you will find the 32 keys of an IR remote control unit, followed by an additional 120 remote inputs below. Each of these remote inputs can be linked up with a show and a mode for show start.
3. Highlight the corresponding Remote input.
4. In column **Show** click on the entry field, enter the corresponding show number and press **Enter**.
5. In column **Mode** right-click the entry field and select the corresponding mode for the remote behavior of the show. The various modes have the following effects:
    - **Normal** ...normal show start is only possible when no show is running, as the running show is not interrupted
    - **Interrupt** ...show start interrupts any show being played back.
    - **Terminate** ...show start terminates only other shows but not itself.
    - **Add** ...added start; show is run simultaneously in addition to the running show. With the SC Master 6/16 a maximum of 18 shows can be run simultaneously. For all the other SC Master units the maximum is 6 shows. Please bear in mind, that this Start Mode interrupts the sound of other shows that uses the same stereo output.
    - **End** ...terminates show playback. When a switching pulse is applied to the remote input, the specified show is terminated, while other shows continue unchanged.

- **Continue** ....continues the selected show, when it is waiting at a Pause Marker or an X-time
- **Continue all** ... continues all shows that are waiting at Pause Markers or X-times.
- **Memory** ....show is preselected and started automatically at the end of the running show.
- **Restart** ....a running show is started again from the beginning, other shows continue (just like **Add**).

6. When using one of the inputs **Remote 1** to **120** you can additionally specify whether the show is to start when opening or closing the switching contact. Right-click column **Trigger** and select **Close** or **Open**. If, however, you choose **Close/open**, you can specify a second show for opening.



When the contact closes, **show 1** is started, while **show 7** starts when the contact is opened. Therefore, the first show can be continued by holding down the key. When the key is released show 7 is started and terminates show 1.

7. Finally, click on **OK**.

Info

- Remote inputs can temporarily enabled and disabled via the Key Mask function. This is done via markers and can be adjusted to match the

corresponding situation. See Key Mask - Enabling/disabling remote inputs.

- If your show consists only of audio objects without any other control commands or data objects, you should set a position marker at the end of the last object. Otherwise the SC Master cannot determine the length of the show, which may be a problem for displaying and differentiated starting of shows from CF cards. See Setting markers.
- The Remote Properties can also be modified without Wings Platinum in the CF Card SHOW.INI. This may be necessary in emergency situations. More about this can be found under Editing SHOW.INI.

Special settings

Below you will find a few special settings:

- **Activate transponder** ...prepares a CF Card for communication with a transponder.
- **Activate scheduler** ...prepares a CF Card for time-controlled show start. In addition to this you have to create a scheduler file containing the control information for the show starts. See Scheduler for CF Card shows.

Scheduler for CF Card shows

SC Master and devices of the Event Control series allow time-controlled start shows via the connected radio clock module DCF-77. This requires a schedule file containing the control information. A **SCHEDULE.INI** for a CF Card can be created as follows:

1. Click on **Output** and select **Create FlashCard**... and a dialog box will appear.
2. Under **Card Directory** double-click the corresponding CF Card folder and the remote table will appear.
3. Under **Special settings** click on **Edit** and a text editor with an empty SCHEDULE.INI is opened up.

4. Now enter the corresponding commands for time control. Several commands are added in separate lines one below the other. Syntax information can be found.
5. Save SCHEDULE.INI and exit the text editor.
6. Now click and check **Activate scheduler**, followed by clicking on **OK**.

The schedule file has now been copied into the CF Card directory and will be copied onto the CF Card along with the other files when copying presentation data.

Syntax for schedule commands

The syntax for commands in SCHEDULE.INI is as follows:

```
[Zeit]=[Show-Nummer][Remote-Modus]
```

Bracket **Time** may contain several values separated by a comma (without spaces), e.g. weekday, hour, minute

```
[w=3,h=14,m=30]
```

The following terms are recognized:

Year, **Month**, **Day**, **WDay**, **Hour**, **Min**, **Sec**.

Entering the first letter will do. There is only one exception: As both **Min** and **Month** start with an "M", the minimum entry for **Month** is **Mo**.

WDay stands for weekday. Therefore:

1 = Monday

2 = Tuesday

3 = Wednesday

4 = Thursday

5 = Friday

6 = Saturday

7 = Sunday

Permitted operators:

= : condition is true, if term equals succeeding value

< : condition is true, if term is smaller than the succeeding value

> : condition is true, if term is larger than the succeeding value

% : Condition is true if the result of the Modulo operation equals zero (only applies to **Hour**, **Min** and **Sec**).

The modulo operator is useful in those cases where a presentation is to be started every 5 minutes, for example. In this case you simply enter "Min%5"! Please bear in mind, that the resulting times are absolute times, i.e. they are calculated from 0:00 onwards.

The **Show Number** corresponds to the order of shows on the CF Card, which can also be recognized in the central window of the FlashCard dialog.

The **Remote Mode** corresponds to the definition contained in the SHOW.INI. The following operations are possible:

N Normal start, the running show is not interrupted

I Interrupt Start; every running show is terminated

B A running show is started again from the beginning, other shows continue.

T Terminate Start; terminates only other shows but not itself

M Memory Start, show is preselected and started automatically at the end of the running show.

A Added Start; show is run simultaneously in addition to the running show. A maximum of 10 shows can be run simultaneously.

E End of show playback. Is used for terminating individual shows; other shows continue.

Examples:

```
[w=3,h=9,m=30]=[S8][N]
```

This starts show 8 every Wednesday at 9.30 am in normal mode.

```
[w<6,h=12]=[S1][I]
```

From Monday to Friday Show 1 is started in Interrupt Mode at 12.00 am, i.e. a running show is interrupted by it.

```
[w=7,h>14,h<21,mi%30]=[S4][N]
```

This starts show 4 every 30 minutes on Sundays between 2.00 pm and 9.00 pm in normal mode.

Presentation

The enchantment and charm of a cinema projection should be retained even during show presentation. This means that the Windows interface and all its windows should remain invisible to the audience &endash; the show should be presented on a dark screen in fullscreen mode without any other windows being visible. Wings Platinum offers all this and there are a number of different options depending on show type and contents:

- **Digital show with pictures** ...can be presented directly from the timeline or as an EXE presentation. Direct playback via Wings Platinum allows any type of device to be controlled via Show Control. An EXE presentation, on the other hand, is well suited for circulation, as it can be played back on virtually any modern Windows computer and be largely protected by the author against unauthorized usage or misuse via password protection and expiry date.
- **Digital show with pictures and video** ..can be presented directly from the timeline or is exported as EXE Presentation or as video (AVI, MPEG or WMV). A presentation video offers the advantage of allowing highly complex show contents and playback via player software or Wings Platinum, independent of the project. When playing a Wings Platinum timeline, devices can be controlled via Show Control and multichannel sound be output, provided your version allows it. See Licenses and functions.
- Moreover, even output as **video DVD** to be viewed on a DVD player and a TV screen is possible. Due to the high compatibility of the world standard video DVD this is a very attractive option for world-wide distribution. The TV standard, however, distinctly limits the resolution.
- **Slide show** ...first of all, presentation data are created, which contain soundtrack and control information the slide projectors. Depending on the type of control unit used, this can be an audio CD with control signals, a tape or a CF card for Event Control or SC Master units. However, direct control via computer is also possible.

Direct presentation from the timeline

Due to hardware rendering, Wings Platinum is able to play back at full quality even during production. The idea of presenting directly from the timeline seems to suggest itself. The only thing you need be sure about is that your computer has enough capacity for proper playback. Actually, there are only restrictions for very complex shows that contain a high number of simultaneously running videos. In such a case, producing a mixdown into a video file would be a feasible alternative for presentation at full quality. See Methods for video creation.

If you want to present directly from the timeline you should check and optimize the quality of the image display data. Moreover, your project can also be optimized for presentation by adding markers and triggers. The following operations are possible and appropriate:

- Check whether **sharpening** has been enabled for the pictures. Optimum results can only be achieved when the sharpening process takes place after scaling. See **Options** - **Project Options** - Picture processing.
- Check the **resolution of the display data** used for the presentation. The value at **Max. picture size (long edge)** should preferably correspond to the monitor or video projector resolution if the screen touches the sides on the right and left. If the screen touches the top and the bottom, on the other hand, you need to calculate the optimum entry. You also need to make sure that your computer has enough power for proper playback. See Screen Properties.
- **Optimize the display data** for the size to be matched up exactly with the corresponding picture objects. See Optimizing display data for pictures.
- Check the **sound track peak level** and correct the Audio Level Display, if necessary. See also Peak level of sound track.
- In order to avoid wasting **playback performance** you should not compress the timeline for a presentation and makes sure that a large time portion remains visible. If the Locator reaches the right margin and the timeline portion is shifted a great number of objects must be updated. This causes a performance peak and may result in jerky playback. It is also a good idea to hide the tracks containing the media objects (pic-

ture, video, audio tracks) by grouping them and to avoid the timeline from being displayed.

- You may want to set **pause markers for Speaker Support** (.This allows individual playback control for a show, e.g. when live comments are added (this works also for a video presentation). See also Setting markers and Remote-controlling presentations.
- For **navigation** and **starting of specific shows** you can use position markers and triggers (requires the Advanced License or higher). In that case you can change over to fullscreen mode and control the presentation by pressing keys. This allows you to jump to certain locations within a show or start playback at certain positions. Even shows on other timelines can be started this way without you having to leave fullscreen mode, so that you can call up an entire presentation program for an event via the keypad. By the way, this process works also for video presentations. This requires the following steps:
    - Place either all your shows one after the other into one timeline or use a separate timeline for every show. See also Adding timelines and Pasting/copying objects into new tracks.
    - Place position markers at the positions in the show where playback is to stop automatically or which are to be accessed. Do not forget to specify a remote index for every position marker. See Setting markers.
    - In the Media Pool, create the trigger actions you want to have performed, e.g. "Playback from timeline 2 at position marker 5". In the Trigger Properties Dialog, specify also the function key to start the corresponding action. See Creating triggers and Starting triggers with function keys.

The easiest way to learn about project configuration by using markers and triggers is to work through the corresponding workshop. See Optimum presentation of shows.

Presenting videos

For very complex shows in particular, a mixdown of all media into a video is the only chance to present at high quality without any problems. For this

purpose, Wings Platinum offers powerful functions, which require the Advanced License or higher:

- Wings Platinum offers **Exclusive Mode** for video tracks. Exclusive mode ensures that all other tracks containing visual contents are temporary disabled (...except for live video/TV tracks). The track remains unconsidered during scrolling and playback in Preview Mode. Due to the extensive usage of hardware rendering via 3D graphics card this requires an up-to-date, middle-class graphics card. Exclusive Mode can be enabled in the Video Track Properties.
- Simultaneous, synchronized playback of multi-channel soundtracks from the timeline (via the Pro License). See also Multi-channel sound.
- Position markers and triggers allow navigation within the show without any windows or buttons being visible to the audience. See workshop Optimum show presentation.
- Playback stops automatically at stop markers and is continued after pressing a button, e.g. for Speaker Support. The show can be continued both via the keyboard or the mouse and via a remote control unit connected to a serial computer port.
- Mix groups allow spontaneous dissolves from one video to another during the presentation (requires the Pro License).
- In the event of a power failure or a system crash during the presentation, playback can automatically be resumed from the position where it stopped. See Power failure.
- All the actions programmed in the timeline for lights, switches and other devices are controlled and synchronized via the device ports.

Starting / stopping playback

1. Create a video file for your project. ...See Methods for creating a video. For video creation select option **Insert as presentation into the current** project under **Further actions**. Following this a **Video Track in Exclusive Mode** containing the appropriate video is added to the timeline.

2. Using the mouse, move the Locator to the position in time playing back of your show is to start.
3. In the main menu, click on **Presentation** and select the type of playback by clicking either **Start in fullscreen mode** or **Start in window**.

> **Attention!** The Presentation Mode can only be terminated by pressing the **Esc** key twice!

4. Playback is now in Pause Mode. Press the **space bar** to start playback from the Locator position. In Fullscreen Mode playback can only be controlled via keys/key combinations. Make sure you remember them!

Fullscreen mode ➡ **F5**

Playback/start in window ➡ **Ctrl** + **F5**

Play / Pause ➡ **Space bar** (fullscreen remains)

Continue playback ➡ **Enter** or **space bar** (fullscreen remains)

Stop ➡ Press **Esc once** (fullscreen remains)

Terminate ➡ Press **Esc twice** (Wings Platinum reappears)

Info

- As the soundtrack is played back from the timeline during the presentation, video file and sound track must be placed synchronously ... See also Aligning objects. Moreover, the video files should also be available on hard disk. This is the only way to ensure that pictures and sound are played back synchronously.
- Presentation of a show can be started from a position marker. But it is also possible to jump to the previous or next marker. See Playback from position marker.
- Playback of a presentation stops automatically 10 seconds after the last active object.
- If the video is not played from its very beginning, it may take a few moments &endash; depending on the number of keyframes &endash; until the correct position is found. For DivX-videos, for example, with a keyframe interval of 300 frames and a frame rate of 25 frames per second, there is only one keyframe every 12 seconds available, which

makes starting in certain locations difficult. When recalculating the video, you can choose a different setting for the keyframe interval ... See also Tips for video rendering.

- High-resolution videos with fast moving picture elements make high demands on the data projector signal processing system. For production you should use a tube monitor for reference purposes. Being an analog device it is able to display the video signals virtually without any delay &endash; which is not true for LCD monitors. This is the only way to find out whether what you have produced with Wings Platinum is played without any jerks on your computer. See also Valuable information about data projectors and PC optimization.
- If the video is to fade in from darkness, you need to provide for a black leader when creating your video.
- To be able to remote-control playback via Iseo or AV Prompter or to control other additional devices, the device control system must be enabled. To do so, click on **Enable device ports**.... See also Synchronizing devices.
- During the period the video is presented Wings Platinum will disable screen saver and energy saving mode, provided they are enabled.
- By defining a password, a project can be protected against unauthorized editing and saving, as well as closing of the Control Panel. This is particularly important for permanent installations and presentation with touch panels. See Password protection.

Speaker Support Presentation

1. Place Pause markers at the positions in the show where playback is to stop automatically. .. ..This is how you set markers.
2. Upon starting Presentation Mode using **F5** and playback using the **space bar**, the video will stop at the pause markers. To continue playback press one of the following keys:
    - Space bar
    - Enter key
    - Left mouse button

- Play key on the Speaker Support remote control unit

3. Presentation Mode can be terminated any time by pressing the **Esc** key twice.

Info

- According to the playback mode pressing the space bar causes either **Play** or **Pause**. Therefore, pressing the space bar too early may cause playback to be stopped prematurely.
- A professional way of controlling your show is via a Speaker Support remote control unit connected to a serial computer port. This, however, requires the port to be previously selected in the Media Pool under Devices.
- Use the Tascam US 224 for comfortably remote-controlling various playback functions. This device is also a high-quality audio interface, which allows connection of a microphone. It is therefore the ideal supplement to notebooks in particular. ... See also Remote control via Tascam US224.
- To be able to remote-control playback via Tascam US-224 or to control any other additional devices, the device control must be activated. To do so, click on **Enable device ports**.... See also Synchronizing devices.
- An alternative would be to use a good wireless radio mouse with the corresponding range as a remote control unit.
- For presentations in permanent installations, warning messages can be suppressed as they would interfere with the presentation. See Enabling/disabling all warnings.
- Videos with an aspect ratio that differs from that of a monitor or a projector can be moved from the monitor centre to the sides when presenting them. This function is actually an extended shift function for projectors. See **Project Options** &endash; **Presentation**.

Continuing a video presentation after power failure

A power failure during the video presentation is the nightmare of every presenter. Wings Platinum can't prevent the power failure itself, but it allows the presentation to be continued from the point of interruption.

1. When the video presentation was aborted by a computer crash or a power failure, restart your computer.
2. Start up Wings Platinum. When starting up will be queried whether you want to continue the aborted presentation. Click **Yes** to load the project. Following this the video is started in Fullscreen Mode at the location where it was aborted.

Creating a project for video presentation

Before you can present a video which is not available as Wings Platinum project, you need to create a presentation project in which image and audio information are placed on synchronous tracks. In addition to this, you can also set various markers for navigational purposes, e.g. Pause markers for Speaker Support shows.

Creation of such a project is restricted to opening the project template **Video presentation** with the corresponding aspect ratio.

3. Click **New...** in the function bar below the main menu.
4. On the left, click on **Project Templates** and, on the right, select the template **Video presentation** ... with the appropriate aspect ratio by double-clicking it.
5. Add the corresponding video by dragging it from the Explorer and dropping it into the timeline below the marker track. Following this audio and video objects are placed in sync on separate tracks.
6. In the marker track you can add the marker for playback control. See also Using markers.

Playing EXE presentations

Playing an EXE presentation is plain sailing; it can be started just like any other program on the hard disk

- by double-clicking the presentation file.

Following this, the presentation is run in Fullscreen Mode without any windows. Depending on your setting, the presentation either starts immediately or is in Pause Mode and needs to be started, for instance, by hitting the Enter key.

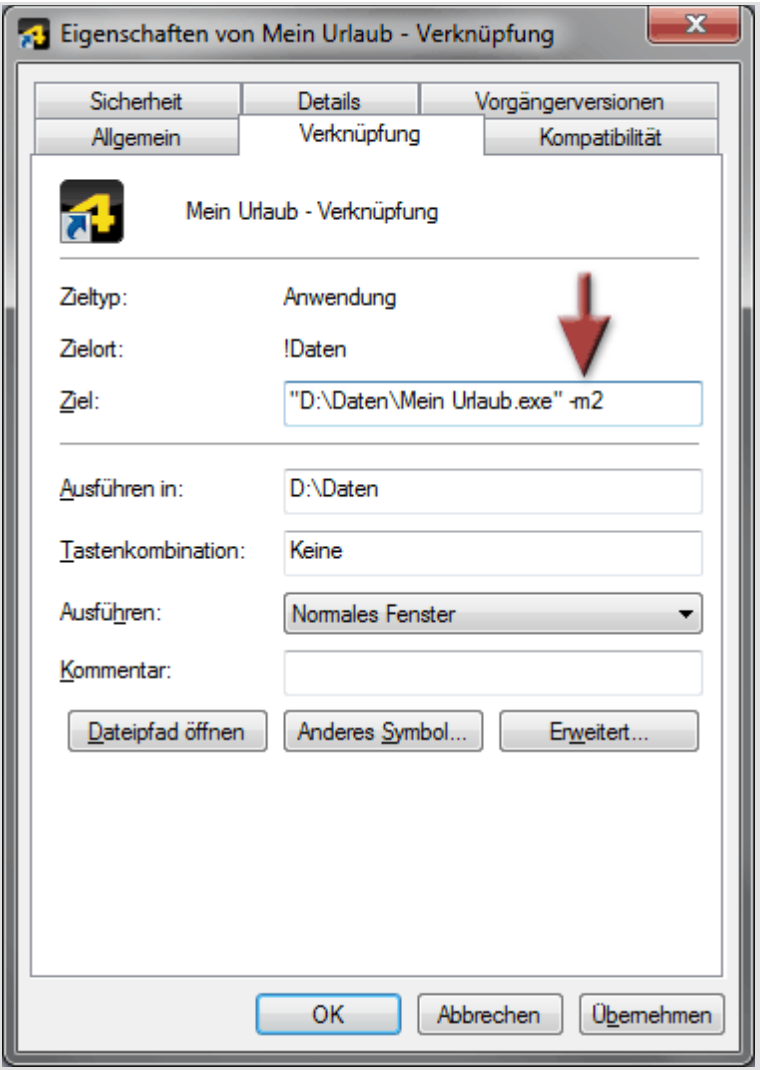
Info

- In Dual Monitor Mode, playback starts on the corresponding monitor where the EXE presentation was started by double-clicking it. As an alternative, it is also possible to specify the monitor to be used. For this purpose the command line is provided with the addition **-mX** (**X** = monitor), e.g. in the shortcut properties **Show example** . This is quite convenient if you want to place the start shortcut for starting on one monitor and run the fullscreen presentation on the other monitor or video projector.

  Via the addition **-m2** the EXE presentation **Urlaub Mallorca** is started o
  the second monitor, i.e. the shortcut can also be located on the first mo
  nitor.

  Important:

  - After the quotation mark there must be a space before **-m2**!
  - The monitor can only be specified for EXE presentations produce
    with version 2.40 or up.



- Audio is always output at the audio output chosen by default in the Windows Control Panel.

- When an EXE presentation is larger than one Gigabyte, the standard file symbol will appear instead of the Wings Platinum file symbol. This is due to Windows and has no further consequences.
- EXE presentations should not be started in Wings Platinum via file markers since this causes two instances of Wings Platinum to be running that use up each other graphics resources such as the full screen. This will only be successful if you do without the screen in Wings Platinum.

Playback can be controlled as follows:

Start playback ... via the **space bar** (alternating with **Pause**)

Pause ...space bar (alternating with **playback**) **Futher keys compatible with PowerPoint**

...keys **P**, **PageUp**, **Cursor left** or the **Backspace key**.

Resume paused playback ...**Enter** or **space bar**, **Futher keys compatible with PowerPoint**

...keys **N**, **Page Down**, **Cursor right** or **Cursor down**.

Stop ...press **Esc** once (fullscreen mode is maintained) / **Futher keys compatible with PowerPoint**

simultaneous pressing of **Ctrl** and **Pause**.

Terminate ...press **Esc** twice (Wings Platinum reappears)

Navigation ...after right-clicking the screen a navigation bar appears representing the current Locator position. Click the corresponding area in the bar and the presentation jumps to that location in the presentation. Click the screen above the bar and it will disappear (at the next slide change at the latest). **Note:** The colors in the navigation bar can be customized. See Screen Properties.

Any position markers in the show can be used for navigation purposes:

Jump to the next position marker ...by simultaneously pressing **Ctrl** and cursor keys or .

Jump to a position marker with remote index ...by pressing number keys **1** to **9** (corresponding to the remote indexes 1 to 9).

After a jump to a position marker playback stops and can be restarted at the current location by pressing the space bar.

Jump to the beginning ...by pressing the **Home** key and start playback by pressing the space bar.

Info

- In combination with the Advanced License or higher you can also use other markers for playback control, e.g. **Jump Markers** for continuous loop playback. See Markers.
- Use screen objects and the pertaining trigger actions to implement **graphic menus** for controlling EXE presentations. These functions are available with the Advanced License and up. See Executing triggers via screen objects.
- Usually, fullscreen mode is maintained at the end of playback. If, however, the Windows Desktop is to reappear at the end of an EXE presentation, you can set a reset marker at the end of the show. See Using markers.

What you need to consider in playing back EXE presentations

As an author you are responsible for informing the receiver of an EXE presentation about the preconditions for trouble-free playback. Failure to do so is asking for trouble and your show may cause more frustration than enjoyment.

- For playback of an EXE presentation, the multimedia interface **DirectX 9.0c of November 2008** or higher and **VC Runtime** must be installed in Windows. If necessary, write a folder containing the installation files on the CD/DVD as well. The **Direct X** folder can be found an any current Wings Platinum CD-ROM under **Software**.
- **Tip:** As mentioned above, playback requires DirectX 9.0 of November 2008 or later. However, most of the time you can save yourself the effort of installing this version by starting the EXE presentation from a folder that contains the file **d3dx9_40.dll**. It is usually copied to the

folder containing the EXE presentation when the presentation is created. It would therefore make sense to pass on the EXE presentation in a folder that contains the EXE presentation, the data folder with the intermediate video data and the file **d3dx9_40.dll** and not just the presentation on its own.

- For optimum performance EXE presentation and the pertaining ***XXX Data*** folder containing the video files should be copied onto the hard disk and started from there.
- Certain functions, such as transparency masks or Chroma/Luma Keying require a very powerful graphics card. Make sure that the presentation computer is equipped correspondingly or do not use these functions.
- If you are using ticker objects to display text in an EXE presentation the font types used must be available on the presentation computer. Otherwise replacement fonts are used automatically. It is useful to use standard Windows fonts, such as Arial or Times New Roman.
- An EXE presentation must not be larger than 4 GB, otherwise it cannot be executed by Windows. If this is the case, reduce the data volume during creation of the EXE presentation by JPEG compression of the images. See Creating an EXE presentation.
- We have prepared start pictures with the most important operating instructions which you can use at the beginning of an EXE presentation. Moreover, there is also a readme file containing all the important bits of information for playback of EXE presentations. You can write this **readme file** onto the CD/DVD together with your EXE presentation, if you want to pass it on. Start pictures and readme file can be found in the Wings Platinum program folder **Exe Presentation\English**, unless you deselected "Example pictures" when installing the program from DVD. Open the folder by clicking **Extras** in the main menu followed by **Open folder ▶Media Samples** and double-clicking folder **Exe Presentation/English**.

Incorporating PowerPoint presentations

Wings Platinum Pro and up allows PowerPoint presentations to be integrated in a show. In principle, this can be done in two ways:

PowerPoint markers in the timeline allow a PowerPoint file to be opened which covers the Wings Platinum screen. Additional markers or a mouse-click or key-press initiate the slide change. This method has the disadvantage that the changeover from Wings Platinum to the PowerPoint contents is somewhat clumsy and that the PowerPoint presentation must be incorporated in the show. Information on how this is done can be found further below at PowerPoint integration via markers.

The other option is to **import the presentation from another computer via a video input card** so that the PowerPoint presentation is integrated in the show just like a live video. Live video objects can be dissolved and animated using all effects just like any other images or videos. This method distinguishes between the Wings Platinum and the PowerPoint computer and allows a clear definition of interfaces and responsibilities, which may be quite important for external presenters. See Live video/TV import.

PowerPoint integration via markers

This requires PowerPoint software to be installed and the PowerPoint presentation to be saved as a so-called **Pack & Go presentation** (*.pps). During the presentation, Wings Platinum calls up and controls the PowerPoint presentation, which appears on top of the Wings Platinum screen.

Here you can see what steps need to be taken:

1. Add the PowerPoint presentation to the Media Pool category **External**. See Managing external files.
2. Drag the PowerPoint file from the Media Pool into a marker track and a file marker will be created.
3. Double-click the file marker and the Properties dialog will open up.
4. Place a checkmark next to **Position** and enter location and size of the PowerPoint presentation on the screen.
5. Place a checkmark next to **Topmost window** and enter **screenClass** for **Window class**. Close the dialog.
6. When you start playback before the file marker, the PowerPoint presentation is started by the file marker. The PowerPoint presentation will be displayed topmost and can be controlled as usual via mouse and keyboard. Of course, this also works if you start playback of Wings Platinum in Presentation Mode.

7. In addition to this, the PowerPoint presentation can also be controlled via PowerPoint markers in Wings Platinum. The Properties dialog for the PowerPoint marker allows you to select the corresponding **Action**.

Info

- **Important:** PowerPoint menu **Slide Show** - **Set Up Slide Show** at the very bottom allows you to choose the **Slide Show Resolution**. Make sure it is set to the default setting **Use Current Resolution**. Any other manually set resolution may lead to this resolution being permanently stored and used by the graphics card. Any other shows following may then be presented at a reduced resolution!
- A PowerPoint file that is only available in *.***ppt** format can be changed to a Pack & Go presentation by changing the file extension to *.***pps**.
- If the Windows task bar appears along with the PowerPoint presentation on the screen choose the following settings in the taskbar properties: Click and check **Auto hide** and, if applicable, remove the checkmark next to **Always on top**.
- It is a good idea to keep the PowerPoint files small; this will reduce the loading times correspondingly.
- Should playback of Wings Platinum slow down while a larger PowerPoint file is loaded, you can increase the priority for Wings Platinum. See **Options** - **Global Options** - **General**.
- While a PowerPoint presentation is run, you cannot reach Wings Platinum via mouse or keyboard. The only chance in this case is to control Wings Platinum via external remote control units. See Remote-controlling Wings Platinum.

Positioning the fullscreen picture

In fullscreen mode the screen is usually centered on the monitor or video projector display area. If the screen aspect ratio does not correspond to the monitor aspect ratio, black bars will be visible. In such a case you can use the picture shift function to shift the screen, which helps to prevent the trapezium distortion produced by inclined video projectors.

And this is how it is done:

1. In the Media Pool click category **Screens** and the available screens will appear on the right.
2. Right-click the corresponding screen and select **Properties**.
3. Under **Fullscreen settings for hardware rendering** you need to add a checkmark next to **Keep aspect ratio**. For **Picture shift** you can enter a percentage for the shift:
   - **Centered** corresponds to **0** %.
   - Top corresponds to 100 % (landscape format screen)
   - Bottom corresponds to -100 % (landscape format screen)
   - Right margin corresponds to 100 % (portrait format screen)
   - Left margin corresponds to -100 % (portrait format screen)

   Enter in-between values to position the screen accurately on the monitor or video projector display area.
4. Keep clicking **OK** and starting fullscreen mode to check the effect.

Remotely controlling presentations

Wings Platinum can be remotely controlled during a presentation. You can use our simple, cable-operated Speaker Support remote control unit or the software tool AV Prompter for iPod touch/iPhone, as well as special controllers, such as the Tascam US-224 or Mackie Control. Basically, Wings Platinum can also be controlled by any other devices able to output serial commands via RS 232 or TCP/IP. See also Remote-controlling Wings Platinum.

Remote control via Speaker Support remote control unit

The Speaker Support remote control unit is a simple remote control unit for show presentation, which is connected to the serial port of a computer running Wings Platinum. In addition to this you need to create a remote control port in the device control system. The Speaker Support remote control unit allows you control of the following functions:

- Start of playback

- Pause
- **Continue playback**, after the Locator has stopped at a pause marker. See also Using markers.

Configuring a remote control port...

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool portion and select **Addport** ▶**Remote control**.
3. Next to **Serial port** click and select the corresponding remote control port.
4. Next to **Protocol / Device type / SettingsEventPlayer / Keyboards** must be chosen. Finally, click on **OK**.

Info To use the remote control unit, the device control system needs to be enabled, which can be recognized by the button being depressed or highlighted in gray.

Remotely controlling via iPod and AV Prompter

These functions require the Starter License or higher. See also Licenses and functions.

AV Prompter is software for **Apple iPod touch** or **iPhone** for remotely controlling speaker support shows. In addition to playback control AV Prompter allows display of preview pictures and prompts on the iPod display in sync with the show. The following descriptions refer to the iPod only but they also apply to the iPhone unless stated otherwise.

This what you need for controlling via iPod:

- **iPod touch** or **iPhone** ...by Apple. Virtually all device generations with a large touch panel are suitable.

- **AV Prompter** ...is available for free in App Stores. It can be installed on your iPod or iPhone via iTunes. Software installation of mobile Apple devices is described on the Internet at www.apple.com.
- **AV Prompter Module** ...this license is required for using the remote control unit and the Prompter. Without this Wings Platinum module the AV Prompter runs in Demo mode. You can try and test everything, but the screen will show a bar "Demo Mode". The AV Prompter Module can be acquired in specialist shops or from us.

The following steps will be covered in this topic:

- Configuration of Wings Platinum and iPod
- AV Prompter operation
- Sending information and preview images to the iPod
- Troubleshooting

Configuration of Wings Platinum and iPod

Surely you will already have connected your iPod to the WLAN to get to the Internet. If not, do so now. Both devices, i.e. PC and iPod must be connected via WLAN.

This is how you set up the WLAN connection under Windows XP

This example is based on Windows XP and a built-in WLAN Module (Notebook) or a WLAN stick. Other operating systems or WLAN hardware set up dialogs have a similar structure.

Note: For a PC with a connected Access Point the WLAN configuration is done in the Access Point, usually via the Browser. On the PC the LAN interface is configured for a cabled network.

5. Open the Windows Control Panel and double-click **Network connections**.
6. Right-click **Wireless Network Connection** and select **Properties**.

7. In the dialog box scroll down to entry **Internet Protocol (TCP/IP)**, highlight it and click **Properties**.
8. Select **Use the following IP address** and enter the corresponding IP address (e.g. **192.168.2.32**) as well as the Subnet mask (e.g. **255.255.255.0** or **255.0.0.0**). It is essential that this IP address is not used by other LAN network components. Note down the IP address and the Subnet mask - you will need them at a later time. See also Static IP addresses within the network in the help files.
9. Close the Properties Dialog by clicking on **OK**.
10. Click tab **Wireless Networks** and place a checkmark next to **Use Windows to configure my wireless network settings**.
11. Click **Add** and make the following settings in the next dialog box:
    - **Network name** ...required name, e.g. **Prompter**
    - Network authentication ...Open
    - **Data Encryption ...WEP** or any other encryption standard
    - Remove the checkmark next to The key is provided for me automatically.
    - **Network key** ...enter the corresponding key. For WEP a character string with 10 or 26 characters would be allowed; allowed characters: 0 to 9 and A to F (Hex Code). Confirm the key by entering it again in the field below. **Important:** Note down the key for later on.
    - If no access points are used, place a checkmark next to **This is a computer-to-computer (ad hoc) network**.
    - Note down all the settings and close the dialogs by clicking on OK.

Info

- If you want to change your WLAN connection from **Ad Hoc** to **Access Point** you need to delete the old connection on tab **Wireless Network Connections** and set up a new one.
- For a PC with a connected Access Point the WLAN configuration is done in the Access Point, usually via the Browser.

This is how you set up the WLAN configuration under Windows 7

This example is based on Windows 7 and a built-in WLAN Module (Notebook) or a WLAN stick.

Note: For a PC with a connected Access Point the WLAN configuration is done in the Access Point, usually via the Browser. On the PC the LAN interface is configured for a cabled network.

1. On the Control Panel open the Windows **Network and Sharing Center**.
2. Click **Set up a new connection or network**. In the selection dialog scroll down to the very bottom and select **Set up a wireless ad hoc (computer-to-computer) network** and click **Next**.
3. Click **Add** and make the following settings in the next dialog box:
    - **Network name** ...required name, e.g. **Prompter**
    - **Security type** ...possibly select **WPA2-Personal** (high degree of protection against external access) or any other encryption standard.
    - **Security key** ...enter the corresponding key. For WPA2 this would be a string of characters with a minimum length of 8 and a maximum length of 63 characters (for strings with small and capital letters), whereas Hex Code would allow a maximum number of 64 characters from **0** to **9** and from **A** to **F**. **Important:** Note down the key for later on.
    - Check box Save this network.
4. Note down network name and security key and click **Next**.
5. Click **Close** to connect the new network.

Info For a PC with a connected Access Point WLAN configuration and entry of the security key is done in the Access Point, usually via the Browser.

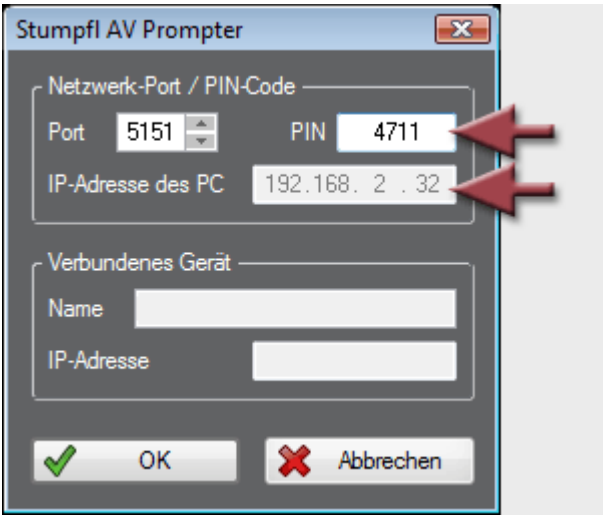
This is how you set up the iPod and Wings Platinum computer

1. Click **Settings** - **Wi-Fi** and switch on **Wi-Fi** unless it is already on.
2. Wait until the wireless network set up on the PC appears under Connect to network (may take up to a minute) and select it. In the dialog box popping up enter the previously defined security key.
3. After clicking **Connect** you will be connected to the desired network.

   If the network cannot be selected or the connection fails....

   - Check the security key or try a security key that contains fewer characters in order to avoid typos.
   - You may have to disable the PCs LAN adapter as it may cause problems with some PCs when the Ad hoc connection is established simultaneously. In the **Network and Sharing Center** click on **Change Adapter Settings**. Right-click the **LAN connection** and choose **Disable**.
   - Try some other Security Type. For this purpose you need to set up a new network on the PC.

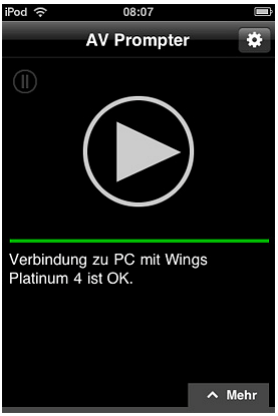
4. In the Wings Platinum Media Pool add a device port. Right-click category **Devices.** In the Media Pool, right-click some free space and select **Add port** ▸ **Stumpfl AV Prompter**. For **PIN** enter a 4-digit number. Note down the pin code and the computer's **IP address** and click **OK**.



5. After having made all the settings, enable the device ports by clicking **Enable device ports**.

6. Start the **AV Prompter** on the iPod, following which you will be requested to enter IP address and port of the Wings Platinum computer. Enter **IP address** and **port** of the computer in the free fields and enter the information so that it matches device port properties of the AV Prompter in Wings Platinum. Following this quit the page by clicking **AV Prompter** at the top.

7. AV Prompter will now attempt to make a connection to Wings Platinum. Once the network connection has been made you are requested to enter the PIN previously defined in Wings Platinum. Once the correct code has been entered the AV Prompter display will show a green bar and the message "Connection to Wings Platinum 4 PC is OK".



If there is no connection... check the settings once again. You may try to disable the device ports in Wings Platinum by clicking and enable them again. Further tips can be found under Troubleshooting further down in this topic.

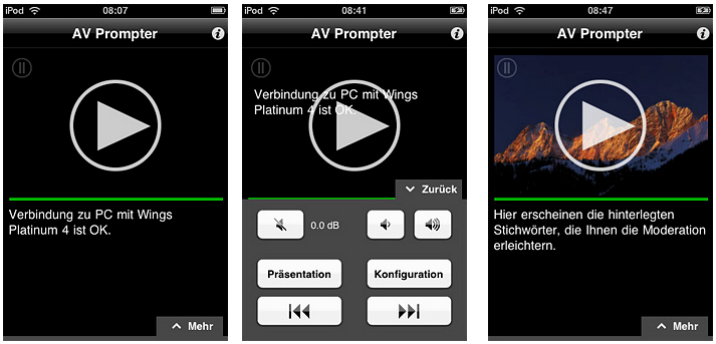
8. After clicking the Play symbol playback in Wings Platinum is started. When you click the small pause symbol in the top left corner playback is paused.

Details on how to send preview images and prompter information of your show to the iPod display can be found in section Sending prompter information and preview images to the iPod further below.

AV Prompter operation

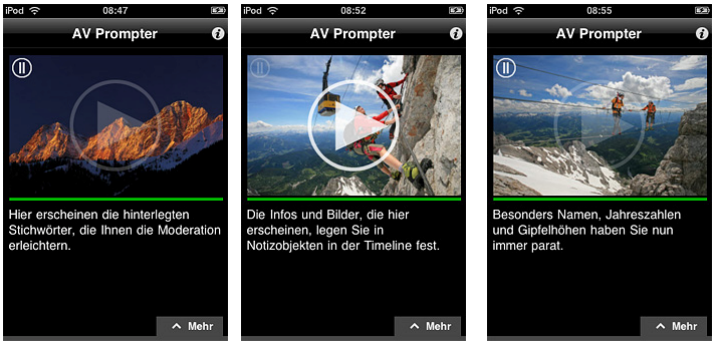
Once your show has been loaded, the device ports been enabled and the connection is displayed in green and OK you can start using the AV Prompter to control your show. You can test the AV Prompter using the sample project **Demo - AV Prompter**. The easiest way to find this sample is by clicking **Extras** - **Open folder** ▶**Sample projects**.

1. To start the show in presentation mode click **More** followed by **Presentation**. Following this, playback will change to pause mode.



Connection is OK ➔ Start presentation ➔ Pause mode. Start by pressing "Play"

2. After clicking the white Play symbol playback is resumed. In such a case the Play symbol becomes transparent and signalizes that playback is running. Only when playback is stopped, i.e. when the locator stops at a pause marker, will the Play symbol turn white again and playback can be resumed by clicking it.



Playback is running → Pause mode, continue with "Play" → Playback is running...

3. By clicking the small pause symbol in top left corner of the preview image you can stop playback at any time.

Additional functions

Click **More** to select the following additional functions:

...mutes audio playback.

0.0 dB ...shows the current position of the volume control (Master fader in Wings Platinum).

....for adjusting the volume.

Presentation ...starts Presentation Mode and pauses playback; corresponds to **F5** in Wings Platinum.

Configuration ...displays some short configuration instructions as well as the iPod's IP address.

...makes the Locator jump to the next position marker or pause marker, following which playback is paused. Whether the jumps are made to pause markers or position markers can be specified in AV Prompter, by clicking and choosing the corresponding option under **Skip behavior**.

Sending information and preview images to the iPod

Any prompts or preview images to be sent to the iPod must be placed in the timeline as note objects.

1. Add a device port for **AV Prompter** in the Media Pool under **Devices** unless there is already one available.

Add a universal track by right-clicking a track head and selecting **Insert Track ▸ Universal**.

Right-click the universal track and select **Insert Notes**, following which the Properties Dialog of the note object will pop up.

In field **Text** enter the information to be sent to the iPod.

Enable **Display on Stumpfl AV Prompter** and enter a remote index of **1**.

Close the dialog by clicking on **OK**.

Drag the image to be displayed in addition to the text from the Media Pool and drop it on the note object. After starting playback, Wings Platinum will send text and image to the iPod as soon as the Locator moves across the notes object.

Info You can test the AV Prompter using the sample project **Demo - AV Prompter**. The easiest way to find this sample is by clicking **Extras** - **Open folder ▸Sample projects**.

Troubleshooting

If your AV Prompter does not work consider the following things:

Is there a correct connection?

- If a connection has been established the bar below the image is green. If this is so, playback start and pause, as well as jumps and volume control should be possible.

- If the bar is red there is no connection. Start by checking whether the device ports in Wings Platinum are enabled. If necessary click **Enable device ports**. After the connection has been established column **Status** in the Media Pool will additionally show (**Active**) (otherwise **Inactive**).
- If there is still no connection, terminate AV Prompter and restart it again.
- If there is still no connection, check the AV Prompter settings for the correct IP address of the Wings Platinum computer.
- If there is still no connection check your iPod settings for the correct WLAN choice. Moreover, you can also prevent connection to foreign WLANS:
    1. On the iPod click **Settings** and **Wi-Fi**.
    2. Select the correct WLAN for presentation control, i.e. it must be checked.
    3. The iPod should ignore other WLANs. Next to Other WLANs click and click **Forget this network**. Repeat this procedure for any other WLANs that are not required.
    4. Switch off **Ask to Join Networks** by moving the switch to the left, unless this has already been done. After starting AV Prompter the connection should now be established.
- If still no connection has been established, check the firewall and unblock the addresses required for the AV Prompter. You can also try to disable the firewall but you need to bear in mind that this leaves your computer unprotected.
- Disable the PCs LAN adapter as it may cause problems with some PCs when the Ad hoc connection is established simultaneously. In the **Network and Sharing Center** click on **Change Adapter Settings**. Right-click the **LAN connection** and choose **Disable**.

Texts and preview images from the timeline are not displayed on the iPod display...

- Check first whether output on the AV Prompter has been enabled in the note objects. Right-click the note object and select **Properties**. Check box **Display on Stumpfl AV Prompter** and close the dialog by clicking **OK**.

If radio communication is intermittent

You can improve WLAN reception by ensuring that there is a clear line of sight between the WLAN device (notebook, WLAN Access Point, WLAN stick, etc.) and the iPod. Access Points with visible antennas are more reliable than ad-hoc connections. Please bear in mind that the possible range depends on the quality of the WLAN device. Some devices allow connection of external antennas which help to improve its range. In any case, is it useful to perform tests before every professional application of the system. Please consider also that reception is worse in a room full of people than in an empty room. The strength of the incoming signal can be identified at the top left iPod corner:

...high signal

...medium signal

...bad signal

...no signal

Performance test for videos

HD videos make high demands to the computer. This is why Wings Platinum offers a performance tests to find out about problem videos.

This is how you find out about the playback performance of a video:

1. In the Media-Pool, right-click the corresponding video file and select **Performance Test**. Following this, the corresponding dialog box will open up.
2. Click **Start** and the computer will start decoding the video internally at its maximum speed. Below **Performance** the current frame rate will immediately be shown at **Current**. After completing the performance test the frame rates displayed below **Performance** can be interpreted as follows:
    - **Maximum** ...indicates the highest frame rate. This value is of minor importance for performance.
    - **Average** ...indicates the mean or average frame rate. It should possibly be 20 to 30 % above the video frame rate. (...See **Framerate** at the top of the dialog under **Properties**).
    - **Minimum** ...indicates the lowest frame rate achieved during the test. This value should be higher than the video frame rate or at least only very little below it.

If the frame rates are too low the video may be jerky during playback. In such a case you can transcode the video into intermediate video files that Wings Platinum can play while bypassing Windows routines. This ensures optimum playback provided the computer is basically capable of running HD videos.

Close the dialog and click **Cancel**.

See also

Performance test for complete timelines

Presenting with mix groups

The mix group function can be used for spontaneous and differentiated fades of parallel track contents during playback &endash; these can be pictures, video or sound. You can define certain tracks as mix group A and some other tracks as mix group B. Playback can be started with mix group A, for example, and after a while you change over spontaneously to mix group B . It is also possible to set up more complex groups and combine them arbitrarily.

Mix groups can be executed or controlled in three different ways:

- Via **triggers** containing instructions as to which mix group is to be faded in in what way. For trigger execution all the possible options are available. See Executing triggers.
- Via **data objects** linked up with mix groups. Value (opacity, volume, etc.) and the duration of the fade is controlled via the ramp bands in data objects.
- Via **slider controls** on external controllers, e.g. Behringer BCF2000 or Mackie Control. Here the mix groups are assigned to a slider control and can be controlled live similar to a video mixer.

All these functions are very well suited for live presentation of very complex contents, i.e. also in combination with live video / TV imports. However, mix-groups can also be used for elegantly changing over between different contents of information systems. The mix group function requires the Pro License or higher. See Licenses and functions.

Setting up mix groups

In order to present mix groups you need to, first of all, set up the mix groups. For this purpose, assign a mix group from **A** to **Z1** (a maximum of 52 mix groups are available) to the tracks with the contents that need to be controlled separately.

1. To do so, right-click a track head and select **Properties**.
2. For **Mix group** click and select the corresponding mix group for this track.
3. Click **OK**. In the track head, at the bottom left corner, the assigned mix group is indicated.
4. Repeat this process for the other tracks, setting up the corresponding mix groups, e.g. **A** and **B**.

You can now define whether certain mix groups are to be used by default for a timeline. Without default setting for the timeline, the mix group selected last will always be active.

1. In the Media Pool click category **Timelines**.

2. Right-click the corresponding timeline and select **Properties**.
3. Under **Mix groups**, add a checkmark next to **Activate** and enter the mix group for normal playback start in the field, e.g. A (use capital letters). It is also possible to specify several groups. By adding a checkmark below next to **Autorestore at beginning...** the specified group is always started when playback is restarted. Otherwise playback is always started at the mix group selected last.
4. Finish by clicking on **OK**.

The next step is to decide how you would like to control the mix groups:

Controlling mix groups via triggers

Controlling mix groups via triggers

This function requires the Pro License or higher. See Licenses and functions.

In order to be able to fade in mix groups at a mouse-click or push of a button, you need to set up triggers with the corresponding action and parameters for the fade. These triggers can later be placed into the Control panel or, alternatively, executed via a function key.

Creating triggers and defining fades

Unless you have already assigned a mix group to the tracks in the timeline, you should do so now. The letter in the bottom left corner of the track head, e.g. **G |** tells you whether tracks are part of a mix group or not. See Setting up mix groups.

1. Right-click category **Trigger** in the Media Pool.
2. Right-click some free space and select **Add trigger** for the Properties Dialog to appear. Enter an appropriate name for the fade.
3. For **Category** select **Mix group** and for **Action** choose **Fade**, for example. The following actions can be selected:
    - **Continue + fade** ...continues paused playback and fades over to the specified mix preset.

- **Disable mix group** ...disables control via mix groups. After performing this function, all tracks in a timeline are again played back.
- **Fade** ...fades over to the specified mix preset during playback.
- **Fade + pause** ...fades over to the specified mix preset, followed by putting playback into Pause Mode.

4. In field **Parameter** on the right, you specify which mix groups are to be faded in in what way:

   - **Mix groups** ...here you specify the groups addressed by this particular trigger.
     However, it makes a difference whether a mix group is entered in capital letters or in small letters:
   - **Capital letter** ...causes a fade to the **end value** in the specified period of time.
   - **Small letter** ....causes a fade to **zero** in the specified period of time.

     Between the letters no separators are required. Mix groups which are not specified retain their status.

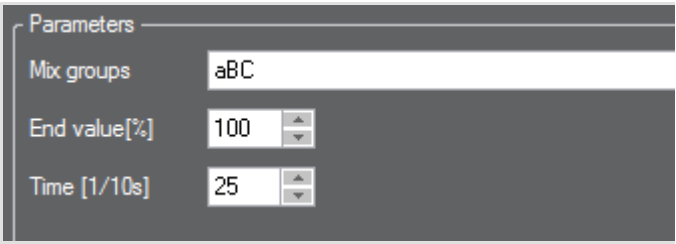
End value ...defines the target value for brightness, opacity, or volume for the mix groups in capital letters.

Time ...defines the duration of the fade. Please note that entry must be in tenths of seconds.

Show example

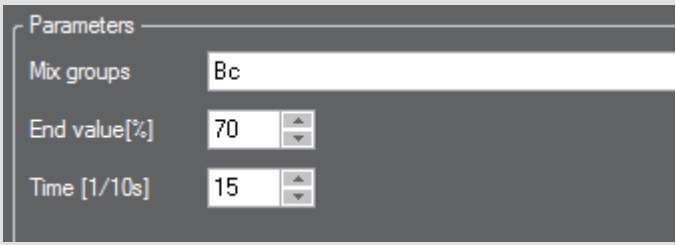
Mix group **A** is faded in to 100 % within a period of 2.5 seconds.

Mix group **B** is faded out to 0 % within the same period of time.



Mix group **A** is faded out to 0 % within a period of 2.5 seconds.

Mix groups **B** and **C** are faded in to 100 % within the same peri



Mix group **B** is faded down to 70 % within a time of 1.5 seconds

Mix group **C** is faded out to 0 % within the same period of time

5. Click **OK** and create further triggers likewise, e.g. **Fade in map**, **Fade in logo**, **Continue show**, depending on the task of the trigger.

6. Now click on tab **Control Panel**. The Control Panel tab is located in the same place as the Project Explorer or Audio Level tabs. See also The Program Window. As an alternative, you can assign a function key to the trigger. See also Executing triggers via function keys.

7. Grab the triggers in the Media Pool at their icons and drag them into the Control Panel one after the other for the corresponding control panel fields to be created.

8. These control panel fields can be grabbed at the title bars and moved. You may have noticed that the control panel fields snap to the suggested checkerboard pattern on the Control Panel.

Info If necessary you can create another trigger which disables all mix groups and ensures that all tracks are again considered. This may be useful for show editing. Use trigger action **Disable mix group** for this trigger.

Live fade between mix groups

After completing all the preparations you should have a sufficient number of parallel objects, i.e. pictures, video or sound, etc. on the tracks of the mix groups. You can now test playback:

- When you start playback, all those mix groups are run first which were set by default in the timeline properties, e.g. **A**. If you have not made any settings in the timeline properties, those mix groups that were active last are played back.
- During playback you can fade over from the current image blend to the other mix presets. To do so, click one of the trigger buttons on the Control Panel. Or press a function key, if one has been assigned to the triggers. See also Executing triggers.

Info

- Please note that a mix preset can be enabled when the Locator is immobile, i.e. in Editing Mode, but the modifications will not be visible on the screen. You can then refresh the screen contents by briefly moving the Locator with the mouse.
- Please consider that Wings Platinum always needs to play back all active tracks in the background when playing back a timeline to allow you to call up mix groups at any time. This means that the required performance does not change even if a mix group is played which contains only a small part of the tracks.
- Mix groups cannot be used for video tracks in Exclusive Mode, as the other tracks containing visuals are disabled for playback.
- Mix groups can only be faded over within the active timeline. Simultaneous playback of several timelines is currently not possible.
- For videos or picture sequences, i.e. output of new files, the currently active mix group is considered.

- When sound is late in crossfading, this may be due to the playback mode selected. Choose a faster mode, provided that your sound card is still able to work reliably. See **Options** &endash; **Project Options** &endash; **Output.**
- For presentations you can also assign function key to triggers to allow you to call up mix groups also in full screen mode. See Executing triggers with function keys.
- However, triggers can also be executed via external keypads or serial commands. See also Wings Platinum remote control.
- When presenting from the computer, you should set up two monitors or a monitor and a video projector, respectively, with extended desktop and assign the screen to one of the displays, so that Wings Platinum and the Control Panel remain accessible.

Controlling mix groups via data objects and fader controls

To be able to control mix groups via fader controls you need an external controller suitable compatible with Wings Platinum. Information on the corresponding devices and their integration in Wings Platinum can be found under Using external input devices.

In addition to the controller you also need the device port **Mix groups** set up in the Media Pool. All that requires the Show Control Module. See also Licenses and functions.

Adding a device port and creating data objects

Unless you have already assigned a mix group to the tracks in the timeline, you should do so now. The letter in the bottom left corner of the track head, e.g. **G |**. See Setting up mix groups.

Now set up the device port **Mix groups**. In the Media Pool click category **Devices**. Right-click some free space in the right Media Pool portion and select **Add port ▸ Mix groups**. Following this the device port is displayed and after clicking on the plus sign next to the folder **All devices** a list of mix groups **A** to **Z** will be displayed.

Now drag one mix group from the Media Pool into a universal track or into some free space below the tracks. The ramp band of the data object created thus can be used for controlling opacity or volume of this mix group.

To enable the device port Mix groups, click on button **Enable device ports** so that it is displayed in blue . This is important, otherwise this type of control does not work. By setting nodes and changing them in height the transparency can be altered. During playback, transparency is controlled in accordance with the ramp band.

For a fade over to another mix group, set up an additional data object likewise. Drag the corresponding mix group from the Media Pool onto a second universal track and arrange both data object so that one fades out while the other one fades in.

But in addition to data objects mix groups can also be controlled live via fader controls. More info about this can be found further below.

Info

An existing data object can be linked up with an additional mix group, by dragging the corresponding mix group onto the object while pressing the **Ctrl** key.

You can link up a data object with several mix groups by highlighting the corresponding mix groups in the Media Pool and dragging them all simultaneously into the timeline.

A mix group can be assigned to a number of data objects simultaneously by highlighting the corresponding data objects before dragging the mix group onto one of the highlighted objects.

You can drag several mix groups into the timeline in one go while and create a separate track for every individual data object by pressing the **Shift** key while releasing the mouse key.

Assigning and using fader controls

In the Media Pool, add a suitable controller in category **Devices**. Below you will find the controllers that are primarily used:

MIDI Controller with faders and rotary controls, e.g. Behringer BCF2000. How a MIDI port is set up can be found under MIDI configuration.

Tascam US-224/428 (DAW controller) ...supports drive buttons, fader controls and data wheel. Show Tascam US-224. How a port is set up for a Tascam controller can be found under Tascam US224.

Mackie Control (DAW controller) ...supports fader controls, function keys, drive buttons, data wheels and more. Show Mackie Control. How a port is set up for a Mackie Control can be found under Mackie Control.

A list of other controllers supported can be found under Using external input devices.

When the controller is available in the Media Pool category Devices, you can link up the fader controls.

1. Click the plus sign next to the folder **All devices** to display the assignable control elements.
2. Grab the corresponding fader control and drag it onto the data object of the mix group to be controlled. Now the data object info line will show the name of the assigned fader control.
3. Repeat these steps for any additional mix groups and fader controls so that at least two data objects for different mix groups are linked up with different fader controls.
4. The length of the data objects corresponds to the time window available for a possible control via fader controls. If you want to have the option of fader control during the entire show the data objects need to extend over the entire length of the show. The simplest way of extending the objects is to highlight them, right-click one of the objects and select **Change duration**.
5. Now put the data objects into Live control mode. Highlight the data objects, right-click one of the objects and select **Mode ▶Live**. Following this click button **Record Mode** so that it is depressed. This way, playback is always started in Record Mode which allows live control via fader control. Just try it out.
6. Before the show beginning you can modify the data object ramp bands so that the right mix group is displayed on the screen. If your controller features motorized fader controls (e.g. Behringer BCF2000 or Mac-

kie Control) the fader controls will automatically assume the correct position before playback start.

There are further interesting modes for using external control elements, such as recording of the fader control position in the data objects. More information on this can be found in topic Live control and recording in objects.

Special functions

Backup of project files

These functions are available from the Advanced License and up. See Licenses and functions.

Once you have finished programming a show, all project data must be saved and archived so that they are available for editing at a later time. Wings Platinum features an easy-to-use function which allows you to write your complete project into a new folder, e.g. on an exchangeable disk. Optionally, you can also have a copy written to CD/DVD or Blue-ray disk. This function ensures that actually all project data are archived in this new folder.

Attention! Nobody else but you can be responsible for producing a correct backup copy. Before deleting your original data on the computer check the backup files for possible data errors and make sure that backup data are readable without any problems. We cannot assume any liability whatsoever for any possible problems and loss of data.

This is how you can save your data to a new folder

1. Open the project you want to save and select **Extras** &endash; **Project Backup** in the main menu. Following this the Media Pool data are checked, which may take a while depending on the size of the project.
2. In the dialog box popping up, select the files you want backed up:
   - **All files in the Media Pool** ...backs up all files contained in the Media Pool. I.e. even those data that are not used for the show or the project may be included.
   - **Only files used in the project** ...backs up only those files that are used in the show, i.e. that are contained in the timelines.

   Additional options:
   - **Video display data** ... backs up also the video display data. This option is useful if projects are to be transferred to a different

computer. Mere backup does not require display data, since they can be recreated at any time. **Note:** This option is only available if **Keep folder structure as in pool** was selected.

- **Intermediate video data** ...saves also intermediate video data that may be available. Mere backup does not require this option, since intermediate video data can be recreated at any time. **Note:** This option is only available if **Keep folder structure as in pool** was selected.
- **All external files** ...saves also external files contained in the Media Pool in category **External**.

3. If you want to generate a backup copy on CD, DVD, Dual-Layer DVD or Blue-ray Disc, place a checkmark next to **Copy to CD/DVD/Blu-ray disc**. Checkmark next to **Check files after writing** should be placed to improve data security.

4. Under **Backup files into following folder** click **Select folder** and specify the corresponding (empty) folder or create a new one. Following this you will see how much memory space there is still available on the chosen drive.

5. Files can be stored in three different folder structures. The options are available after clicking :

   - **Discard folder structure** ...saves the files in a folder. If necessary it automatically creates new folders in order to avoid collisions in the case of identical file names. Optionally, you can specify sub-folders of a particular size which is very useful if you want to write the files to a DVD, etc. **With this method picture sequences must be saved separately !**

Picture sequences, e.g. individual pictures of a 3D-animation or of an HDTV film are not considered for backup. Should this be the case for your project, a corresponding message will be displayed.

Such picture sequences have an extremely high data volume. They are usually saved to a separate folder and need separate, manual backup.

- **Keep original folder structure** ...saves the files along the same file paths as are currently used on the hard disks, with the drive letter being represented as a folder. The advantage of this method is that the folder structure is kept and can be reconstructed. The disadvantage is the length of the paths which may add up to 255 characters after a number of backups and may no longer work. Things like this can happen if you save your shows to a personal folder which you use also for the backup. **With this method picture sequences must be saved separately !**

Picture sequences, e.g. individual pictures of a 3D-animation or of an HDTV film are not considered for backup. Should this be the case for your project, a corresponding message will be displayed.

Such picture sequences have an extremely high data volume. They are usually saved to a separate folder and need separate, manual backup.

- **Create folder structure as in pool** ...saves the files in the folder structure created in the Media Pool. With this option you can save display data and intermediate data along as well and they need not be recreated at a later time.

6. For **Maximum size of subfolder** you define portioning of the files in subfolders (not possible, if option **Create folder structure as in pool** was selected). The folder size must be larger than the largest file to be copied on one hand and must be in line with the storage capacity of the blank used for copying the backup on the other. This is an important and practical feature if you want to save the files on a data carrier of a certain size at a later time, e.g. CD or DVD. **Important:** For a DVD blank, the specified capacity of 4.7 Gigabyte in reality corresponds to about 4.38 Gigabyte only. This is the value you need to enter. **Why this is so**

The capacity of a data carrier must be entered in binary notation. Unfortunately, the data carrier industry does not care and uses decimal notation. That's why there is such a discrepancy: A DVD capacity of **4.7Gigabytes** therefore correspond to only **4.38 Gibibytes**.

decimal notation: **1 Gigabytes** (GB) = 10 to the power of 9 Bytes

= **1 000 000 000 Bytes**

binary notation: **1 Gibibyte** (GiB) = 2 to the power of 30 Bytes = **1 073 741 824 Bytes**

By the way, the unit **Gibibyte** is no typing mistake but indicates binary notation.

7. Now click on **Start**. The status dialog will appear and inform you about the progress.

A message appears saying that the file name is available twice in a folder...

..., click **Yes**, following which a list of the files concerned appears. Move these files into other Media Pool folders to avoid the folder containing several files with the same name. Restart backup again.

Additional steps for writing CD/DVD/Blu-ray Disks...

- After choosing Copy to CD/DVD or Blu-ray disk you will be prompted to insert a blank CD/DVD or Blu-ray disk. Use **blank** CDs/DVDs or Blu-ray disks only. Follow the instructions and click **Start** in the **Write CD/DVD/Blu-ray Disk** dialog.
- After writing of the first CD/DVD is finished, click **Exit**.
- You will be asked to verify the backup if you have chosen this option. Click on and select the required CD/DVD/Blue-ray drive. We recommend choosing a drive different from the writer for verifying your backup copy and for finding out about the reading compatibility. Remove the backup CD/DVD from your CD/DVD/Blu-ray disk writer and put it into the chosen drive. Following this click **Start**.
- After the successful verification, you will be requested to insert the next blank CD/DVD/Blu-ray disk. This procedure is repeated as many times as blank CD/DVDs/Blu-ray disks are required for this

project.

8. After the message about completing the process has appeared, confirm with **OK**.

Info

- Picture sequences, e.g. from 3D programs or fast motion recordings located in the Media Pool under **Video** currently cannot be considered for this process!
- For backup copies, display data usually remain unconsidered since they can be recreated at any time on the basis of the original files.
- Unless all project files are accessible, which can be recognized by a red cross in the Media Pool, no back up copy will be created.
- If option Create folder structure as in pool was selected for the backup, those folder names that contain prohibited characters (\ " **/ : * ? <** **>** **|**) will be changed by omitting these characters.

Restoring data

Projects saved onto CD/DVD via the backup function can be restored to the hard disk as follows:

1. Copy the whole contents of all backup CDs/DVDs of a project into a new directory on your hard disk (e.g. via Windows Explorer). When copying back data from several CDs/DVDs, you may be confronted with messages asking you whether files ***Backup.map*** and the project file (****.pt3*** or ****.ptp***) are to be overwritten. You can answer **Yes** without any problems since there will always be several copies of these files available on the backup media anyway.
2. Double-click the project file which can be recognized by the file extension ****.pt3*** or **.ptp* for older projects. While loading, Wings Platinum offers to search for the required files. Specify the corresponding folder or at least the target drive. See also Searching for missing files.
3. Save the successfully loaded project again to save the altered pathnames along with it.

4. Backup copies do not usually contain any display data. This is why you should now create all the necessary display data. See Creating display data for media files.

Info

- Just in case you happen to have accidentally overwritten a project file during a normal saving operation it may be important to know that Wings Platinum saves the previous version as ***Name.ptp.bak*** file in the same folder. To be able to open the file you need to remove the file extension **.bak**.
- Moreover, the last 10 backup copies are located in folder **Autosave**, with ***Backup_0.ptp*** being the latest file. Open folder **Autosave** by clicking **Extras** in the main menu followed by **Open folder ▶Autosave**. This file and any other older backup copies can simply be opened by double-clicking them and saving them in the corresponding project folder under a different name. See also **Options** - **Global Options** - **Save**.
- In the rare event of a crash, Wings Platinum attempts to save the last version of the project. This project can be found in folder **Report** and is called ***Report.ptd***. Open folder **Report** by clicking **Extras** in the main menu followed by **Open folder ▶Report**. However, there is no guarantee that the project is not corrupted. It is therefore essential to check the project.

Using and editing the Program menu

Main menu item **Programs** can be used for fast and easy opening of programs or calling documents in linked programs. The menu can be customized as described below:

1. In the main menu click **Programs** and select **Customize**.
2. On tab **Tools** click **New** and enter the appropriate program or document name.

3. In line **Command** click and select the corresponding program.
4. In line **Arguments** enter the document you want to be opened in the program entered above.
5. In line **Initial directory** enter the path name for the document.
6. After closing the dialog **Customize** you should be able to open the program or document in menu **Programs**.

Info

- A document can also be called by entering path name and document name in field **Tools**. It is then opened by the program linked up in Windows.
- If the program has already be specified, a document can be called by entering path name and document name in field **Arguments**.
- A program can be removed from the menu by highlighting it in the list and clicking **Delete**.
- The order of programs on the list can be changed by highlighting a program and moving it by clicking or .

See also

Customizing toolbars

Customizing the program window

Enable usage of slide projectors

Before your can actually project your show via slide projectors you need to enable usage of slide projectors in Wings Platinum.

1. Click **Options** in the toolbar below the main menu and select in **Global Options** - **General**.
2. Under **Slide projection** check box **Enable usage of slide projectors**.

3. Click **Help** on the left and enable the Help function for **Audiovision**.
4. Close the dialog by clicking **OK** and **close** Wings Platinum. After restarting Wings Platinum usage of slide projectors is enabled.

Screen configuration

The Wings Platinum concept provides for even highly imaginative projects on exceptional presentation surfaces and offers a wide scope for project design. You can work with any number of screens, divide them into as many fields with or without overlap as you desire and even control them dynamically. Doesn't this sound a bit complicated...? Don't worry, you'll manage. All the basic settings can be done via the various Wizards will help you prepare the show. For any other cases, information can be found below.

The concept for screen display

Wings Platinum is based on a highly differentiated concept for representation of visual media. Depending on working situation and available computer hardware representation of pictures can be based on full or reduced resolution of displays or video projectors.

Modern computers usually allow editing and presentation of standard shows at full screen resolution. The necessary media files for very complex shows and multidisplay shows, however, may be so large that even modern computers can not always guarantee swift editing. So as to make even such shows editable, we have come up with a comprehensive system for display data management which creates additional file versions for output, so-called display data, and saves them to hard disk. These files can also include image editing steps, i.e. sharpening of pictures after scaling. This means that originals at any size and HD videos up to a resolution of 4 K can directly be edited via Wings Platinum because the display data and the corresponding properties for output are automatically created in the background. All you need to do is define the general set-up, which is actually done by configuring a project via the Wizards, but it is still possible to change the settings manually at a later time.

The following display data are created by Wings Platinum:

Pictures

- **Low resolution** for display within the program (e.g. thumbnails in the Media Pool or in objects). By default the long edge of a picture is scaled to 192 pixels, although you can also define the size yourself. See Project Options - Display data.
- **Medium resolution** for screen display during editing. Actually, this is only required for multidisplay or for very complex shows. For standard shows, this preview resolution can be set to 100 percent, which corresponds to the high resolution set for presentation.
- **High resolution** for presentation at optimum quality, i.e. at the full resolution of the display or video projector. The settings for the display data for pictures are made via the Project Wizards. For existing projects, the settings can be altered via the Screen Properties. Optional, global picture editing processes, such as sharpening, can be defined under Project Options - Picture processing.

Videos

- **Low resolution** with three different picture sizes for display in Media Pool and Timeline.
- **Medium resolution** for screen display during editing. These display data are one quarter of the picture size for SD videos and one ninth for HD videos, i.e. an SD video (768 x 576 pixels) is displayed with a size of 384 x 288 pixels in the preview and a full HD video (1920 x 1080 pixels) with a size of 640 x 360 pixels. If you enable better preview quality for HD videos one quarter of the picture size is used for the preview, which would correspond to 960 x 540 pixels for full HD. See also Project Options - Display data.
- **Original resolution** and full frame rate in the form of intermediate video data for presentation (optional). Interlaced videos are usually deinterlaced during creation of intermediate video data, i.e. they usually consist of non-interlaced pictures only.

How does display data management work?

As mentioned above, even during the creation of a standard show the pictures can be edited at full screen resolution (based on the high-resolution display data) and the videos be edited on the basis of display data and pre-

sented on the basis of the original or deinterlaced intermediate video data. When a high number of videos is to be presented simultaneously and the computer can no longer cope with this situation, playback can be based on low-resolution display data. Change-over to low-resolution display data is possible for every track independently. In such a case, a high-resolution mix-down video must be produced for presentation purposes.

To display of pictures, the display data are loaded into the graphics card memory where the image mix is processed. If sections of pictures are to be shown only, the graphics card is only supplied with the necessary portions of the picture, which saves graphics memory and computer processing power. Multidisplay shows require particularly large display data so that it would definitely be unwise to load the whole picture into the memory although only a fraction of it is required for the corresponding slave. The progressive display data management in Wings Platinum offers distinctive advantages as it allows pictures to be presented on a correspondingly high number of slaves at virtually any resolution.

To ensure optimum performance and highest quality the display data can be optimized for a particular object and a certain application after completing the show. After all, some pictures may only be used at a small size as an insert, whereas some pictures may need to be enlarged for a camera movement. In optimizing display data, the picture size is adjusted to the size required for the corresponding picture programming, which prevents a loss of sharpness due to unnecessarily strong scaling and saves graphics memory on top of all that.

For multidisplay shows a distinction must be drawn between editing and standard playback (started by clicking the mouse or pressing the space bar) and presenting (started by pressing the F5 key). For editing and controlling standard playback medium resolution is used to guarantee swift editing at all times. But if you want to play back the show at full quality you need to start Presentation Mode by pressing the F5 key. In this case, playback is always started in full screen mode based on high-resolution display data.

Displaying/hiding screen windows

The screen window allows you to view the picture sequence including dissolves and videos. The quality of display in the screen window depends on

the kind of display that has been chosen. See Choosing the method for screen display.

This is how screens are displayed / hidden:

- To display an activated screen, click on **Display screen** in the function bar below the main menu. The same way the screens can be made to disappear. As an alternative, you can also press the **F10 key**.
- If you have defined several screens for your project but don't want to display each of them, simply remove the checkmark in category **Screens** (Media Pool) to prevent screens and screen fields from being displayed.

Info

- In order to be able to display a screen, at least on screen field must be enabled, i.e. provided with a checkmark.
- For playback in fullscreen mode only one screen must be activated. If necessary, deactivate any screens in the Media Pool that are not required.

See also Configuring screens

Adding a screen

You can use several screens in a project. This is how you can add a screen:

1. In the Media Pool click on category **Screens** for the available screens to appear on the right.
2. Right-click a free area in the Media Pool and select **Add screen**. Following this, the Screen Properties of the new screen will appear.
3. The Screen Properties may reflect already available screens. Any modifications can now be made. See also Screen Properties.
4. Finish by clicking **OK** and the new screen will be displayed as a new screen field.

Info

- For the screen to be able to display a certain picture, the tracks must be set for output on this screen. See Picture tracks and Video tracks.
- In order to duplicate a screen, you right-click the screen to be duplicated and select **Add screen**.

Screen properties

In the **Screen Properties** dialog you can enter the parameters for size and proportion and for a number of output options. By the way, the screen is the total area available for creation and design of your show.

1. In the Media Pool click category **Screens** and the category contents will be displayed.
2. Right-click the required screen and select **Properties** and the dialog will appear. As an alternative you can also open this dialog as follows:

- ...via buttons in the Properties Dialog of Video or Live/Video/TV tracks, Picture tracks or Text tracks.
- ...by right-clicking the screen window and selecting **Properties**.

The following settings can be made in the Screen Properties:

Aspect ratio

Here you enter the corresponding screen aspect ratio. You can choose an aspect ratio that is suitable for particular media or define one yourself. If the aspect ratio of the pictures used deviates from this entry, the pictures may, under certain circumstances, be distorted (...depending on the Screen field properties).

Fullscreen settings

Fullscreen settings allows the following options:

- Option **Windowed display only (no fullscreen display)** causes the screen to be displayed in a window even in Presentation Mode (**F5**

key). Since a project for presentation must only have one full screen you can choose this option if you want to use several screens.

- **Keep aspect ratio** makes sure that the defined screen aspect ratio is maintained independent of the monitor or video projector aspect ratio.

  Picture shift: If there is a difference between the screen aspect ratio and the monitor or video projector aspect ratio, the image will be placed in the middle of the screen resulting in black borders on the monitor; this corresponds to a **picture shift** of 0 %. A picture shift of **100 %** means that the picture is moved to the top edge and one of **- 100 %** means that it is moved to the bottom edge of the monitor. When you use a portrait format screen, **100 %** means moving it to the right edge, while **- 100 %** means moving it to the left edge.

- **Black background** causes the monitor area which is not covered up by the screen to be displayed in black. Without checkmark the desktop or the window may be visible.

- When **Display as topmost window** is activated, no window can cover up the screen. If you want to integrate a PowerPoint presentation, this option must not be chosen, otherwise the PowerPoint contents will not be visible.

- **Display mouse cursor** can be enabled for In-Screen Editing in full screen mode or for trigger execution via Screen buttons. See also Executing triggers via objects on the screen.

Navigation bar colors

You can customize the colors of the navigation bar on the screen to adjust the bar to the contents.

- Click the color fields and select the appropriate color. Click **Default** to resume the default color setting **Details on color selection**.

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object,

if live update is supported by the object. This way, a before/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

Display Warp / VIOSO Calibration

For automatic camera-based calibration and alignment of your Multidisplay setup or for manual display warping check box **Display Warp / Vioso Calibration**. See also Using Display warp and Camera-based calibration.

Output size and quality of display data

On the right you can enter output size and resolution of display data for the different operating modes:

Presentation

- Entry of the **Output size** is important for the display layout of multidisplay shows and as a reference if you want to display image and videos in the screen at the original size(...i.e. an image pixel is directly changed into a display pixel during the display). For display at the original size the native video projector or display resolution and the output size need to be identical. For multidisplay shows enter width and height of the entire screen for the output size. If you select **Keep**

aspect ratio it will do to enter the width, the height results from the chosen aspect ratio.

- **Picture display data** defines the resolution of the display data. To achieve optimum quality for presentation (start by pressing the F5 key), the image width for standard single display shows correspond to the display or video projector resolution, i.e. the screen touches the sides on the right and left. If the screen touches the top and the bottom, on the other hand, you need to calculate the optimum entry.For multidisplay presentations, the picture width should correspond to the output size, i.e. to the size of the entire screen.
- When checkbox **Reset pan/zoom** is checked, presentation (via the **F5** key) is always at standard fullscreen display of 100%. This applies also to situations when the pan function was used to change the display for In-Screen-Editing. See also Enlarging/reducing the screen content.

Info Before the presentation you can have optimized display data created for your show, which is definitely an advantage in terms of quality and performance. See Creating display data for media files.

Preview

- For direct playback from the timeline (start by pressing the space bar) and during editing you can choose a reduced resolution of the display data instead of the default setting of 100 %, i.e. the size corresponds to the size chosen for presentation, to ensure swift editing at any time even for complex shows. For **Max. picture size** enter the percentage to which the display data are to be reduced with reference to the maximum picture size specified under **Presentation**, e.g. 50 %. For multidisplay shows this value should be distinctly lower than 50 %, i.e. about 10 % to 25 % depending on the number of slaves. Please bear in mind, that a reduction by half of the picture width, for example, reduce the amount of data by one quarter and distinctly reduces the burden on the computer.
- By placing a checkmark next to **Slaves always use presentation quality**, the slave computer does not use any preview display data but always full presentation quality.

Video output

- You can define a **Default size** for video output. It is used as default value for video output and stands for the overall picture size for multi-display presentations via split video files. When you place a checkmark next to **Keep aspect ratio**, entering the width will do, as the height automatically results from the selected aspect ratio.

Info

- After completing the show, i.e. before the presentation and before video creation, you should have optimized display data created for your show, which is definitely an advantage in terms of quality and performance. See Creating display data for media files.
- If you have changed the settings for the pictures sizes for display data, we recommend recreating all display data in one go. Otherwise, this is done in the background while you continue editing, and may lead to annoying waiting times. See Creating display data for media files.

Fullscreen Mode

You should know the following about Fullscreen Mode:

Fullscreen presentation of a show is started by pressing the F5 key. See also Starting and stopping playback.

Terminate Fullscreen playback by pressing the **Esc** key twice. If the show has already been stopped, pressing Esc once will do. **Note:** If the screen is allocated to a second monitor it remains in Fullscreen Mode. In such a case you can change over to windowed mode by double-clicking the screen.

Only one screen can have fullscreen property. With additional screens enable option **Windowed display only** in the Screen Properties. See Screen Properties.

With fullscreen playback, screen content that has been enlarged or reduced in size (e.g. **Pan** function) is reset automatically. If this is inappropriate, you can remove the checkmark next to **Reset pan / zoom** in the Screen Properties. See Screen Properties.

If the screen aspect ratio differs from that of monitor or video projector, you can move the screen within the monitor surface to prevent it from being right in the center. See Positioning the fullscreen picture.

Positioning the fullscreen picture

In fullscreen mode the screen is usually centered on the monitor or video projector display area. If the screen aspect ratio does not correspond to the monitor aspect ratio, black bars will be visible. In such a case you can use the picture shift function to shift the screen, which helps to prevent the trapezium distortion produced by inclined video projectors.

And this is how it is done:

1. In the Media Pool click category **Screens** and the available screens will appear on the right.
2. Right-click the corresponding screen and select **Properties**.
3. Under **Fullscreen settings for hardware rendering** you need to add a checkmark next to **Keep aspect ratio**. For **Picture shift** you can enter a percentage for the shift:
   - **Centered** corresponds to **0** %.
   - Top corresponds to 100 % (landscape format screen)
   - Bottom corresponds to -100 % (landscape format screen)
   - Right margin corresponds to 100 % (portrait format screen)
   - Left margin corresponds to -100 % (portrait format screen)

   Enter in-between values to position the screen accurately on the monitor or video projector display area.
4. Keep clicking **OK** and starting fullscreen mode to check the effect.

Menu Screen Properties

Dialog **Properties of Menu Screen** allows you to make entries for video DVD or CD menus. The menu screen is the total area available for creation of a menu.

1. In the Media Pool click category **Screens** for the category contents to be displayed.
2. Right-click the required menu screen, select **Properties** and the dialog will appear. As an alternative, you can access this dialog via the video track and image track properties.

The following settings are possible:

- Under **Video type** you define whether the menu is to be for a DVD, an SVCD or a VCD.
- Under **TV norm**, choose the norm for producing and playing back the DVD/CD.

Adding a screen field

Screen fields are components of a screen window. They are used for the output of picture or video tracks. For one screen any number of screen fields of different sizes and at different locations can be created.

1. In the Media Pool click on the plus sign in front of category **Screens** and select the corresponding screen following which the screen fields will appear on the right.
2. Right-click the corresponding screen and select **Add field**. Following this, a new screen field is created.
3. Link up the new screen field with a track by dragging the new screen field from the Media Pool and dropping it onto the track head of the appropriate track. Following this, the name of the linked-up screen field is displayed in the track head.
4. Usually, the screen field is created at the same size as the screen. The corresponding size, aspect ratio and location of the screen field can be defined in the Media Pool by clicking the corresponding fields and entering the new values. As an alternative, these values can also be entered graphically via the mouse, which is usually much easier. See Adjusting screen field size and position. For numerical entry, the Media Pool offers the following options:

- Entry of the size as a **Zoom value** as a percentage of the screen size. Depending on whether the aspect ratio is larger or smaller than that of the screen, the zoom value refers to the screen width or height.
- Entry of the **Aspect ratio** as a quotient, e.g. **1.5** or, alternatively, as a ratio, e.g. **16/9** or **16:9**.
- Alternative entry of the size in **pixels** in columns **Width** and **Height**.
- Entry of the position as a **percentage** of the screen size in the columns **X position** and **Y position**. The reference points are always the centers of screen and screen field. Positive values shift the screen field to the right or to the top, while negative values shift the screen field to the left or to the bottom.

Info

- For the screen field to be able to display something, the tracks must be configured for output on this screen field. See Picture tracks and Video tracks.
- If you want to duplicate a screen field, you right-click the screen field to be duplicated and select **Add field**.
- Please bear in mind that images may be displayed at a smaller size than the screen field if the image aspect ratio deviates from the screen field aspect ratio. See also Screen field properties.

Adjusting screen field size and position

In addition to direct entry of size and position in the Media Pool these parameters can also very conveniently be entered graphically.

1. Open the screen window and move the Locator to a position where an image or a video is to be output on the screen field to be adjusted.

   Info For the adjustment to become visible on the screen the track must be linked up with the screen field you want to change.

Additionally, the box next to **Keyframes relative to screen field** must be checked.

2. In the Media Pool click on the plus sign in front of category **Screens** and select the corresponding screen following which the screen fields will appear on the right.
3. Right-click the required screen field, select **Position + Size** and a dialog will appear.
4. Now change the screen field as desired, which is displayed by a pink frame. Grab one of the small squares in the corners with the mouse and drag it. Grabbing the square in the centre allows you to shift the whole screen field. As an alternative, you can also enter numerical values. The modifications will immediately become visible in the screen window.
5. Finally, click on **OK**.

Info

- In the editing window the screen is represented by the white field. If you change the screen field size, by entering values from 0 to 1000 %, the display is adjusted dynamically.
- The reference point of both the screen field and the screen is the centre. The values are entered as a percentage of the screen height or width, respectively.
- If the position of the screen field is not visible in the screen window, check whether the object you are using for the adjustment is actually located on the track which is output on the corresponding screen field.

Screen field properties

Screen fields are used for output of pictures and videos. When creating DVD/CD menus, they can also stand for buttons for menu operation. How to open the Screen Field Properties:

6. In the Media Pool click on the plus sign in front of category **Screens** and select the corresponding screen following which the screen fields will appear on the right.
7. Right-click the corresponding screen field and select **Properties**. This dialog allows the following settings:

   Under **Aspect ratio** you can choose whether the aspect ratio of pictures or videos is to correspond to the pixel values or whether they are to be stretched to screen field size. Note: Distortion correction of videos is normally effected by entering the correct aspect ratio. See Video Properties.

- **Without a checkmark**, all pictures are always displayed in a way which fills the screen field. I.e. pictures and videos are displayed at the screen field aspect ratio and may therefore be distorted.
- With a checkmark next to **Keep pixel aspect ratio**, the pictures and videos are displayed with the aspect ratio that corresponds to the pixel width and height. When the image aspect ratio deviates from the screen field aspect ratio, transparent areas will become visible on the right and left edge or at the top and the bottom. At **Above difference to screen field** you can enter a tolerance value as a basis from this type of display is to start. This is very convenient in order to avoid transparent bands for slightly differing aspect ratios resulting from scanning errors.
- By selecting **Menu functions**, the button functionality is activated. Click on **Select file name** to enter the video to be started by clicking on this button.

  Under **Video end action** you can choose the action to take place at the end of the video:

  - **Display menu** ...useful for selecting further videos.
  - **Pause** ...appropriate if the DVD contains only one video.
  - **Loop** ...for loop operation. Make sure this is clear from the button labelling.

See also

Adding a screen field

Adjusting screen field size and position

Displaying screen field frames

Producing a video DVD/CD

Displaying screen field frames

The location of screen fields, text fields and buttons can be indicated by a frame on the screen. This helps to analyze arrangements of screen fields and processes, as the frames are always visible, independent of the picture information.

- Right-click the corresponding screen window and select **Display screen field frames**. Following this the screen and text fields are displayed in different **Colors**.
  - **Green** → Screen field
  - **Red** → Ticker field
  - **Yellow** → Multidisplay area
  - **Blue** → Button for DVD menu
  - **Pink** → Field is currently being edited
  - **Grey** → Field is disabled in the Screen Pool
- The same way the frames can be made to disappear again.

Info

- Disabled screen or text fields and buttons are displayed in gray.
- During the presentation, the screen frames are automatically hidden, unless you have enabled **Display borders also during presentation** in the screen.

Color code for frames on the screen window

For a better overview, the frames for screen fields, text fields, menu buttons and multidisplay areas can be displayed on the screen. The frames can be distinguished by the following colors:

- **White** ➔ Screen border, only visible when the screen is displayed at a reduced size.
- **Yellow** ➔ Screen field
- **Orange** ➔ Ticker field
- **Red** ➔ Multidisplay area
- **Blue** ➔ Button for DVD menu
- **Pink** ➔ Field is just being edited via a dialog box
- **Gray** ➔ The field has been deactivated in the Screen Pool

Adding text fields

Text fields are used for text output within a show. This is how you can add a ticker field to a screen:

1. In the Media Pool click on the plus sign in front of category **Screens** and select the corresponding screen following which the screen fields will appear on the right.
2. Right-click the corresponding screen and select **Add ticker field**. Following this, a new ticker field for the corresponding screen is created.
3. Link up the ticker field with ticker tracks by dragging it from the Media Pool and dropping it onto the appropriate tracks. Alternatively, you can also create a new track by dragging & dropping the ticker field into the empty space below the timeline tracks.

Info

- The Ticker Field Properties allow you to enter different fonts, etc. for text output. See Ticker Field Properties.

See also

Ticker Field Properties

This is how you open the Ticker Field Properties:

1. In the Media Pool click category **Screens** and select the corresponding screen below it. Following this the screen and ticker fields will be listed on the right.
2. Right-click the corresponding ticker field and select **Properties**.

The dialog popping up allows you to specify the basic properties for text output of one or several text tracks.

- Any **Fonts** selectable in the system can be used.
- The **Font size** is entered as a percentage of the screen height so that the proportions always remain the same even at a different output size. **Important:** The larger the font, the more graphics memory is used up. A lack of graphics card memory may lead to problems in graphics output.
- Selectable **Attributes** are **Bold** and **Italic** as well as **Left aligned**, **Centered** and **Right aligned**. The line alignment can also be chosen in the Text Object Properties. See Ticker Object Properties.
- The field next to **Default color** shows the font color. Click on color field next to it to open the color selection dialog. **Details on color selection**.

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a be-

fore/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

Info This color only takes effect if the ticker object does not have a control track for color. If necessary, remove the appropriate checkmark under **Global Options** - **Objects** - **Text/Ticker**, for new objects to be created without control track.

- For **Motion** you can select **None**, **Horizontal** or **Vertical**. When the Multidisplay License or the Show Control Module is installed, you can also enable a **Ticker loop** for continual repetition of the text.
- The **Speed** of animated text is entered as a percentage of the screen per second.
- The option under **Display of text files** only becomes available upon when the **ticker loop is enabled**. If you place a checkmark next to **Update display of altered text files automatically** the text files are checked for modifications before they are displayed.

Adjusting the screen window size

Just like any other Windows window, the screen window is freely adjustable. The effect on the screen content, however, is different.

- When you scale it by dragging any of its corners, window and screen content will keep the proportions.
- If you drag at one edge of the screen window, the editing area increases in size. The actual screen border is displayed as a white line.
- Aspect ratio and cropping area can be **reset** by dragging one of the corners while pressing the **Shift** key.
- If the screen and its content is to be displayed at the presentation output size, right-click the screen and select **Restore output size**. The output size is defined in the Screen Properties.
- Double-click the screen window you can change over between fullscreen and window mode.

Info

- In the screen window title bar, the current size of the screen content is displayed as a percentage of the window size separately for X and Y axis.
- The title bar also displays the current **frame rate (fps)** and the **texture data size (MB)** for hardware rendering. The frame rate defines the rate at which the graphics card outputs newly rendered pictures. Texture data size defines the quantity of image data the graphics processor is processing for the current display. Of course, the graphics memory should also be able to accommodate further textures required for the next display. Both parameters can be used for analyzing bottlenecks. The frame rate drops when the graphics card processor is running to capacity. With a very low frame rate, display will start being jerky.
- In Fullscreen Mode only one screen must have fullscreen property. With additional screens enable option **Windowed display only**. See Screen Properties.
- Resolution and quality of the picture or video preview in the screen window are dependent on the quality of display or texture data. See Screen Properties.

Enlarging/reducing the size of screen content

Display of the screen content can be enlarged, reduced in size and shifted. This has no influence on the objects within a show, but affects only the display on the screen. A reduction in size is necessary for In-Screen Editing if frame and handles are no longer visible. With extreme panorama formats, i.e. when the preview in the screen window turns out to be too small for editing, the display can be enlarged in size.

Auto Zoom Function

Function **Auto Zoom** is activated by default. It makes sure that the handles of the edited images always remain visible during In-Screen-Editing. If you use the Pan function to shift the screen section, Auto Zoom is disabled and you can adjust portion or zoom manually via the pan function. By right-clicking the screen and selecting **Auto Zoom** or **Restore pan/zoom** you can reactivate the Auto Zoom function.

Manual adjustment of Pan/Zoom

In the toolbar, enable mode **Pan** by clicking it, so that the background turns blue. This **Pan** tool can be used very effectively and enabled temporarily by holding the **P** key.

- **Enlarge or reduce in size** ...turn the mouse wheel until the desired size has been reached.
- **Shift** ...click the mouse the screen and drag the content to the corresponding position.
- **Resume normal size** ...double-click the screen.

Following this, disable **Pan** mode again by clicking or or by pressing key **T** or **S**. See Toolbar.

Info

- You can change over between normal screen size and the last pan setting by right-clicking the screen and selecting **Reset pan/zoom** or **Restore pan/zoom**. This is very useful for checking In-Screen Editing.
- Option **Reset pan / zoom** gives you the chance to decide whether the Pan/Zoom settings are to be automatically reset during the Presentation (**F 5**) or not. See Screen Properties.
- By dragging one screen window edge you can also extend or reduce the size of the screen. See also Adjusting the screen window size.

See also

Displaying/hiding screens

In Screen Editing

Adjusting the screen size

The screen size is only relevant for multidisplay shows or for pixel-accurate display of images. The screen size may only have to be changed when you want to output the show on displays or video projectors with a higher resolution than specified in the Media Pool.

1. In the Media Pool click on category **Screens** for the available screens to appear on the right.
2. Right-click the corresponding screen and select **Properties**.
3. Select an **Aspect ratio** or enter individual values next to **User defined.**
4. Under **Presentation** enter the corresponding size in pixels next to **Output size**.
5. Click on **OK** to close the dialog.

Info

- Pictures and videos can be automatically zoomed to their original size by dragging and dropping them into the timeline while holding the **Alt** key pressed. The reference size is the currently set screen output size. See also Motion: Position - Zoom - Rotation.

- Experimenting with various display data sizes results in a number of picture versions being stored on the hard disk, which take up a lot of storage capacity. For an easy way to quickly delete redundant display data click here.

One screen with one screen field

This application is most easily implemented by means of the Wizard for creating an audiovision. Below you will find a description of a manual setting of screen and screen field and of how to allocate additional slide projectors:

1. In the Media Pool, click category **Screens**.
2. If there is no screen available yet, right-click a free area in the Media Pool and select **Add screen**.
3. In line **Standard** click into column **Projectors** and enter the device ID of those slide projectors that you want to project on this screen field, e.g. **1, 2, 3, 4**. Press the Enter key to finish.

Info When the selected projectors are displayed in brackets, e.g. (1), (2), etc. they need to be configured in the device control first. Both screen and screen field must be allocated to the picture tracks for the output. If this has not been done yet, you can do this at a later time.

Panorama screen hard edge

This is how you configure a screen with two hard edge screen fields. For configuration of a digital multidisplay show use the Wizard for Mixed Media Projects. Before you do so, choose the help version that suits your range of applications best. See Selecting the right type of help.

1. In the Media Pool, click category **Screens**.

2. If there is no screen available yet, right-click a free area in the Media Pool and select **Add screen**.
3. Right-click **Screen** and select **Properties**. Under **Aspect ratio** click **User defined** and enter double the width. For an aspect ratio of your pictures of 3:2 you enter **6:2**, for example.
4. Right-click **Screen** and select **Add field** for the screen to receive two screen fields.
5. Add **left** to one field name and **right** to the other. This works just like in the Windows Explorer, ...mark the name and click it a second time.
6. In column **Aspect ratio**, enter the aspect ratio of your pictures for both screen fields, e.g. **3/2** or **1.5**.
7. Now enter **25** percent at **X position** for the right screen field and **&endash;25** percent for the left one.
8. For projection via slide projectors enter the address of the slide projectors to project onto this field, e.g. **1, 2** for the **left field** in column **Projectors**. Press the Enter key to finish this entry. Now continue by specifying the slide projectors for the **right field**, e.g. **3, 4**.
9. Finally, allocate the screen and the corresponding fields to the picture tracks via Properties.

Info If the numbers of the selected projectors are displayed in brackets, e.g. (1), (2) etc. they need to be configured in the device control first.

Multidisplay

Display Properties

This dialog is about settings to arrange and define the overlaps of multidisplay presentations. When you have created your project via the Wizard for Mixed Media Projects and have entered correct values for the displays, all settings should be as required. For differing requirements you will have to correct these values.

Display size and position

VIOSO calibration via camera ...must be enabled if you want to use a camera to calibrate displays and softedge masks. This function is only available in combination with a Wings VIOSO License.

Left Bottom Width Height

Defines the resolution of displays or projectors used and their position on the screen. Values can be entered in **percent** (top) or in **pixels** (bottom) depending on which one you prefer. Pixel values always refer to the activated screen reference size. At **Left** and **Bottom** you define the amount by which the display is to be displaced to the left or to the bottom.

Info

- Size and location of the display define the image portion that is to become visible on the screen. It is "cut out" from the screen in accordance with the settings. You can have the location of the displays displayed on the screen. See Displaying multidisplay frames.
- The aspect ratio of a display in Wings Platinum must correspond to the aspect ratio of the physical display or projector. Otherwise the image is distorted and does not fit in with the contents of the other displays.

Different physical resolution for presentation

If you enable **Apply resolution** you can enter a resolution that deviates from the display size (see above). The display data will be adjusted accordingly. This is an interesting feature for use of different types of displays. In this case, the display size refers only to the screen layout section while the resolution of media can be adjusted individually for the display.

Info Please note that the deviating resolution currently cannot be considered for creation of split videos.

Assignment

This field is used specify which hardware is to be used for output of display contents.

For **Display PC** select the computer to supply this display. If no PCs are selectable, you need to add some in the Device Pool. See Adding a master/slave PC.

Under **Monitor** you specify the graphics card output for output of display contents. The graphics card outputs must be enabled as extended desktop in the Windows display manager or in the graphics card tool.

Windowed display only (no fullscreen) can be enabled if no fullscreen mode is to be used. Only special configurations will require this setting.

Next to **Monitor for fullscreen display** you can enter the graphics card output (dual head) for the fullscreen image to appear.

Softedge mask

For a display arrangement with overlaps you need to **Enable** softedge mask.

- For **Texture size** you can choose the gray scale resolution.
- If you want to adjust gray scale individually for every display, you need to remove the checkmark next to **Apply global softedge mask of screen**.
- The overlap usually has already been preset by the Wizard. In the fields **Left**, **Right**, **Bottom** and **Top** any alterations of the gray scale size should only be made in exceptional cases. These entries, too, can be in pixels or as a percentage with reference to the activated screen size.

Display Warp

Here you define whether and in what way warping is to be performed for the corresponding display.

- A checkmark next to **Enable display warp** enables display warping.

- **Warp softedge mask** ensures that the softedge mask is warped too. You should enable this function for heavily and individually warped displays, e.g. for projection on vertically warped surfaces.

Displaying multidisplay frames

The location of multidisplay areas can be indicated by displaying a frame on the screen. This helps to analyze arrangements of fields and processes, as the frames are always visible, independent of the picture information.

- Right-click the corresponding screen window and select **Display multi-display frames**. Following this, the multidisplay areas are displayed as yellow frames.
- The same way the frames can be made to disappear again.

Info

- Disabled screen fields or buttons are displayed in gray.
- During the presentation, the screen frames are automatically hidden, unless you have enabled "**Display borders also during presentation**" in the screen.

Transferring position and size of displays to screen and ticker fields

Position and size of displays can be assigned to screen and text fields via drag & drop. This way, screen and text fields can very accurately be aligned with displays, which is particularly interesting for multidisplay shows with native image display, e.g. for LED screens.

10. In the Media Pool click on the plus sign in front of category **Screens** and select the corresponding screen following which the screen fields and display will appear on the right.
11. Grab the display whose position and size you want to use and drag & drop it onto a screen or ticker field.

12. After confirming the message with **OK**, displays and screen or ticker fields will be aligned with each other.

Info This alignment works both ways, i.e. you can also assign position and size to a display by dragging and dropping a screen or ticker field onto it.

See also

Adding a screen field

Adding a ticker field

Display Properties

Importing a multidisplay configuration for a screen

Configurations for multidisplay shows, i.e. the displays, softedge masks and warp settings of a particular multidisplay configuration can be imported into other projects.

13. Create a new project with a screen size that corresponds to your multidisplay setup. In the Media Pool click on category **Screens**.
14. Right-click the corresponding screen and select **Import multidisplay configuration** and the file dialog will appear.
15. Select the corresponding project, click **Open** and the selection dialog for the multidisplay setup to be imported will pop up.
16. Select the screen whose configuration is to be imported and choose whether any possible displays are to be maintained or not.
17. Place a checkmark next to **Softedge** and **Warp settings** if they are to be imported as well.
18. Click **OK** to import the configuration.

In the Media Pool in category **Devices** set up the required master and slave PCs and allocate the slave computers to the displays. See also Configuring the presentation network.

Exporting soft edge masks

Usually, the soft edge masks are added to the picture information by the graphics card during presentation. If, however, you want to edit or use your production under different conditions you can export soft edge masks as bitmaps.

1. In the Media Pool, under category **Screens** right-click the display whose soft edge mask you would like to export and select **Export softedge mask&ldots;** If this menu item does not show up, you need to enable soft edge masks in the Display Properties first.
2. **Picture size** automatically shows the display size. For a mask at a different size you just need to change the values.
3. For **Color depth** you can now choose between two possibilities:
    - **24 bits** .....creates a picture with the mask being displayed black on white. Actually, this sort of picture file is only suitable for viewing.
    - **32 bits** ...creates a picture file with an alpha channel, with the mask being stored in the alpha channel and the picture information being in black. This picture file can be added to the picture information via alpha control.
4. Click on **Select file name** and enter the required target directory and file name followed by clicking on **Save**.
5. Export the soft edge mask by clicking on **OK**. The mask picture file has now been saved as BMP format. Repeat this procedure for the soft edge masks of the other displays.

Info You can copy the softedge mask curves from existing projects and paste them into other ones. Right-click the Preview Window containing the mask and select **Copy** or **Paste**.

Display Warp

Screen Warp / Display Warp

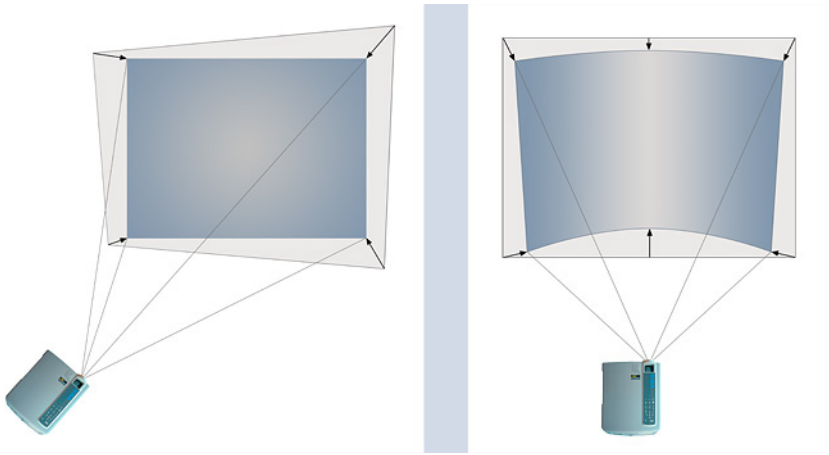
Projections that do not hit the level surface at a right angle cause deformed and warped pictures. The Multidisplay License and Wings VIOSO features a Display Warp function which allows warping of screen contents or individual multidisplay areas in order to geometrically adjust the projected image to warped or uneven projection areas. More extensive information can be found under

Using Display Warp

Warping display contents

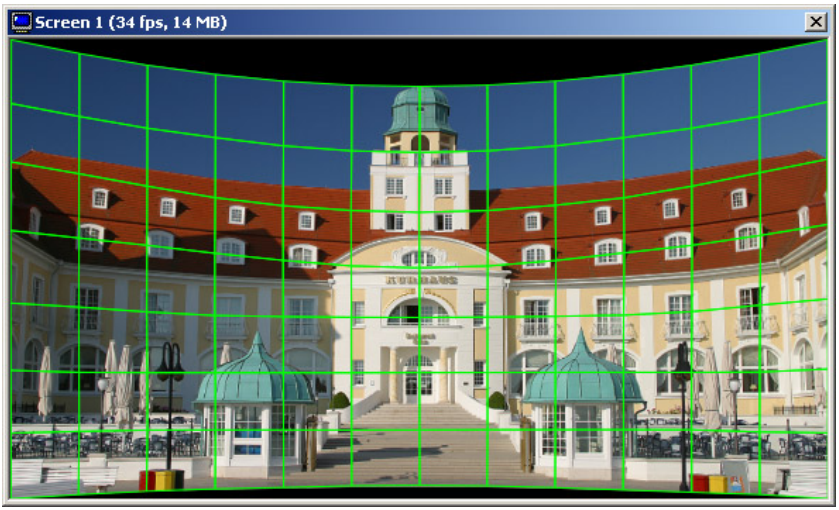
When the projection surface is not level or when a projection does not hit the surface at a right angle the projected pictures are deformed and warped. The **Multidisplay License** contains a display warp function which allows individual multidisplay areas to be warped so as to adjust the projected image to curved or uneven projection areas. This function is indispensable for congruent and overlapping softedge projections onto uneven surfaces. Also distortions produced by projection lenses, which have a double effect on the overlap areas can be compensated for. By the way, the Warp function also offers much better quality than more expensive hardware solutions as the image files are still available at high-resolution quality at the time of correction. Warping can be performed very comfortably and effectively by means of automatic camera-based calibration. See Camera-based calibration of multidisplay projections.

Examples of typical applications:



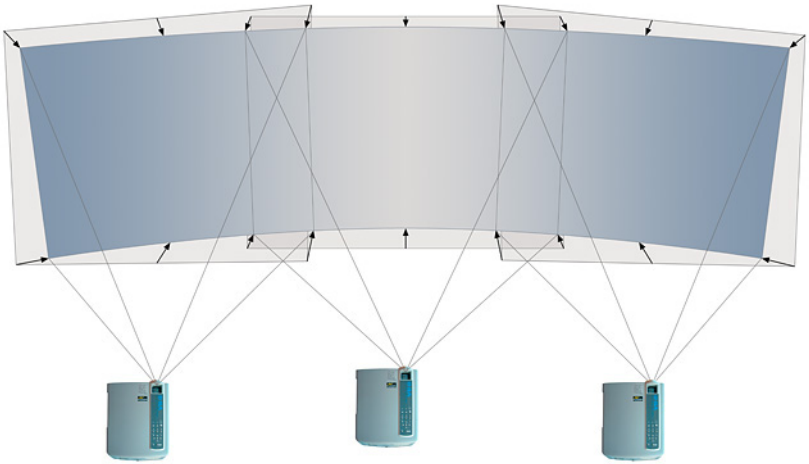
Left image: Projection of an image onto the screen at any other angle but a right angle causes a distortion in perspective. Such a distortion can very easily be corrected by dragging the image corners via Warp. For everyday projection life this function can be beneficial in many ways. Here is one example: The projector is mounted to a crossbar in a location which is difficult to reach. After bringing the projection screen in its final position it turns out that the image cannot be accurately projected onto the screen. The Display Warp function provides an easy and fast solution for problems like that.

Right image: In cinemas or for complex multimedia installations projections onto bent or curved screens are becoming increasingly popular. This way, you get a number of different distortions which require very individual distortion correction. The Display Warp function offers a grid with freely definable fineness, as well as a number of tools for warping which allow bent lines and other distortions to be corrected without any extra efforts.



Correction for projection onto a warped projection screen using Display Warp

The most important Display Warp application is definitely soft edge projection on curved or warped surfaces, where the structure of the images must be perfectly congruent in the overlap areas. Especially high-resolution pictures animated by camera movements, or HD videos mercilessly expose the flaws in the overlap areas. The distortions are not only caused by the shape of the screen and the projector set-up, but also by the optical distortion of the lenses, which is particularly well visible in the overlap areas.



Using Display Warp

This function is only available with a Multidisplay License or Wings VIOSO. See also Licenses and functions.

This adjustment layer allows individual warping for every display. Display warping is usually necessary for softedge projection onto uneven projection screens or for lenses with optical distortion.

This is how you proceed:

1. Open your show project and start your multidisplay system.
2. In the Media Pool click category **Screens** and, in the right Media Pool section, right-click the corresponding screen and select **Properties**.
3. Under **Display Warp** check the box next to **Allow display warp / VIOSO calibration** and close the dialog by clicking **OK**.

4. In the Media Pool click the plus sign next to category **Screens** and click the corresponding screen. After this its screen fields and displays are shown on the right.
5. Right-click a display and select **Properties**. Under **Display Warp** check box **Allow display warp**. For softedge productions it is usually appropriate to activate option **Warp softedge mask** .
6. Click **OK** to close the dialog and activate warping for the other displays likewise.
7. If you are using slave computers transfer these modifications by pressing the **F7** key.
8. Start Presentation Mode by hitting **F5** for the screens to open and the image to be displayed at full quality. Pause Mode can be canceled at a later time by clicking in the timeline.
9. In the Media Pool, highlight the display to be adjusted and the alignment grid will be displayed in the Properties window (...where the Properties Table would be located).
10. The warp grid will be displayed with its last settings. In order to reset it or change the grid divisions select **Properties**. Under **Warp** enter the number of lines and columns the alignment grid should have. It is useful to start with a low number of divisions, e.g. 2 lines and 2 columns. See also Tips for effective warping.
11. For any new warping reset the grid by placing a checkmark next to **Reset warp**. Click **OK** to close the dialog.
12. Via the handles, the grid can be modified as follows:
    - Drag the **round handle** at the grid edge to change the size.
    - Drag the **square handles** to shift all the grid points of the corresponding grid line.
    - Dragging while holding the **Ctrl**-key down allows individual points to be moved. This applies both to round and square handles.
    - When clicking the round handles at the edge they are provided with additional **Bezier handles** which allow direction and degree of warping to be changed.

- After highlighting the round handles, they can be moved vertically and horizontally via the cursor keys.
- Dragging the **Grid area** moves the grid as a whole.
- Dragging outside the grid rotates the grid.

The grid display in the Warp Editor can be modified so as to allow easier and more accurate editing:

Start by highlighting a handle. Press the **Alt** key and turn the mouse wheel to enlarge or reduce the display in size. Continue pressing the Alt key and change the visible section by grabbing and dragging the grid.

Any changes are immediately visible in the picture. For warp alignment you should use a grid pattern, e.g. picture **Pattern**, which was used in the workshops for creation of multidisplay shows:

Creating a multidisplay show via one computer

Creating a multidisplay show using master and slaves

Info

Possibly start with a simple grid that allows easy editing. .

- For mere Keystone correction choose **Linear** in the grid properties under **Interpolation** instead of **Spline**. Open the Grid Properties by right-clicking the grid and selecting **Properties**.
- Active warping requires slightly more graphics memory than playback without warping.

How effective warping can help you attain your goals

Here you will find a few tips that should help you to get rid of distortions with the least possible time and effort.

Taking simple steps

Possibly avoid using fine warp grids in the beginning. This mode requires the most time and effort in editing.

Using the appropriate adjustment grid

Start by choosing a coarse warping grid with few intersection points. Only if you can't achieve what you were hoping for, refine the grid. Below you will find a few application examples:

A grid of 1 row x 1 column allows easy rotation of the picture. This is a useful way if a video projector is crookedly attached to the ceiling or a display behind a cover is lopsidedly mounted.

Also for keystone correction a grid of 1 row x 1 column will do. Although most video projectors also feature the option of keystone correction, Wings Platinum is usually more precise in doing so.

For correcting projection onto a cone-shaped surface a grid of 1 row by 8 columns has been selected here.

You can also start with a coarser grid and refine the grid if you need to effect finer corrections. Any warping that has been effected so far, remains unchanged unless you activate **Reset warp**.

Any incorrect warping of the grid can be made undone via **Undo**. If the screen is not updated instantly, you just need to move the Locator slightly with the mouse.

See also

Using Display Warp

Device control

General remarks on the device control system

Wings Platinum with its modern software architecture permits a nearly unlimited number of devices to be controlled. All functions can be freely allocated to the corresponding device via device ports. A port ID, a protocol or control signal, respectively and a computer port are allocated to a device port, which enables it to address devices. This concept provides for a high degree of flexibility.

You don't normally have to care about the internal management and allocation of functions, devices, protocols and ports &endash; the Wizards will more or less do this for you. For device configuration you can use category **Devices** in the Media Pool.

Adding a device port

Devices are controlled via device ports which can be configured and managed in the Media Pool. First of all, you need to configure a device port and then to define the devices to be controlled.

Configuring a device port

1. In the Media Pool, click on category **Devices**.
2. Right-click some free space in the right Media Pool section and select **Add port** ▸ followed by choosing the corresponding port. Your selection depends on the devices and control types you are using. If you do not know the detailed requirements of your device check the following topics:
    - Configuring the SC Net System

- Control units and slide projectors
- MIDI devices
- Tascam US224
- Mackie Control
- Remote control of Wings Platinum
- Time code synchronization

3. In the dialog box popping up, make the corresponding settings for your port. Connected and activated Stumpfl control units, as well as Ektapro and Leica RT projectors are immediately searched and recognized. Other devices usually do not respond.
4. Finish setting the device ports by clicking **OK**. You can now add devices to the device port. See Adding devices.

Info

- It is possible to enter a an additional identification for a device port, e.g. **Stumpfl SC Net | Light**. To do so, click the name of the device port in the right Media Pool section and enter the name addition.
- Category **Devices** lists all the device ports and devices used in the project. Device ports must haven an entry for the serial port in column **PC Port/Address**, e.g. **Com 1**.

Adding ports and control channels to an SC Net port

In the Media Pool, new ports and/or control channels can be added to the existing SC Net port (or DLC Port).

1. Click category **Devices** in the Media Pool.
2. Right-click the device port **Stumpfl SC Net** or **Stumpfl DLC** or a device folder and select **Add devices...**

Info If you want to arrange the devices in the Media Pool according to certain functions, you should start by creating a device folder followed by creating the new control channels in this particular folder. See Adding device folders.

3. In the dialog box **Add device** popping up place a checkmark next to the corresponding control channels or ports and enter the required number. You can select several control channels and ports (type and number).
4. For an SC Net port, you need to enter the device address of the module at **SC Net address**. The SC Net subaddresses are automatically counted up by Wings Platinum, starting from the first address available.
5. Finish adding devices by clicking on **OK**.
6. It may be useful to name the control channels appropriately, e.g. "Room illumination", "Spot left", "Filter blue", etc. Right-click the control channel, select **Properties** and enter the corresponding **Name**. As an alternative, the Properties Dialog can also be opened by double-clicking the corresponding device.

Info

- **Important:** For the devices to be addresses via the specified control channels, the addresses in the Media Pool must correspond to those set at the hardware. If necessary, correct the addresses. See also Configuring the SC Net system.
- It is also possible to add entire SC Net modules including all their resources. See Adding SC Net modules.
- If you are using a **Stumpfl DLC port** and want to control via DMX, you need to choose 0 &endash; 10 Volts. For DLC, control information is output both as DMX and 0 &endash; 10 Volts in parallel.
- You can link up an object with a number of control channels by highlighting the corresponding control channels in the Media Pool and dragging them all simultaneously into the timeline.

- A control channel can now be assigned to a number of objects simultaneously by highlighting the corresponding objects before dragging the control channel onto one of these objects.
- You can drag several devices or control channels into the timeline in one go while and create a separate track for every individual device by pressing the **Shift** key while releasing the mouse key.

Changing the settings for the device control system

The device configurations in an existing project can be modified. However, if you want to add new devices, click here.

Changing the device settings

1. Click on category **Devices** in the Media Pool. If the corresponding devices are not visible, click on the plus sign next to the **Device port**.
2. Right-click the line of the corresponding device port or device and select **Properties**.
3. In the pop-up dialog box you can now make the corresponding alterations. Confirm by clicking on **OK**.

Enabling device ports

Any connected devices can be run in sync during playback and editing after enabling the device ports. Enabling the device control is a precondition for all ports configured in **Media Pool** - **Devices** to work properly.

- In the tool bar below the main menu click on **Enable device ports**. The devices will follow every Locator movement. Click on the button again to disable the device ports again.
- As an alternative to pressing button **Enable device ports**, you can also press the **F8 key**.

Info

- When starting the synchronization process it may take a few seconds for the devices to respond.
- When a message is displayed in the preview window saying that the firmware (operating software) of the control unit is not up-to-date, you should update it. Otherwise proper function cannot be guaranteed. To find out about the corresponding firmware version for your unit, refer to topic Documentation Status.
- As a sign for active communication between the control unit and the computer, button is depressed and displayed in color. In addition to this, PC LEDs will light up at the Stumpfl control units. When an SC Net Port is used, the PC LED at the control unit goes out while SC Net commands are being transmitted and the SC Net LEDs light up.
- If the projectors do not respond, despite the fact that the device control is activated, perform a systematic check of devices or slide projectors.
- Individual devices or a number of devices in the Media Pool can be activated or deactivated. ..See Enabling/disabling devices.
- Via a control panel field, devices can also be directly or, optionally, override controlled. See Control Panel for direct operation.

Enabling/disabling devices

The devices in the Media Pool, i.e. ports and control channels, can be enabled or disabled. This is very helpful for analytical purposes or if you temporarily don't want to use the full number of devices.

1. Click one category **Devices** in the Media Pool. If the corresponding device should not be visible, click on the plus sign.
2. The devices in the Media Pool can be enabled or disabled, by checking (enabling) or unchecking (disabling) them. Enabling and disabling also

works for device folders. In this case it affects all devices in the corresponding folder.

3. It is also possible to enable/disable several devices in one go. Right-click a port or a device folder, select **Device Status** and the required function. This causes the status of all devices within a folder or for a device port to be altered correspondingly.

Adding devices

In the Media Pool, various devices, control channels and ports can be added to the device port. The individual types of devices that can be added depend on the type of device port. Devices that are not supported cannot be selected in the dialog box.

1. In the Media Pool click on category **Devices** and select the corresponding device port.
2. Right-click some free space in the right Media Pool section and select **Add devices...**
3. The dialog displayed will only allow selection of some of the items listed below, depending on the type of port:
   - **Slide projectors** ...adds the corresponding number of slide projectors. The projector type can be chosen by clicking on . Click on **Extended options** to change some parameters. See also Slide projector properties. When there are several slide projectors, the address is counted up. The address setting depends on your set-up. See also Control units and slide projectors.
   - **Switch output** ...adds the corresponding number of switch outputs. For an SC Net port the address refers to the module; subaddresses are automatically counted up. See also Adding ports or control channels to an SC Net port.
   - **0 - 10 Volt** ...adds the specified number of analog channels (control channels). For information about the address refer to **Switch output**.

- **DMX Out** ...adds the specified number of analog channels (control channels). For information about the address refer to **Switch output**.
- **DMX In** ...adds the specified number of DMX channels for DMX recording. The DMX start channel can be defined, other channel addresses are automatically counted up. See also Recording DMX data.
- **Servo** ...adds the specified number of control channels for servos. For information about the address refer to **Switch output**.
- **Serial** ...adds the corresponding number of serial ports. For information about the address refer to **Switch output**.
- **Value** ...adds the specified number of value channels for a serial port. These value channels allow values from control panel fields and data objects to be sent to a serial port. See also Variable data output by means of drivers.
- **Fader In** ...adds the corresponding number of controllers (max. 128). The corresponding MIDI channel can be specified, the controllers are automatically counted up. See also MIDI configuration.
- **Switch In** ...adds the corresponding number of keys (Note on/off) (max. 128). The corresponding MIDI channel can also be specified, the key numbers are automatically counted up. See also MIDI configuration.

4. Once you have made the entries for the devices, close the dialog by clicking **OK**. Any address changes can still be made in the Properties Dialog of devices, control channels, etc. Right-click the corresponding control channel, etc. and select **Properties**.

Info

- A device which supports DLC and SC Net protocol, can only use either DLC or SC Net protocol.
- Some DAW controllers, e.g. Tascam US-224 and Mackie Control, but also MIDI controllers can be used for controlling Wings Platinum, any other devices or for recording of control data. See also Using external input devices.

- Adding slide projectors activates the standard correction ramp for brightness control. However, you can also specify your own correction ramps. ...See Correction ramp for slide projectors.
- For projects with a number of screen fields, the configured projectors must be allocated manually to the screen fields. ...See Configuring screens.
- For projects with a number of timelines, only one timeline must contain projectors which are linked up with screen fields. Active projectors in any other timelines may cause malfunctions.
- Category **Devices** lists all device ports and devices used in the project. Device ports must haven an entry for the serial port in column PC Port/Address, e.g. **Com 1**. For such devices as slide projectors this is the place where you can find the address that you need to set at the hardware. If devices for a device port are not visible click the plus sign next to the device port.

Removing Devices or Device Ports

In order to be able to remove devices or device ports they must be unused, i.e. they must not be used in objects or linked up with objects. This is how you proceed:

1. Right-click the device or the device port and select **Remove**. If a message pops up saying that it cannot be removed you need to start out by deleting the objects using the device.
2. Right-click the corresponding device and select **Display Pool Objects**. This causes all objects using this device to be highlighted and the Locator will jump to the first of these objects. Press and hold the **Shift** key, while pressing the right (... or left) **Cursor** key to make the Locator jump to the next highlighted object.
3. Now you need to remove these objects. See Removing objects.

Info

- In the case of slide projectors it will do to remove the pictures from the Slide Tray Editor (right-click the picture and select **Remove from tray**).

- Function **Select timeline objects** may also result in objects being highlighted which are part of a group. In this case, if you use **Remove** for the highlighted objects, these objects are removed from the groups.

4. If the device is unused, right-click it and select **Remove**. Should the error message show up again, the device is probably still used in other objects. Find out about them and remove them as explained above.

Adding/removing device folders

...This function is currently not available!

Device folders can help to organize the devices in the Media Pool and are particularly useful for projects comprising a vast number of devices.

Click one category **Devices** in the Media Pool.

1. Right-click the port you want to create a new device folder for and select **Add device folder**. The new device folder will appear at the end of the list for the corresponding device port.
2. If you want to delete a device folder with all its devices, right-click it and select **Remove**. Answer the query with **OK**. If a message appears saying that the device folder or its devices, respectively are being used, you may have to remove the objects using these devices beforehand. To find out which of them these are you can have them highlighted.
3. Right-click the corresponding device and click **Select timeline objects**. Upon doing this, all objects using this device will be highlighted and the Locator will jump to the first of these objects.
4. You can now remove these objects, followed by removing the device folder. Please bear in mind, that standard folders cannot be removed.

Info The devices in a device folder can be activated or deactivated by clicking on them with the mouse. ... See Enable/Disable devices.

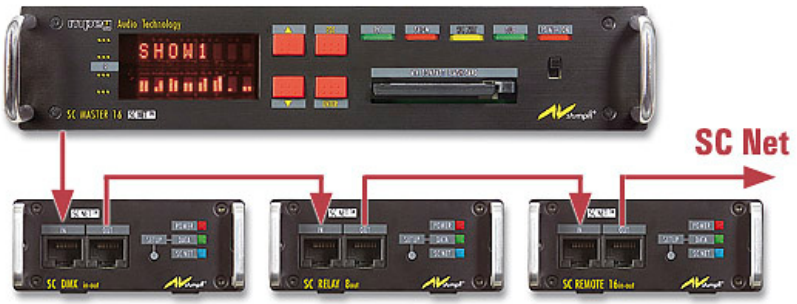
SC Net

Configuring the SC Net System

The SC Net System is a network consisting of an SC Master unit and one or several SC Net modules for controlling a variety of devices. All SCNet modules are run via one single bidirectional connection, which also serves as a power supply.

Cable connections

All components are run via one single network connection made of standard Cat5 cable with a length of up to 1,000 m. Usually, the modules are connected in series. With a distributor module, however, the arrangement of cables can also be star shaped. The compact dimensions of these modules permit them to be located next to the devices to be controlled, which means that this is the location where the numerous connecting cables are branched off and can therefore be kept very short.



Unused SC Net outputs must be terminated. In large, widely branched networks, you should use modules with Iso-PlugIns for potential isolation and optimum operating safety. See Iso PlugIn.

Info When an application is to be exclusively run from a PC with Wings Platinum, SC Net modules can be directly connected to a serial port on your PC. See Direct PC operation of SC Net modules.

Power supply

SC Net modules are supplied via the SC Master or additional power supply units and the network line. The power supplied additionally is not only available for the module connected to the power supply unit, but for all SC Net modules within the network. Usually, the power supply unit AC-3 can supply up to five SC Net modules. However, there are also some modules which require a separate power supply unit.

Address configuration

Device address 1 is always allocated to the master unit. Device addresses 2 to 125 are used for the modules (slaves) within the network. If address 2 or higher is allocated to an SC Master unit, it is regarded as a module within the network.

Every SC Net device offers particular functions to be addressed via **sub addresses**. When SC Net devices were added to the Media Pool under **Devices**, they are always displayed with their corresponding functions, with Wings Platinum automatically providing for the addressing. Addressing, however, can be changed at any time. An SC RELAY 8out, for instance, would be visible as 8 switching contacts with addresses 2/1 to 2/8, i.e. 2 would be the device address and 1 to 8 the sub addresses of the individual relay contacts.

SC Master units, too have a number of interfaces addressable via subaddresses. See SC Net subaddresses of SC Master units.

Setting addresses in the Media Pool

To change addresses, for example, when using modified hardware for controlling, proceed as follows:

1. Click the plus sign next to category **Devices** in the Media Pool and highlight the corresponding SC Net port below it. Following this the devices are listed on the right.
2. Right-click the corresponding control channel and select **Properties**. The Properties Dialog will appear.
3. Under **Address** enter the new address and confirm with **OK**.

Setting the addresses at the hardware

For an SC Net Module to be able to perform the programmed functions requires the device address as it is listed in the Media Pool under **Devices** to be set in the module. Currently the address setting is performed via SC Master components. At a later time, this will also be possible via Wings Platinum.

This is how you set the device addresses at the SC Master and the SC Net Modules:

1. Connect the SC Master with the SC Net Modules and switch it on.
2. In the SC Master menu go to Options &endash; SC-Net &endash; **NetAdrs** and select **NA=1**.
3. In order to establish communication within the SC Net, switch on the SC Master and off again. When starting up the SC Master, a message such as "**SC-Baud: 460800**" must briefly be displayed, with the value depending on the baud rate negotiated. After communication has been established, the blue SC NET LED at the SC Net modules will blink at an interval of a few seconds. In the event of no communication being established, refer to Ensuring communication within the SC Net for more information.
4. Under Options &endash; SC-Net &endash; **ExtAdrs** select the address you want to allocate to an SC Net Module, e.g. **EA=2**.
5. By pressing **Enter** at the SC Master, all connected SD Net modules are set to configuration mode. This is indicated by the **DATA** LEDs blinking while the SC Master sends the address into the network. Both remain active for 20 seconds.
6. During this time, press the SETUP button of the SC Net Module to be configured to save the address. You may have to use a pen to press the setup button. This terminates configuration mode.

Info You can now check the address set for the module. If you press the Setup button, the module address is briefly displayed on the Master unit display. If this does not work for your units, you may have to update the operating software.

Addresses for SC Net modules for DLC operation

If a show is programmed via a DLC port, e.g. via an SD EC 2X4, because slide projectors need to be controlled as well, only the lower SC Net addresses must be used. A DLC port allows 32 switches, 32 RS232 channels and 32 analog channels to be used for the same DLC address, as the information is saved as separate commands in every address. An exception are DMX channels, which contain identical information on the first 32 channels, i.e. they are arranged in parallel, just like analog channels.

Some configuration examples can be found in the corresponding Help topic.:

Setting the SC Net baud rate at the SC Master

For an SC Net system to work safely, the data rate needs to be set to an appropriate value. SC Master automatically negotiates the baud rate with the modules, provided setting "**AudoBd**" has been chosen in Menu "**Options** – **SC Net** – **SCN Baud**". However, the SC Master does not know how many modules are connected. This is why, after powering up the system, you need to check whether all SC Net modules communicate with the SC Master. The are certain LEDs at the SC modules which indicate whether communication has been established:

- **POWER** LED ...red lamp that blinks every second when power supply and module are in working order. If the LED is on permanently or not on at all, there is either a malfunction or no power supply
- **DATA**-LED ... lights up in green while the data for the set module address are arriving.
- **SC NET**-LED ... lights up in blue when the module detects a valid activity on the network, which usually happens every 3 seconds in a passive state. If there is more activity on the network bus, the LED lights up more frequently and may even light up permanently.

After powering up the system, all the POWER LEDs at the SC Net modules must be on and blink every second, while the SC NET LEDs must briefly blink every three seconds. If there is no communication with one module – something that may happen in widely branched networks – you need to reduce the SD Net baud rate manually until even the last module starts communica-

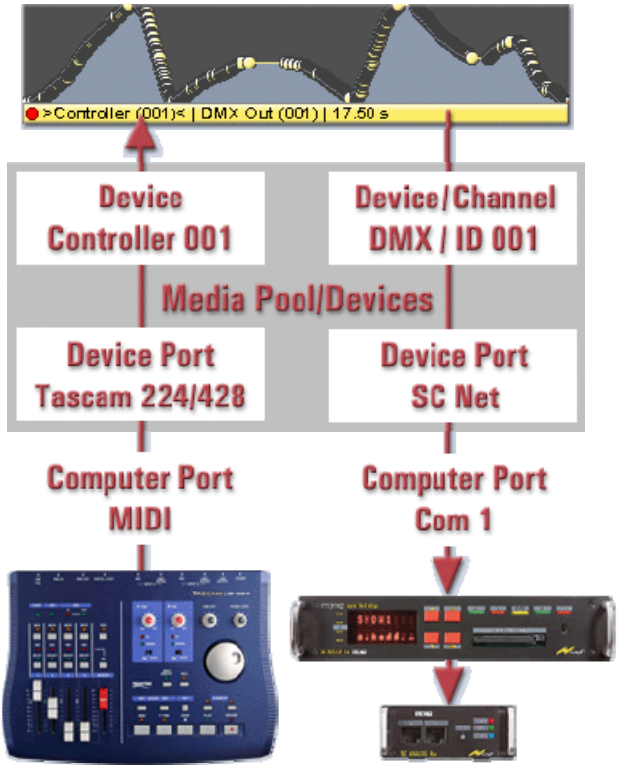
ting within the network. This can be done in the SC Master menu "**Options** – **SC Net** – **SCN Baud**". Further information can be found in the SC Master manual.

See also

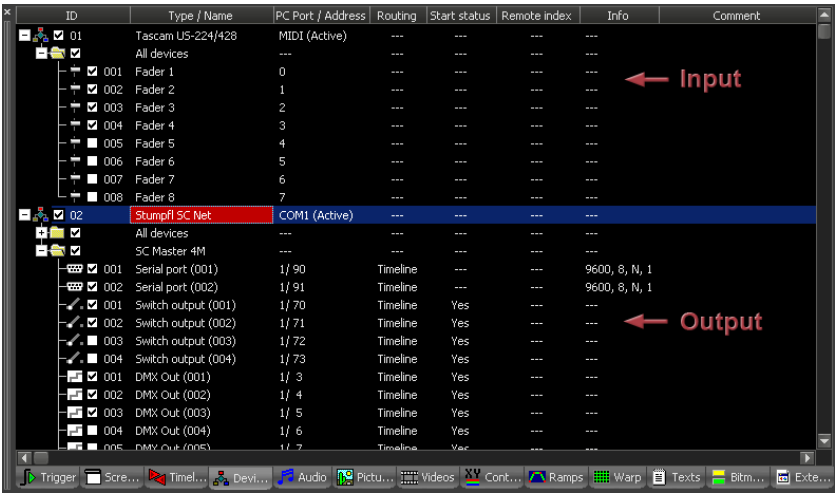
Automatic start upon verification of SC Net communication (example)

Device structure and data flow

Wings Platinum with its modern software architecture permits control of nearly an unlimited number of devices. Connection from software to Show Control hardware is via device ports which are allocated a computer port and a protocol. In principle, the integration of input and output devices is identical, as many devices operate bi-directionally.



In our example both an input and an output device are linked up with a data object. In the Media Pool, the hard is displayed as **Device ports** and devices, e.g. **control channels**, **slider controls**, etc. From the Media Pool, you simply drag a control channel or a slide control onto the data object or into the timeline.



- **Device ports** always feature a protocol and are linked up with a **computer port.** The remark **Active** means that the device control is currently enabled, otherwise the it is disabled (**inactive**).
- Devices are split up into categories, e.g. switching channels, analog channels (0 – 10 Volts), DMX channels, faders, etc. Within one category they are distinguished by their **ID numbers**. Type of device and ID number allow a clear identification within Wings Platinum and are displayed in the object info line. The hardware, on the other hand, uses **addresses** which, in their structure, depend on the type of devices used.
- By unchecking the column **ID** a device port or a device can be disabled.

Adding SC Net Modules

If you want to run an SC Net (Show Control network), you first of all need to define a device port and then add the corresponding modules.

Using slide projectors

If you want to jointly run both slide projectors and SC Net modules, you need to use a **DLC port**. A number of factors must be considered when addressing SC Net modules. Click here for more information.

Adding SC Net Device Ports

1. Click category **Devices** in the Media Pool. Unless an **SC Net Port** has already been configured, you need to do so now.
2. Right-click some free space and select **Add port** ▶**Stumpfl SC Net**.
3. In the dialog box under **Serial Port**, click on the arrow and select a computer port for the corresponding device port, e.g. **Com 1**. Connected and activated devices are immediately searched for and displayed.
4. Finish configuring the device port by clicking on **OK**.

Adding SC Net Modules

1. Click category **Devices** in the Media Pool . Unless an **SC Net Port** has already been configured, you need to do so now. See Adding an SC Net port.
2. Right-click the corresponding device port **Stumpfl SC Net** and select **Add SC Net module** ... and a dialog box will be displayed.
3. Click on and select the corresponding module. If you want to use an **Event Control** unit, choose the corresponding SC Master unit, e.g. Lite, 2M or 4M.
4. Under **SC Net Address** an address is set automatically. Only change the address if the preset address is unsuitable for your device set.
5. Under **Device functions / Number of devices** select the corresponding resources. If you know that you only require a certain number of func-

tions from among the total of available functions, you can enter a lower number. This may be useful for the DMX , for example.

6. Click on **OK**. Following this, a device folder is displayed carrying the module name. If you click on the plus sign in front of this folder, the functions are displayed. If necessary add further modules likewise.

Configuration Stumpfl SC Net

In the Media Pool under category **Devices**, right-click an SC Net device port and select **Properties**. Right-click an SC Net device port and select **Properties**. If no SC Net port is available, right-click some free space and select **Add port** ▸ **Stumpfl SC Net**.

General settings

- Under **Serial Port** select the port to which the SC Master or any other SC Net component is connected. When the device is ready, it appears as **Active SC Net device**.
- The default output range is from address 1 to 10. This default value specified under **Max. device address** should only be changed if you require more than 10 addresses. Too large an output range requires unnecessarily long for scanning the active addresses.
- If you want to send information via the SC Net Port to Wings Platinum,too, you need to **Enable SC Net feedback** and **Enable remote starts** additionally. This way you can start show playback or execute triggers for instance via a keyboard connected to an **SC Master** or an **SC Remote 16in**. Remote starts can be temporarily disabled by removing the checkmark next to **Enable remote starts**.

Info

- Please note that the SC Master or EventControl unit **cannot start shows from CF card** if **Enable remote starts** is activated and the remote communication is to be via the enabled SC Net port. If you want to execute CF card shows, you need to use a remote port and control

Wings Platinum via serial commands from the SC Master (there is a driver available; ask for it, if necessary). See also Remote-control via EventPlayer protocol.

- Every device port requires a separate interface. A device which supports DLC and SC Net protocol, for example, can only use either DLC or SC Net protocol.

SMPTE timecode input

For **SMPTE port**, select the corresponding port and mode:

- **RS 232** ...transfers timecode from the SC Master to the computer via a normal serial connection The advantage is that DMX can continued to be output at the REMOTE connector.
- **MIDI** ...activates conversion of the incoming SMPTE timecode into MIDI timecode by the SC Master. MTC will then be available at the REMOTE connector via a special cable and is then supplied to a MIDI port at the computer. For this purpose, a MIDI port must be configured in Wings Platinum. This solution offers high stability and is the optimal solution for critical applications, such as video playback. In this case, however, DMX cannot be output at the REMOTE socket and may have to be supplied via SC Net modules.
- **RS232 + MIDI** ...is a combination of the two above. It allows you, for example, to supply Wings Platinum with timecode via RS 232 and use MTC at the REMOTE connector for a sequencer or similar. Of course, DMX output at the REMOTE connector is not possible either.

For **SMPTE offset** you can specify a period of time which is to be added to the incoming timecode. It is also possible to enter negative times as offset. The resulting timecode value, however, must never fall below zero, as Wings Platinum automatically sets negative values to zero.

For **SMPTE timeout** enter a period of time for Wings Platinum to continue playback after timecode is no longer available. It does not make sense to enter values below 100 ms. The default setting is 1,000 ms.

At **After SMPTE timeout** you can define the activity to be performed after timeout:

- **Reset timecode** ...causes the system to be without valid time; playback stops and the Locator jumps to the last starting position.
- **Keep last timecode value** ...the system retains the timecode value received last plus timeout and stops likewise.
- **Continue timecode** ...if timecode is no longer available playback is continued via the PC clock.

Further information can be found under Timecode synchronization.

Special settings

You should only change the default settings if you have good reasons to do so.

- **PC Baud rate** ... specifies the speed of communication between PC and SC Master via the serial port. Higher values are possible for very complex applications. At a setting of 115200 Bauds the serial cable must not be longer than 5 m.
- **Command cycle** ... specifies the interval between the individual commands from Wings Platinum to the SC Master.
- **Cues/s from FlashCard** ...defines the number of cues per second that are stored on CF Card and that are executed by the SC Master during playback. This setting has an influence on the data rate and can be reduced for simpler applications, if necessary.

See also

Configuring the SC Net System

SC Net subaddresses of SC Master units

SC MASTER units have a number of interfaces which can be used for SC Net operation. Usually, the interfaces and control channels are configured with their correct address when they are added to the Media Pool. See also Adding SC Net modules. If you want to add ports at a later time, you need to use the following addresses:

- **Display** ➔ **/2** ...information on how messages are output can be found in topic Displaying information on the SC Master display.

- **DMX** or DALI ➔ **/3** and up (up to 64 DMX channels, output to the REMOTE connector)
- **Switch outputs** ➔ **/70** and **/71** (two open-collector outputs at the REMOTE connector)
- **Switch outputs** ➔ **/70**, **/71**, **/72** and **/73** (four AUX relays, for SC Master 2M/4M only)
- **RS232** ➔ **/90** (RS232-OUT connector)
- **RS232** ➔ **/91** (RS232-IN/CAN connector)

The SC Net unit address must be added to the complete address, e.g. **1/90.**

See also

Adding ports and control channels to an SC Net port

Changing SC Net addresses

In the Media Pool, the device addresses of SC Net modules or SC Masters units for existing projects can be modified as follows:

1. In the Media Pool click category **Devices**.
2. Right-click the corresponding device port and select **Change SC Net addresses...**
3. Under **Current** enter the device address to be changed and the corresponding new address under **New**.
4. Finally, click on **OK**. If the OK button cannot be selected, the address specified under **Current** is either not available or the corresponding new address has already been used in the project.

Info This way only device addresses can be changed; the module sub address will remain unchanged. If you want to change the sub addresses, do so in the **Properties** dialog of a control channel.

Direct PC operation of SC Net Modules

When an application is to be exclusively run from a PC with Wings Platinum, you can connect SC Net Modules directly to a serial port on your PC. This requires the following:

- Every SC Net Module requires a separate serial port at the computer. Cascading of several SC Net Modules is not possible without SC Master unit.
- Connection of the serial port of the computer to the IN socket of the SC Net Module is via the cable SCK-N_PC. This cable is also used for firmware update of SC Net Modules. Every SC Net Module requires a separate power supply unit.
- The PC Baud rate for the SC Net port must be reduced to 9600 Bauds. ... See Configuring an SC Net port. Please bear in mind that the reduced Baud rate restricts the number of devices that can be controlled simultaneously.

See also

Configuring the SC Net System

Properties of Control Channels

DMX - Properties

Open the Properties Dialog by right-clicking the corresponding entry on the Media Pool category **Devices** and selecting the corresponding device port below it. In the right Media Pool section right-click the corresponding entry and select **Properties**.

- For **Name** you can enter a corresponding name.
- For **Address** enter the required address. It needs to correspond to the SC Net hardware address. See also Configuring the SC Net system.
- **DMX mode**, by default, is set to **8 Bits**. However, it is also possible to output 16 bits if you use two DMX channels for one data object. One of these channels is set to **16 Bits MSB** and the other one to **16 Bits LSB**. This function is only possible for devices that are able to read two such channels.

- When there is a checkmark next to **Create start status**, the device status is output during playback when starting the timeline, i.e. even before the data objects or value markers are played back. This behavior may result in undesired and hard dissolves, e.g. due to triggers and jump markers, when jumping to other timelines. In such a case you should not have a start status produced.

Info The start status does not have an effect for playback of CF Card shows via the SC Master but only for playback via Wings Platinum.

0 - 10 Volts - Properties

Open the Properties Dialog by right-clicking the corresponding entry on the Media Pool category **Devices** and selecting the corresponding device port below it. In the right Media Pool section right-click the corresponding entry and select **Properties**.

- For **Name** you can enter a corresponding name.
- For **Address** enter the required address. It needs to correspond to the SC Net hardware address. See also Configuring the SC Net system.
- When there is a checkmark next to **Create start status**, the device status is output during playback when starting the timeline, i.e. even before the data objects or value markers are played back. This behavior may result in undesired and hard dissolves, e.g. due to triggers and jump markers, when jumping to other timelines. In such a case you should not have a start status produced.

Info The start status does not have an effect for playback of CF Card shows via the SC Master but only for playback via Wings Platinum.

Switch output - Properties

Open the Properties Dialog by right-clicking the corresponding entry on the Media Pool category **Devices** and selecting the corresponding device

port below it. In the right Media Pool section right-click the corresponding entry and select **Properties**.

- For **Name** you can enter a corresponding name.
- For **Address** enter the required address. It needs to correspond to the SC Net hardware address. See also Configuring the SC Net system.
- When there is a checkmark next to **Create start status**, the device status is output during playback when starting the timeline, i.e. even before the data objects or value markers are played back. This behavior may result in undesired and hard dissolves, e.g. due to triggers and jump markers, when jumping to other timelines. In such a case you should not have a start status produced.

Info The start status does not have an effect for playback of CF Card shows via the SC Master but only for playback via Wings Platinum.

Switch input - Properties

Open the Properties Dialog by right-clicking the corresponding entry on the Media Pool category **Devices** and selecting the corresponding device port below it. In the right Media Pool section right-click the corresponding entry and select **Properties**.

- For **Name** you can enter a corresponding name.
- For **Address** enter the required address. This is only required for MIDI ports and Note on/Note off commands.
- In fields **On close** and **On open** enter the remote indexes of the triggers to be executed. At a value of **0** no trigger is assigned. This is only possible for SC LAN Remote ports. See also Creating triggers.

See also

Configuration SC LAN Remote 8 in

Configuration MIDI

Servo - Properties

Open the Properties Dialog by right-clicking the corresponding entry on the Media Pool category **Devices** and selecting the corresponding device port below it. In the right Media Pool section right-click the corresponding entry and select **Properties**.

- For **Name** you can enter a corresponding name.
- For **Address** enter the required address. It needs to correspond to the SC Net hardware address. See also Configuring the SC Net system.
- **Trim Offset** allows you to enter an angle for adjusting the basic settings.
- When there is a checkmark next to **Create start status**, the device status is output during playback when starting the timeline, i.e. even before the data objects or value markers are played back. This behavior may result in undesired and hard servo movements, e.g. due to triggers and jump markers, when jumping to other timelines. In such a case you should not have a start status produced.

Info The start status does not have an effect for playback of CF Card shows via the SC Master but only for playback via Wings Platinum.

Serial port – Properties

Open the Properties Dialog for a serial port as follows:

1. In the Media Pool highlight category **Devices** and select the corresponding device port below it. Following this, the ports are displayed in the right section of the Media Pool.
2. Right-click the port and select **Properties**. In the pop-up dialog you can make the following settings:
    - For **Name** you can enter any name you like.
    - For **Configuration serial port** you need to enter all the port parameters as required for the device to be controlled. As a rule,

the documentation of the device to be controlled will provide the necessary information.

- For **Driver settings** you can load a driver and enable it. Drivers allow control of devices via commands which are directly selectable from a menu. Add a checkmark next to **Enable acknowledge** to evaluate acknowledge messages, provided this is supported by the device to be controlled and the driver. **Enable driver loop** allows continuous output of variable data from data objects or control fields.

  Info Serial ports of SC Net components are not suitable for DriverLoop commands. For this purpose use the serial ports of PC hardware.

- Field **Driver info** offers information about the suitability for a certain device and the author.

Slide projector control

Control units and slide projectors

In addition to all DLC-compatible Stumpfl control units, Wings Platinum can also directly control some Bässgen control units and a variety of projectors with a serial interface. This requires a corresponding configuration in the Media Pool under **Devices**, which is done automatically by the Project Wizard when creating a slide show. Below you will find some information about what devices can be used and what is important in this context.

Setting the address

Basically, the addresses selected in Wings Platinum must correspond to the addresses set at the devices. Which hardware addresses must be set, can be seen in the Media Pool.

Click on category **Devices** in the Media Pool and select the corresponding device port below. If the slide projectors in question are not visible, click on the plus sign next to the device port.

On the left you will find the **Device ID** (1) for the projector in Wings Platinum. On the right you can see the **projector addresses** (3) which you need to set at the control unit. For a direct connection of a projector to a computer, an address setting is sometimes required as well. Control unit or projectors are connected to the **computer port** (2). The info column provides information about tray length and start position (4).

Direct connection of projectors

Serially controllable projectors can directly be connected to a computer **port** (2) . First of all, however, the following must be considered:

Braun Multimag SC 669

In order to connect several projectors a distribution cable by Braun is required. Further details can be found in the operating instructions of your projector.

Ektapro 70XX/90XX or Leica RT-m

The address switch at the projectors must be set to the corresponding projector address (3). One projector is connected to the computer. From there the projectors must be connected to each other (P-Bus-Out to P-Bus-In). The last projector used may also be an Ektapro 40XX/50XX or Leica RT-s

Info Several Ektapro 40XX/50XX or Leica RT-s (...without P-Bus-Out) can be controlled via additional computer ports...See

Kindermann MPC

Supported projectors are Kindermann Silent 2500 MPC and compatible projectors. Older projector types may be updated with new firmware by Kindermann. The MPC projector is connected to the computer port and two additional projectors (even different types) are controlled as slaves by the Kindermann MPC. Further details can be found in the operating instructions of your Kindermann MPC.

Leica Pradovit PC

This projector can be run directly from the PC. Use the device port **Leica Pradovit PC** and run only this type of slide projectors from this port. Although it is said to be compatible with Kodak P-COM this is not 100% the case. This is why you should not run this projector in a serially controlled network together with Leica RT or Kodak Ektapro.

Rolleivision MSC

A Rolleivision MSC Dissolve Projector is regarded as two individual projectors by the device control system. In Wings Platinum it behaves like a two-projector system. This means that on tab **Slide trays** two trays for 25 slides each are used by Wings Platinum, whereas you need to sort the slides alternately into the 50-slide tray of your Rolleivision MSC. How you can use interlinking trays, find out here.

Info Several Rolleivision MSC XXX P or MSC 66 Dual projectors can be controlled via additional computer ports. See.. ...Controlling projectors via additional ports.

Simda 3245/3445 and 3262/3462

For a connection of these projectors one serial computer port each is required for every projector. See. ...Controlling projectors via additional ports.

Controlling projectors via additional ports

In principle, the number of projectors used can be extended by adding computer ports. If necessary, your computer must be equipped with additional serial ports. For this purpose, PCI Bus extension cards or USB interfaces for up to four serial ports are available in computer shops.

In the Media Pool in category **Devices** you can configure one device port for every serial port and allocate these additional ports to the corresponding projectors.

Using Stumpfl control units

Wings Platinum can be used in combination with all DLC-compatible Stumpfl control units, i.e. from SD 202 DLC to the SD Event and SC Master series. The only exception are the SD 102 and the IR variant of the SD 302. Even the Basic Licenses can take full advantage of the DLC signal features. However, Wings Platinum no longer supports the MemoryCards for units SD 202/402/404 as this technology is outdated and these types of cards are no longer produced.

Using Bässgen control units

Bässgen control units which can read Kodak P-Com- and FreeTrac signals (e.g. QUATRIX, TRIPLEX) can be used in combination with Wings Platinum. The procedure explained below ensures that the individual dissolve ramps are reproduced to the very detail. You do not even require a sound card with digital output!

- For programming, the control unit is connected to the serial computer port and addressed by means of the Kodak P-Com protocol. In order to control a QUATRIX; for example, simply configure a Device port for Bässgen FreeTrac and add the four projectors used in Wings Platinum. The QUATRIX musts be set to KODAK PCOM in menu SIGNAL SELECT (...don't forget saving in SAVE CONFIGS).

- In order to present a show without computer, simply create an audio CD with FreeTrac. When playing back, the signal is detected automatically without requiring any further settings. If the automatic signal detection does not work, update the firmware of your control unit

Info

- Unfortunately, Bässgen control units offer no tray length setting; with P-Com protocol the internal setting is fixed to 80 slides. This means that the control units always assume that 80-compartment trays are used and that there are restrictions for any other tray lengths, for example for Slide tray changes. For the current version of Bässgen control units these problems can therefore only be avoided by actually using 80-compartment trays.
- If you want to use Timecode with Bässgen control units, deactivate RSP-pro coding, which is not supported by these units. When producing audio CDs with FreeTrac, RSPpro in Wings Platinum is deactivated automatically.
- To find out how to import old Imagix shows into Wings Platinum click here.

....See also

Configuring the device control

Setting the address

Slide projector properties

This dialog allows you to make settings for the slide projector control.

1. In the Media Pool highlight category **Devices** and select the corresponding device port below it. Following this, the ports are displayed in the right section of the Media Pool.
2. Right-click the corresponding slide projector and select **Properties**.
3. You should be absolutely sure about the effects of changing the parameters. Incorrect settings may result in faulty control of your projectors.

- **Name** ...for the individual projector designation
- **Address** ... to specify the address in the control signal or protocol for the control technology used.
- **Controllable shutter** ... can be activated by checking it. This only makes sense when the projector has a controllable mechanical shutter.
- **Tray size** ... for the number of available tray compartments. For Rollei interlinking trays you can increase the value to 999 (a max. of 499 for Rollei Twin) for direct computer control or to 255 for control via DLC control signal.

Please note the following:

- The tray size for the Leica Pradovit PC projector must not exceed 250 slides if it is controlled via the serial interface via P-COM protocol.
- Rollei projectors require new firmware in order to be able to process tray sizes of up to 999 slides. The old firmware only works for up to 255 slides. For Rollei Twin enter a maximum of 499, i.e. half the maximum capacity.
- **Tray start position** ... specifies the tray compartment to accommodate the first slide of a show.
- **Slide change time for single step** ... defines the time for a single transport steps to the next slide.
- **Slide change time following steps** ... defines the time per slide it takes to transport to tray positions further away. For projectors with Random Access this time is distinctly shorter than for conventional projectors.
- **Lamp fade in time** ... that's the time the lamp takes during a hard fade in until it reaches full brightness. This delay time plays an important role for automatic shutter control.
- **Lamp fade out time**... that's the time the lamp takes after a hard fade out until it is completely dark. This time is also called afterglow time and is relevant for correct transport control.
- **Parallel Projector** ....for stereo projection you can enter a projector for parallel control. Simply enter the ID number of the

corresponding projector. With ID **0** no projector is controlled in parallel. Any projectors specified herein, must not be allocated to a screen field. Please make sure you read the corresponding remarks at Stereo projection with parallel projector.

See also

Change time for slide projectors

Specifying a tray compartment for show start

Correction ramp for slide projectors

Every slide projector has its own characteristic way of dissolving as a result of the interaction between transformer and lamp. Only the dissolves of a digital AV show are free of such influences. So as to compensate for the individual properties of different projectors and to adjust them to digital dissolves, Wings Platinum features individual correction ramps for every individual slide projector. Usually, the standard correction ramp is activated by the device control. However, it is also possible to determine and use a specific correction ramp for your projectors.

1. Activate your projection system and insert two empty slide frames into tray compartment 1. Create a project with two dummy pictures or any two picture objects and dissolve these objects via a linear ramp without any additional nodes.
2. Click category **Devices** in the Media Pool. If the slide projectors are not displayed, click on the plus sign next to the device port.
3. Click on a slide projector to highlight it. In the Preview Window the standard correction ramp will be displayed.
4. The straight auxiliary line from the bottom left corner to the top right corner is the neutral position. You can now edit the ramp using all possible features you know from editing objects. ... See Editing ramps.
5. By copying a correction ramp into the clipboard and inserting it again, the ramp can be transferred to the other projectors.
6. Test the correction ramp with a dissolve time of about two seconds. The brightness on the screen should remain constant during the dissol-

ve and should neither show a "high" nor a "low". Due to the lamp inertia, brightness is very low for dissolves below one second. This is due to physical reasons and cannot be avoided.

Info

- When a project is created via a Wizard, the standard correction ramp is activated, unless you have chosen a different setting.
- You can reset the correction ramp or restore the standard correction ramp. To do so, right-click the correction ramp and select the corresponding menus.
- Usually, it does not make sense to change the correction ramp for a show worked out with your slide projectors. This would change the effects of all dissolves.
- If you should use different slide projectors, e.g. when changing over from a projector with a 24V/250W lamp to an Ektapro or Leica RT projector with 82V/300W lamp you can adjust the correction ramp with a few mouse clicks and thus optimize and adjust the dissolves to the new technology.
- After defining a correction ramp for your slide projectors you can save an empty project containing only the slide projectors with the correction ramps and empty tracks as templates. See Templates for new projects.

Special devices/applications

Audio Level as device port

This function is only available with the Show Control Module. See Licenses and functions.

It is possible to use output levels for controlling effect parameters or recording levels in data objects and for further control purposes.

1. In the Media Pool click on category **Devices**.
2. Right-click some free space in the Media Pool on the right and select **Add port ▶ PC Hardware ▶ Audio Level**.

3. Following this, device port **Audio Level** is added, which is displayed after clicking the plus sign next to **Devices**.
4. Highlight device port **Audio Level** and the individual channels will be displayed as devices on the right, e.g. **Peak** and **RMS**. From this location they can be dragged and dropped onto data objects or effect parameters in the Properties Table. See also External control of effect parameters.

Configuring the remote control port

This function is only available with the Advanced License and up. See Licenses and functions.

A remote control port is used for remote control of Wings Platinum via external devices. By the way, a remote control port is not relevant for multi-display presentations. Those settings need to be made at **Global Options** &endash; **Network**.

This is how you create a remote control port:

1. Click on category **Devices** in the Media Pool.
2. Right-click some free space in the Media Pool and select **Add port ▶ Remote Control.**
3. Select the required type of communication:
    - If you want control via a serial port (e.g. via the Stumpfl Speaker Support remote control unit) you click **Serial port** and select the corresponding port.
    - If you want control via a network, click on **IP address / port** and enter address and port of the server or device this Wings Platinum computer is to be controlled by. You also need to choose the corresponding control protocol, preferably **UDP**.
4. Click on **OK**.

Info

- To use the remote control unit, the device control system needs to be enabled, which can be recognized by the button being provided with a gray background.
- Connecting two computers via serial ports requires a zero modem cable.
- For remote control via TCP/IP, the server or unit to be controlled needs to be activated before enabling the device control system. In many cases it may be more useful to use **UDP**. It requires no acknowledgement and the Windows Network is not blocked when connection problems occur.
- Information about the computer IP address can be found by double-clicking the LAN connection and clicking tab **Network support** in dialog **Status of ...**
- In order to find out which computer ports are being used, enter command **netstat -a** in the **prompt** window.

Configuration Stumpfl Iseo

This device port is necessary for remotely controlling or interaction with Wings Platinum via Iseo devices.

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool section and select **Add port** ▶**Stumpfl Iseo**.
3. At **IP address / Port** enter the address of the PC used for Iseo Designer software or of the Iseo device or iPod. **Important:** During the setting up and test phase of a touch panel interface, the IP address of computer running Iseo Designer is relevant, while for the presentation at a later time it's the IP address of the Iseo device.
4. For **Port** you can usually leave the default setting of **5151**; it needs to correspond with the port setting for the device **Wings Platinum** in Iseo

Designer. Please note that the next higher port is also used for bidirectional communication via **UDP** protocol. Alternatively, you can also use **TCP** protocol for communication.

5. The image size for preview in Iseo can be left at 320 pixels, as the amount of data per image is restricted to this width. Following this, click **OK**.

Info

- To use the device ports the device control system needs to be enabled, which can be recognized by the button being highlighted in gray.
- Information about the computer IP address can be found by double-clicking the LAN connection icon and clicking tab **Network support** in dialog **Status of...**.
- In order to find out which computer ports are being used, you can enter command **netstat -a** in the **prompt window**.

Configuration SC LAN DMX512 in/out

This function requires the Advanced License and up or the Show Control Module. See Licenses and functions.

An **SC LAN DMX512 in/out** can only be used if its IP address lies within the Wings Platinum computer address space. Instructions on how to set the IP address can be found in the SC LAN Module operating instructions.

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the Media Pool and select **Stumpfl SC LAN ▶ SC LAN DMX512 in/out**.
3. Enter the module IP address. The last address group can be changed by clicking on **Network**. If the module is not detected and the IP address not known, you can use our software ISEO Designer to find out about it or alter it if necessary.

4. Leave the **minimum cycle time** at the default value of 30 milliseconds. Extending this time may save performance, but it should not be less than 30 ms.
5. If you want to execute trigger functions via DMX you place a checkmark next to **Execute trigger with DMX channel** and enter the corresponding channel.
6. Close the dialog by clicking **OK**.
7. Click on the plus sign in front of the SC LAN port in the Media Pool to display folder **All devices**.
8. Right-click folder **All devices** and select **Add devices**.
9. Place a checkmark next to the **DMX-Out** and enter the number of channels that need to be added.
10. Finally, click **OK**.

You can now drag the switch outputs into a universal track and program the appropriate switching functions.

See also

Programming Analog/DMX devices

Using external input devices

Live control and recording in objects

Configuration SC LAN Relay 8 out

This function requires the Advanced License and up or the Show Control Module. See Versions and licenses.

An **SC LAN Relay 8 out** can only be used if its IP address lies within the Wings Platinum computer address space. Instructions on how to set the IP address can be found in the SC LAN Module operating instructions.

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool portion and select **Stumpfl SC LAN** ▶ **SC LAN Relay 8 out**.

3. Enter the module IP address. If you do not know the IP address, you can use our software Iseo Designer to find out about it or alter it if necessary. If you want to alter the last address group only, click **Network** to do so directly.
4. Close the dialog by clicking **OK**.
5. In the Media Pool click on the plus sign in front of **SC LAN Relay 8 out** to display folder **All devices**.
6. Right-click folder **All devices** and select **Add devices**.
7. Place a checkmark next to **Switch output** and enter the number of switch outputs to be added.
8. Finally, click **OK**.

You can now drag the switch outputs into a universal track and program the appropriate switching functions. See also Programming switches.

Configuration SC LAN Remote 8 in

This function requires the Advanced License and up or the Show Control Module. See Licenses and functions.

An **SC LAN Remote 8 in** can only be used if its IP address lies within the Wings Platinum computer address space. Instructions on how to set the IP address can be found in the SC LAN Module operating instructions.

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the Media Pool portion and select **Stumpfl SC LAN ▶ SC LAN remote 8 in**.
3. Enter the module IP address. If you do not know the IP address, you can use our software Iseo Designer to find out about it or alter it if necessary. If you want to alter the last address group only, click **Network** to do so directly.
4. Close the dialog by clicking **OK**.
5. In the Media Pool click on the plus sign in front of **SC LAN Remote 8 in** to display folder **All devices**.

6. Right-click folder **All devices** and select **Add devices**.
7. Place a checkmark next to **Switch In** and enter the number of switch inputs to be added.
8. Finally, click **OK**.
9. You still need to define the triggers to be executed through it:
    - Right-click one of the switch entries and select **Properties**.
    - In field **On close** and **On open** enter the remote indexes of the triggers to be executed. At a value of **0** no trigger is assigned. See also Creating triggers.
10. Close the dialog by clicking **OK**.

After enabling the device ports by hitting **F8** and closing the corresponding contacts, the assigned triggers are executed.

Tascam US-224

Before you can register the US-223 with Wings Platinum you need to install the software for the Audio Controller Tascam US-224.

1. Click one category **Devices** in the Media Pool.
2. Right-click some free space in the Media Pool and select **Add port ▶Controller ▶Tascam US-224/428.**
3. For **MIDI input** and **MIDI output** select **US-224 Control** and place a checkmark next to **Enable control of Platinum functions**.

   Info If setting **US-224 Control** cannot be selected, Tascam US-224 has not been detected by the computer yet. Restart your computer and make sure that the **USB** LED at the Tascam is on.
4. The settings for the LED flash rhythm can be left as they are. Finally, click on **OK**.

Further settings

- To be able to use the US-224 audio outputs, they must be selected under Options – Global Options – **Sound cards**.
- If you want to add live microphone sound to the soundtrack, you need to press key **Input Monitor** on the device (LED lights up). **Fader 1** is then allocated to the microphone.

Info

- When you have done all the settings you can use the Tascam US-224 as described under Remote Control using Tascam US-224.
- You can also use Tascam US-224 for controlling any devices and for recording control data. See Control via external input devices.
- If you want to use the Tascam US-224 MIDI inputs and outputs in Wings Platinum, you need to create a MIDI port and select **US-224 Port 1**. See also MIDI configuration.
- Tascam US-224 makes certain demands to the USB controller. Open Host Controllers are known to have caused problems in this context. Further information can be found in your Tascam US-224 Manual under System Requirements.

Mackie Control

Mackie Control is a versatile remote control system for audio and show control tasks. It is connected to a MIDI port (e.g. sound card or external MIDI interface) and requires a MIDI port in Wings Platinum which is configured as follows:

1. Click category **Devices** in the Media Pool.
2. Right-click some free space on the tab and select **Add port ▶ Controller ▶ Mackie Control.**
3. Under **MIDI input** and **MIDI output** select the MIDI ports you want to use for Mackie Control.
4. Additionally, you can also adjust the following parameters:

- **Fader banks** ...to enter the number of slider controls you want to use. With every bank you add 8 (virtual) slider controls which can be assigned to the hardware slider controls via keys FADER BANKS on the Mackie Control.
- **Enable control of Platinum functions** ... ensures that playback and record functions as well as a number of other functions can be controlled via the keys on the right side of the Mackie Control. If you are using two Mackie Controls, for instance, you can disable this function for the second one.
- **Enable key click for transport keys** ... to ensure that the transport keys (PLAY, RECORD, STOP, etc.) click when pressed to give you a "tape recorder feeling".
- **Decimal point in time display** ...to structure the time display by inserting points between minutes and seconds and the places following the decimal point.

5. Click on **OK** to close the dialog.

Info

- When you have done all the settings you can use the Mackie Control as described under Mackie Control functions. This requires the device control system to be enabled.
- You can also use Mackie Control for controlling any devices and for recording control data. See Control via external input devices.
- If you MIDI port cannot be selected in dialog **Configuration Mackie Control**, the driver may treat inputs and outputs as separate units (e.g. EMAGIC). In this case, the driver dialog may allow you to combine inputs and outputs. Following this the MIDI port will be selectable for Wings Platinum, too.

See also

Mackie Control functions

Configuring a PC keyboard

The Shift and Ctrl keys, i.e. a total of four, can be used as input device for controlling and recording data (data and switch objects). First of all, you need to configure a device port:

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool portion and select **Add port** ▶**PC Hardware** ▶**Keyboard**.
3. Following this, device port **Keyboard** and folder **All devices** are displayed in the Media Pool. When you click the plus sign next to the folder **All devices**, four keys are displayed, which you can drag onto objects and use for controlling purposes.

See also

Using external input devices

Configuration Mouse

The mouse can be used as input device for controlling various parameters and for recording data. To be able to do so, you need to first configure a device port:

1. In the Media Pool click on category **Devices**.
2. In the right Media Pool section right-click some free space and select **Add port** ▶**PC-Hardware** ▶ **Mouse**.
3. The dialog box allows you to make the following settings:
    - Next to **X position** you can define the mouse positions which are to take you to the minimal and the maximal value of the parameter to be controlled. Optionally, you can reverse the direction by placing a checkmark next to **Reverse**.
    - Next to **Y position** you can define the mouse positions which are to take you to the minimal and the maximal value of the parameter to be controlled. Optionally, you can reverse the direction by removing the checkmark next to **Reverse**.
    - Default values can be assigned by clicking button **Assign default values**.

4. Finish by clicking **OK**, following which device port Mouse will appear.

5. When you click the plus sign next to category **Devices** in the right Media Pool section followed by clicking device port Mouse below it, all axes and mouse buttons which can be dragged onto objects and parameters and used for controlling will be listed. See also Using external input devices.

Info Control of screen fields via the mouse does not work for multi-display systems with slaves.

Configuring a joystick

A joystick can be used as input device for controlling various parameters and for recording data. First of all, you need to configure a device port:

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool portion and select **Add port** ▶ **PC Hardware** ▶ **Joystick**.
3. The dialog box allows you to make the following settings:
   - For **General** you can choose the corresponding joystick port.
   - For **Excursions** you can define the excursion of the individual axes and reverse the **direction** of the movement.
   - If you click **Apply default values**, the standard settings are resumed.
4. Finally, click on **OK**.
5. Following this, device port **Joystick** and the folder **All devices** are displayed in the Media Pool. When you click the plus sign next to the folder **All devices**, all axes and buttons are displayed, which you can drag onto objects and use for controlling purposes.

See also

Using external input devices

MIDI configuration

This function requires the Show Control Module. See Licenses and functions.

A MIDI port can be used for remote-controlling Wings Platinum, for recording data in objects and MIDI timecode (MTC) synchronization via MTC. It is possible to add keys and controllers to the MIDI port, which can be used as input devices for data recording.

This is how you create such a port:

1. Click on category **Devices** in the Media Pool.
2. Right-click some free space in the Media Pool and select **Add port** ▶**MIDI**.
3. In the dialog box under **MIDI input** and **MIDI output** select the corresponding hardware ports. You can use different devices for input and output.
4. For MIDI remote control of Wings Platinum enable the corresponding functions under **Control of Platinum functions**:

   Process song messages

   With a checkmark next to them, Wings Platinum processes the following messages:

   - **Song Select** ...preselects a timeline, **Song Number** corresponds to the remote index.
   - **Song Position** ...preselects a position marker, Position LSB corresponds to the remote index.
   - **Start Song** ...starts playback in Presentation Mode and considers the preselected timeline and position marker.
   - **Stop Song** ...puts playback into Pause Mode.
   - **Continue Song** ...continues paused playback.
   - **System Reset** ...terminates playback. When Presentation Mode is on, Full Screen Mode is terminated and

a possible background image removed, too.

MIDI Machine Control (MMC)

With a checkmark next to them, the following MMC commands are evaluated for control by Wings Platinum:

- **Play** ...starts playback in Presentation Mode from the current Locator position and waits in Pause Mode; paused playback can be resumed by **Play**.
- **Stop** ...terminates playback; corresponds to the **Esc** key
- **Pause** ...puts running playback into Pause Mode.
- **Fast Forward** ...makes the Locator jump to the next marker
- **Rewind** ...makes the Locator jump to the previous marker
- **Punch In** ...enables recording in objects. See also Live control and recording in objects.
- **Punch Out** .....terminates recording in objects

Next to **ID** enter the corresponding MIDI device number for Wings Platinum (0...126). MMC commands using this number are evaluated by Wings Platinum.

Program Change ➪ Multimode Start

Add a checkmark and select the corresponding MIDI channel (1...16). All **Program Change** commands of the selected channel execute the corresponding trigger, with the **preset** corresponding to the remote index for timeline or trigger. See also Trigger functions.

Note On ➪ Trigger

Add a checkmark and select the corresponding MIDI channel (1...16). All **Note On** commands of the selected channel will execute the corresponding trigger in accordance with the note number (1...127). See also *Trigger functions*.

5. If necessary, you can specify period of time next to **MTC offset** which is to be added to the incoming timecode. It is also possible to enter negative times as offset. The resulting timecode value, however, must never fall below zero, as Wings Platinum automatically sets negative values to zero.
6. Next to **MTC timeout** enter a period of time for Wings Platinum to continue playback when timecode is no longer available. MTC is only transmitted every two frames. Therefore, it does not make sense to enter values below 100 ms. The default setting is 1,000 ms.
7. At **After MTC timeout** you can define the activity to be performed after timeout:
    - **Reset timecode** ...causes the system to be without valid time; playback stops and the Locator jumps to the last starting position.
    - **Keep last timecode value** ...the system retains the timecode value received last plus timeout and stops likewise.
    - **Continue timecode** ...when timecode is not available playback is continued via the PC clock.

Adding MIDI devices

If you want to use a keypad or a MIDI controller for data recording in switch and data objects or for live control you need to add keys (Note On, Note Off) or slider controls (Controller Change):

1. Right-click the **MIDI** device port and select **Add devices**.
2. Place a checkmark next to **Fader In** (Controller) or **Switch In** (Note On, Note off) and enter the corresponding number.
3. Moreover, you also need to define the **MIDI channel** you would like to use. Controllers and keys (max. of 128 each) are counted up automatically.
4. Close the dialog by clicking **OK**.
5. If you want to use particular controllers or keys, you can change the allocation. Right-click **Controller** or **Note** and select **Properties**. MIDI, for example, defines middle C by key number **60**. Enter key number **60** for middle C, e.g. **1/60** (channel/key number or channel/controller).

6. Close the dialog by clicking **OK**.

Info Please note that there are special device ports for certain controllers which contain all devices or control elements, e.g. for Tascam US-224/428 and Mackie Control.

S

Configuration Serial / LAN

This device port allows serial commands to be sent via serial ports or a network in order to control devices such as video projectors, DVD players, etc.

1. Click category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool portion and select **Add port** ▸ **Serial / LAN**.
3. Under **General settings** select the required type of communication:
   - If you want control via a serial port, click **Serial port** and select the corresponding port.
   - If you want control via a network (...requires the Show Control Module), click on **IP address / Port** and enter address and port of the device to be controlled, as well as the protocol used for controlling. Preferably choose **UDP** for protocol. The server is always the computer or device this computer (being the client) is to be hooked up to.
4. The option **Open/close PC port for every command** allows control of a device by several controllers. **Caution:** This function should be used by specialists only. **More about operating conditions**.

   When there is a checkmark next to **Open/close PC port for every command** the port is opened after configuration and closed again. Following this, it will be opened for sending information and closed again 100 ms later. The fact that the port of the device to be controlled is then available again, allows other controllers to communicate with the device.

   This procedure entails some risks and should only be used in a

controlled environment. Be cautious because you may end up with massive problems when Wings Platinum is trying to send information via this port and the device to be controlled is blocked by another controller. Therefore, it is important to ensure that no other controller blocks the port while Wings Platinum is sending commands.

5. For a serial connection, select the parameters in accordance with the device requirements under **Configuration serial port**.
6. Click on **OK**.

Info

- To use the device port, the device control system needs to be enabled, which can be recognized by the button being highlighted in gray.
- For remote control via **TCP**, the server or unit to be controlled needs to be activated before enabling the device control system. In many cases it may be more useful to use **UDP**. It requires no acknowledgement and the Windows Network is not blocked when connection problems occur.
- Information about the computer IP address can be found by double-clicking the LAN connection icon and clicking tab **Network support** in dialog **Status of....**
- In order to find out which computer ports are being used, you can enter command **netstat -a** in the **prompt** window.

Adding a DMX port

This function requires the Advanced License and up (up to a maximum of 32 channels) or the Show Control Module. See Licenses and functions.

This device port allows usage of our **AV Stumpfl USB-DMX-IO a**nd **SCZ-USB-DMX-IO-2 s interfaces** (Windows 7/64 bit compatible) as well as the Soundlight USB interfaces **USBDMX1**, **USBDMX2** and **USBDMX-IN**. The interface

drivers must be installed before you add the DMX ports to make the interfaces ready for operation.

1. Click on category **Devices** in the Media Pool.
2. Right-click some free space in the right Media Pool section and select **Add port ▶DMX**.
3. In the dialog box click next to **Type** and select the interface you are using.
4. Enable the corresponding interfaces by placing a checkmark next to them and enter the corresponding ID numbers. With only one DMX interface, use **ID 1** for input and output of a **Stumpfl USB-DMX-IO** and **ID 1** and **ID 2** for Soundlight USB interfaces. When several USB-DMX interfaces are used, the ID number depends on the order in which the drivers for the interfaces were installed.
5. To use the configured DMX input for controlling Wings Platinum, place a checkmark next to **Execute trigger with DMX channel** and specify the DMX channel to be used.
6. Close the dialog by clicking **OK**. Finish by adding the corresponding number of DMX channels by right-clicking the device port and selecting **Add devices...**

Info

- **Important:** As the ID numbers, interfaces and USB ports relate to each other, you should always **run the interfaces on the same USB port** after their installation. This ensures that all allocations remain correct even after rebooting.
- In the case of a failure to enable the device port in Wings Platinum when using **AV Stumpfl USB-DMX-IO interfaces**, check **Device Manager - USB Controller** in the Windows Control Panel for the entry **Intelligent Usb Dmx Interface (Stand Alone 2006)** or **Intelligent Usb Dmx Interface (SIUDI8A, 32/64bits)**. If there is no such entry, repeat the driver installation and try using a different USB port on your PC.
- An error message during DMX port setup for a **Soundlight Interface** saying that the DMX input or output could not be opened, either means that the ID numbers are incorrect or that the interfaces were plugged

into the wrong USB port. Here, you may have to go by trial and error. You may have to install the latest driver, which can be downloaded from the Soundlight website.

- A maximum of 11 Soundlight DMX-USB interfaces can be run on one computer. In Wings Platinum, the corresponding number of DMX ports must have been configured.

See also

Programming analog/DMX devices

Recording DMX data

Remotely controlling Wings Platinum via a DMX signal

Adding a master/slave PC

Usually, master or slave PCs are automatically configured in the Media Pool when creating multidisplay projects. However, it is also possible to add PCs at a later time or change their properties:

1. Click category **Devices** in the Media Pool.
2. Right-click the corresponding PC and select Properties. **If you would like to add a new PC...**

   ....Right-click some free space on the Media Pool tab and select **Add Master/Slave PC**. If a master is already available, select **Add Slave PC**. There can only be one active master PC.
3. You can enter a name in field **Name**. Please consider that the name is supplemented by the **Master PC** or **Slave PC**. If you enter **left**, the computer will be named **Slave PC left**, for example.
4. What type of PC would you like to configure?

   Master PC

   - Place a checkmark next to **Local Master Pc** and confirm the warning with **OK**.

     Info If you want to use the serial ports of the master, you need to add these separately. See Confi-

guration Serial/LAN.

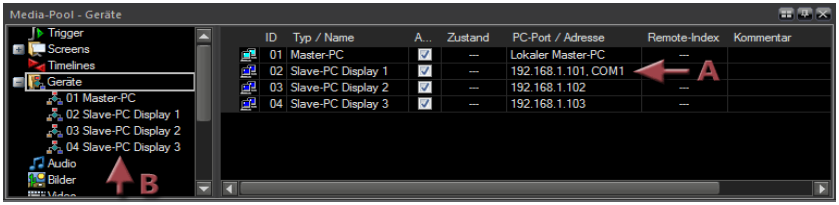
Slave PC

Click on **Select computer** and choose the corresponding PC. If there is no network connection, you can also enter the IP address manually.

If you want to use the serial ports of the slave, you place a checkmark next to **Serial port** and enter the corresponding COM port of the slave.

Finally, close the dialog by clicking on **OK**.

Info The serial ports of a slave that are addressed can be seen in the Media Pool in line Device ports.In this example it is **Com 6**, the other numbers at the serial ports are only internal IDs.



See also

Configuring a presentation network

Programming serial commands

Using drivers for serial control

Removing a master/slave PC

When a PC is removed from the Media Pool, only the serial ports are checked for links to other devices. You need to check for yourself if the PC is still required for other functions. This can be done in the Media Pool on tab **Screens** and **Trigger** as well as in the **Track Properties** under **Target PC**.

This is how you remove PCs from the Media Pool:

1. Click category **Devices** in the Media Pool.
2. Right-click the corresponding PC and select **Remove**.
3. If you answer the query **in the positive**, all existing links to **displays**, **triggers** and **control panel fields** as well as the entries as **Target PC** in the Track Properties will be deleted.

Info If a message pops up saying that the device cannot be removed because it is used, it can only refer to command markers in the timeline which are connected to a serial port. Function Select timeline objects is very useful for searching and removing markers.

Options and Settings

The Options Dialog

This dialog serves for managing all parameters you may want to adjust. Some parameters only refer to the current project, other parameters have permanent validity.

- Click on **Options** in the function bar below the main menu or on **Extras** and **Options** in the main menu and mark the required option. Should only some entries be visible, start out by clicking on the plus sign.
- As an alternative, you can open the Options dialog by pressing keys **Alt** + **P**.

Global Options

Audio Level

Click on **Options** in the function bar below the main menu and select **Global Options** - **Audio Level** on the left.

Level display settings

Here you can set the various modes of the audio level display:

- **Peak Level** ...is the default setting and shows the peak level based on a quantized data stream. This mode has little significance with regard to the loudness of an audio signal but plays an essential role in numerically correct level control of the digital audio signal.
- **K-XX/RMS (K-System)** ...enables the K-System for audio level and volume management introduced by Bob Katz. You can choose **K-12**, **K-14** or **K20** following which the RMS level is displayed which is more closely

related to the actual loudness. The Peak Levelis also displayed but in narrow gray bars. Further information on the K-system can be found in topic The K-System - Monitoring volume and dynamic range.

Info For the RMS level a larger time window located before the locator is evaluated. Therefore, the RMS level display starts indicating even before a sound object, which is quite normal in this connection.

Background colors of stereo channels

Here you can select a **background color** for the level display of every stereo channel:

- To do so, click in the corresponding field. This way, various channels can be assigned different colors to characterize them. **Details on color selection**.

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
  - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

  If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

  - Select a color so that it becomes visible in field **Old / New color** on the right.
  - Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
  - All colors saved under **Custom** can be directly selected by

clicking them. This selection of colors will also be available when the dialog is opened again.

- If you want to deactivate the individual background, click and check **Use standard colors.**
- The Audio Level display is located on tab **Audio Level** in the Project Explorer. The indication for playback duration is automatically shown unless tab **Control Panel** has been selected.

Color management

Click **Options** in the toolbar below the main menu and select **Global Options** - **Color management** on the left. Here you define whether and how color management is to be effective.

Input

If you check the box next to **Use embedded color profiles of picture files** Wings Platinum automatically considers the file profile for displaying the image on the screen during display data creation.

Important: Wings Platinum can only read color profiles in **JPG**- and **TIF**-format!

Output

If your monitors or data projectors are calibrated and their properties defined in an ICC color profile, Wings Platinum can use for the output of pictures. The following options are available:

- **Use sRGB/HDTV color space** ... results in color output in the standardized sRGB- and HDTV color space. Your output device should correspond to the sRGB/HDTV color space as closely as possible to achieve good results. Output devices with larger color space are not suitable for this setting as the colors may become oversaturated.

- **Use color profile** ... allows selection of a color profile. Here you should preferably specify the individual color profile of your monitor or data projector. Output is the directly in the output device's color space which ensures correct color rendering for devices with a large color space. Below the selection box the color profile used for the primary output device is displayed.

Info

- Below the selection box the color profile is displayed that is currently used for the primary output device.
- Since you can only select one color profile you need to do the fine adjustment for the individual display units via the display color controls. This can very conveniently be achieved via the automatic, camera-based Wings VIOSO multidisplay calibration.

Under **Pictures** you need to enter the way color is converted:

- **Create color-converted display data** ...converts the display data into the output device's color space. Since this is done before the presentation it saves performance but calls for a recreation of display data as soon as a different monitor or video projector is used. Wings Platinum, however, supports several display data sets. If you have created display data for your monitor or video projector you can change over between these profiles without having to create new display data. With regard to resolution and color space the display data are in this case linked up with one output device.
- **Color conversion of display data during presentation** ...saves the display data in the original color space and converts them in the main processor during playback. This has the advantage that any changes in the color profile can immediately be considered while playback requires more performance.

Display

Click on **Options** in the function bar below the main menu and select **Global Options - Display** on the left.

Nodes

Enter the node display size in the objects. The preset value is a node size of 3 x 3 pixels.

Duration of message display in the Preview Window

Here you can enter the time that messages should be displayed in the Preview Window. Don't choose too long a period of time. All messages can be read again in the Log File .

General

Click on Options in the function bar below the main menu and select Global Options - General on the left.

Video playback

Option **Allow auto codec selection by Windows** should only be checked in certain situations if the video file properties do not allow selection of a suitable codec or if playback based on the codec selected there fails. See also Video Properties.

Slide Projection

In order to control slide projectors check box **Enable usage of slide projectors**. This change will only take effect at the next program start, i.e. you need to close the Options Dialog and close and restart Wings Platinum. See also Slide programming.

Standard folder for your projects

Here you can enter a **Standard Folder** for your projects in which all future projects are to be stored. The default setting is the pathname for own files defined by Windows.

Preferred text editor

Here you can specify a text editor for editing text files, e.g. the schedule file for CF Cards.

Playback priority

This setting allows you to take an influence on how the available PC capacity is to be assigned to Wings Platinum and other applications. Settings only need to be changed when other applications are run simultaneously, e.g. PowerPoint, and Wings Platinum is no longer able to run the show properly. In this case you should choose a higher priority.

Info This setting is transferred from the master to the slaves via function **Transfer Global Options to slave PCs**. See Transferring Global Options to slave PCs.

Help topics

In the function bar blow the main menu click on **Options** and select **Global Options** &endash; **Help**.

Wings Platinum offers a help structured in accordance with target groups to provide optimized support for every user. When you select the help that matches your applications most, you will receive optimised information for the corresponding topics.

Info Updating Wings Platinum via the Internet, causes Help **All information** to be updated and used. This help contains a lot of information for advanced and professional users. It would therefore be a good idea to download your preferred help separately. See Separate update of the Online Help.

In Screen Editing

Click **Options** in the function bar below the main menu and select **Global Options** - **Keyframe Editor** on the left.

Here you can make a few settings for In-Screen Editing and the Keyframe Editor.

Settings for In Screen Editing

In this field you can enter the **snap radius** for the screen object handles. The default setting is 5 pixels. The higher the value, the higher is the "magnetic effect" of the handles on the mouse pointer.

Position of the Keyframe Editor

Here you can define the location where the Keyframe Editor is to appear when highlighting a control track.

Without any checkmark, the Keyframe Editor is opened at the bottom of the timeline window.

With a checkmark next to **Open Keyframe editor beneath the timeline object** it opens directly below the object whose control track was highlighted and maintains its position until it is closed.

With an additional checkmark next to **Update position with object selection** it keeps jumping to the object whose control track has just been highlighted. You only need to close it when an object is not visible.

Settings for Keyframe Editor

If you don't want to edit the keyframes in combined control tracks directly in the object, you can place a checkmark next to **Use keyframe editor for combined control tracks**. This may be useful if you tend to crossfade images and videos in a track as it allows also the keyframes in the crossfade area to be edited.

Media Editors

Click on **Options** in the function bar below the main menu and select **Global Options** - **Media Editors** on the left.

Here you can specify two external programs for editing or playing audio, picture and video files. Click on **Select program** and specify the corresponding software. The chosen programs are displayed in the context menu for the corresponding media files (Media Pool).

Select the mode in accordance with the type of program. The field next to **Editor** allows you to choose from among three modes by clicking them:

- **With check mark** ... the specified program is capable of editing. In the context menu, it is displayed with the appendix **Edit with ...** and Wings Platinum will update the display data after files have been modified.
- **Without check mark** ... the specified program is only capable of playing back or showing files. In the context menu, it is displayed with the appendix **Open with ...** In this case, Wings Platinum will not check, whether files were edited.
- Grey check mark ... the specified program is not displayed in the context menu.

Under **Playback software for newly created videos** you can specify the software for playing back the finished videos after clicking . In addition to this, **Enable** must be provided with a check mark.

Network

Click on **Options** in the function bar below the main menu and select **Global Options** - **Network** on the left. These settings are important for additional licenses and for synchronization and distribution of presentation data for multidisplay presentations.

Mode

This setting specifies whether the computer is used as **Master** or **Slave** within the presentation network. If you have selected **Slave** click and select the drive the media files are to be saved to. The slave automatically copies the required data from the master and pastes them to **Wings Platinum 4 Slave Sync** folder. **Important:** Make sure that the drive is cleared for network access.

- When you change over from **Master** to **Slave**, **Autosave** and **Undo** are automatically disabled. When you change back to **Master**, both are enabled again.
- For slaves the connection monitoring system is automatically enabled. It checks whether the master still responds. If there is no response from the master, a second connection attempt is made. When this fails again, a connection to the backup master will be established.

Network protocol (TCP/IP)

When **Activate** is provided with a checkmark network communication is activated.

Per default **Synchronize system clocks** is enabled. Only disable this function if you have a good reason to do so – this function is highly important for the correct distribution and update of presentation data.

Enter the corresponding data under **Master IP address** and **Port**. If you click **Select computer** a dialog pops up listing all active computers in the network for selection. If one particular computer is not displayed, you

can use button **Retrieve network configuration** to retrieve and update the configuration.

If you enable **Backup master**, you can optionally specify a second master as backup. Should the first master fail, the slaves will automatically link up with the back-up computer.

Info In order to ensure trouble-free operation, the computers need to have a static IP address. For information on how to verify or alter this, refer to Static IP addresses in the network.

Retrieving the network configuration

Click button **Retrieve network configuration** to search the network for available computers and update the IP addresses already provided by Wings Platinum. This is particularly useful for large networks.

Objects

Objects

Click on **Options** in the function bar below the main menu and select **Global Options** - **Objects** on the left. Here you can make settings for object behavior and properties.

For media-specific settings select the submenus

Default control tracks for In-Screen-Editing

Here you can choose whether combined control tracks or individual control tracks are to be created for parameter objects.

Behavior when shifting following objects

You can influence the behavior of objects on highlighted tracks in mode **Shift following objects** as follows:

- **Unchecked** ... only objects to the right of the Locator are shifted along.
- **Checked** ... objects which are at the location of the Locator are shifted along, too.

Behavior when selecting areas

Here you can choose whether objects need to be fully contained in the area between the first and the last object in order to be highlighted while holding the **Shift** key. This is particularly important for longer objects. See also Marking objects.

Behavior of nodes

If the keyframe tool is to be used for object nodes, too, check the box next to **Apply keyframe mode tool to ramp nodes**. This may be useful with regard to Show Control applications, e.g. in order to create data objects with constant values.

Audio

Click on **Options** in the function bar below the main menu and select **Project Options** - **Audio** on the left. Here you can make settings for the behavior and properties of audio objects.

Default duration for new objects

The duration for **fade-in** and **fade-out** apply to creation of new audio objects, e.g. when dragging some music from the Media Pool into the timeline. The default values are zero.

Options

When there is a checkmark next to **Show duration**, the object duration is shown in the object info line.

Pictures

In the function bar below the main menu click on **Options** and select **Global Options** - **Objects** - **Pictures** on the left. Here you can make settings for the behavior and properties of picture objects.

Default duration for new objects

These settings refer to creating new picture objects, i.e. when pictures are dragged from the Media Pool into the timeline. The **Display time** is the period of full opacity or brightness.

Info Alternatively, these values can also be entered by right-clicking a picture object and selecting **Ramp** - **Set durations as default**.

Default control tracks in new objects

Place a checkmark next to the control tracks new picture objects are to be provided with. See also Visual effects.

Options

Choose the information to be displayed in the picture object info line:

- **Don't show duration / display time** ...no time information is displayed.
- **Show duration** ...shows the complete object duration.
- **Show display time** ...shows the display time, i.e. the time when the fade-in is complete to the beginning of the fade-out.

Settings for new picture tracks

- **Crossfade** ...defines the type of crossfade when moving to objects on top of each other:
  - **Standard crossfade** ...fades out the first object while simultaneously fading in the next object.
  - **Unilateral crossfade** ...fades in the second object while maintaining full opacity or brightness of the first object. The second object covers up the first object, so to say. This setting is usually the correct choice for tracks with alpha control. However, there

are also some exceptions, e.g. a crossover between pictures with different aspect ratios.

Text/Ticker

In the function bar below the main menu click on **Options** and select **Global Options** - **Objects** - **Text/Ticker** on the left. Here you can make settings for the behavior and properties of text objects.

Default duration for new objects

Under **Duration** you can enter the duration or the length of newly created text objects.

Default control tracks in new objects

Place a checkmark next to the control tracks new text or ticker objects, respectively are to be provided with. See also Visual effects.

Options

When there is a checkmark next to **Show duration,** the object length or duration is shown in the object info line.

Video

Click on **Options** in the function bar below the main menu and select **Global Options** - **Objects** - **Video** on the left. Here you can make settings for the behavior and properties of video objects.

Default duration for new objects

The duration for **fade-in** and **fade-out** apply to creation of new video objects, e.g. when dragging a video from the Media Pool into the timeline. The default values are zero.

Default control tracks in new objects

Place a checkmark next to the control tracks new video objects are to be provided with. See also Visual effects.

Options

When there is a checkmark next to **Show duration**, the object duration is shown in the object info line.

Under **Frame buffer** you can specify the frame buffer size for optimization via the SmartSync Engine™. Usually, 2 to 3 frames should do. Higher values improve reliability but use up more graphics memory.

At **Preload time** you can specify how many seconds before video playback preloading is to start at the earliest. If many videos are played at the same time, the video files are also loaded at a later time. The default preload value is 60 seconds.

Info The preload time can also be set for individual video objects. See Video Object Properties.

Ssettings for new video tracks

The **Crossfade** setting applies to newly created tracks. However, it can be changed any time in the track properties.

- **Standard crossfade** ...fades out the first object while simultaneously fading in the next object.
- **Unilateral crossfade** ...fades in the second object while maintaining full opacity or brightness of the first object. The second object covers up the first object, so to say. This setting is usually the correct choice for tracks with alpha control. However, there are also some exceptions, e.g. when pictures with differing aspect ratios are dissolved.

Live-Video / TV

Click on **Options** in the function bar below the main menu and select **Global Options** - **Objects** - **Live video / TV** on the left. Here you can make settings for the behavior and properties of live video/TV objects.

Default duration for new objects

Under **Duration** you can enter the duration or the length of newly created live video/TV objects.

Default control tracks in new objects

Place a checkmark next to the control tracks new Live Video / TV objects are to be provided with. See also Visual effects.

Options

When there is a checkmark next to **Show duration,** the object length or duration is shown in the object info line.

Data

In the function bar below the main menu click on **Options** and select **Global Options** - **Objects** - **Data**. Here you can make settings for the properties of newly created data objects.

- Under **Default properties of new objects** you can enter the following parameters:
  - **Duration** ...defines the object length
  - **Object value** ...defines the location of the ramp band.
  - **End value** ...specifies the location of the last node which defines the corresponding value at the object end.
  - Unit ...defines the unit for displaying the node values.
  - Under **Options** you choose whether the duration is to be displayed in the info line of data objects.

Switches

In the function bar below the main menu click on **Options** and select **Global Options** - **Objects** - **Switches** on the left. Here you can make settings for the properties of newly created switch objects.

- Under **Default properties of new objects** you can enter the object length at **Duration** and the switch condition **On** or **Off** at **Value**.
- Under **Options** you choose whether the duration is to be displayed in the info line of switch objects.

Print

Click on **Options** in the function bar below the main menu and select **Global Options** - **Print** on the left.

Under **Printing of picture sequence** you can specify the amount of pictures per line and column to be printed onto one page (DIN A4). For 35 mm slides, the default amount per page is 40 slides (5 x 8). You can also select what additional information is to be printed out along with the pictures:

- **Print filenames** ...prints the name of the image file for every image
- **Print comments** ...the comments from the picture objects are used for printing the sequence of pictures in the timeline.

Program start

Click on **Options** in the function bar below the main menu and select **Global Options** - **Program start** on the left. Use this dialog box to specify the behavior of Wings Platinum after startup of the program.

Startup delay ...delays startup by the specified period. If after starting up the computer Wings Platinum is to be started via the Windows Autostart folder, you can delay this by the specified period. This may be necessary for particular configurations (network, etc.). Choose one of the following options:

- **Never** ...Wings Platinum opens without delay

- **Always** ...Wings Platinum opens with the specified delay. The reference time is the start of Wings Platinum.
- **After PC start** ...Wings Platinum opens at the earliest with the specified delay after the start of Windows. The reference time is the start of Windows. Therefore the specified delay should not be too short, e.g. **120** seconds.

Below this you can choose whether a project is to be opened automatically or not. If yes, you can specify the project:

- **No action** ... opens only the Wings Platinum Program Window
- **Show startup options** ... opens the dialog box for selecting projects, templates and Project Wizards.
- **Open last project** ... opens the project edited last.
- **Open following project** ... opens the specified project. To select the corresponding project, click on **Select filenames**.

In addition to this, you can specify a few extra actions, which is particularly important for automatic presentation mode. Please note that the first four options are only available when **Open following project** was previously selected:

- **Wait for slave connections** ... is an important function for automatic multidisplay presentations. At **Timeout** you can specify the maximum period the master is to wait for the slaves. Data transfer to the slaves is it start as soon as the connection to the slaves has been established but at the latest after the timeout has expired. This period should allow the slaves to safely establish a connection with the master.
- **Transfer project to slaves** ...is also required for multidisplay presentations. After the specified timeout expires, the project is transferred to the slaves. If one slave within the network is not active, the project is still transferred to all the other slaves. This function can only be selected when **Wait for slave connections** is enabled.
- **Transfer media files to slaves** ... as above, but only the corresponding media files required by a slave, i.e. only the minimum of data are transferred. If a slave within the network is not active, all other slaves are still supplied with data. This function can only be selected when **Wait for slave connections** is enabled.

- **Autoplay timeline**... ..automatically starts playback of the timeline with the specified remote index at the position marker with remote index 1. Unless the specified timeline and position marker with remote index 1 are available, this action cannot be performed. When there is an active video track in Exclusive Mode or a presentation track in the project, the video presentation is started automatically. Without active presentation track the timeline is presented in presentation mode, i.e. in fullscreen mode and with high display quality.
- **Ignore last autosave status** ... ignores the last autosave or location of system crash or power failure. For automatic mode in permanent installations you should enable this functions to prevent queries such as "Do you want to continue at the location the show was aborted...." and to start the presentation as programmed. See also Continuing a presentation after power failure.
- **Enable all warnings** ...should usually remain enabled for all messages to be displayed. For presentation mode you can reduce warning messages to the absolutely necessary by disabling this function, i.e. unchecking the checkbox. See also Enabling/disabling all warnings.
- **Enable device ports** ...ensures that the device ports are enabled for a project to be auto-started after Wings Platinum start-up. See also Enabling the device ports. For solutions to problems in enabling the device ports during autostart, click here.
- **Display screen in fullscreen mode** ...opens the screen in fullscreen mode.
- **Adjust sound card assignment** ...makes sure that the current allocation of sound card outputs is not altered by Windows, e.g. due to faulty sound card detection. This option is required for the sound interface Audiotrak FW 410, for example.
- **Trigger Scheduler** ...for enabling and disabling the trigger scheduler (...requires the Show Control Module).

  Disable ...disables the Trigger Scheduler.

  Enable always enables evaluation of conditions and executes the triggers that fulfil these conditions. See also Trigger functions.

  Restore last exit state restores the setting that was active when the program was exited last.

Save

Click on **Options** in the function bar below the main menu and select **Global Options** - **Save** on the left.

Backup copies

Check this box if Wings Platinum is to produce a safety backup copy of your project. Additionally, enter the time interval for doing so. After a computer or system crash, Wings Platinum will use these backup copies to restore the project loaded during the time of the crash.

Attention! This backup copy function is a mere safety measure in case of system problems and no replacement for saving the project .

Tip Just in case you happen to have accidentally overwritten a project file it may be important to know that the last 10 safety copies are located in folder in subfolder "...Documente and Settings\ ***User name***\ Local settings\ Application data\ AV Stumpfl\ Wings Platinum 4\ **Autosave**, with **Backup_0.ptp** being the latest file. This file and any other older backup copies can simply be opened by double-clicking them and saving them in the corresponding project folder under a different name.

Folder for temporary files

Here you can specify the location to save temporary files by clicking . This is the folder for temporary storage of files for creation of

presentation media, for example. Choose a drive with sufficient memory capacity.

Automatic date correction

When display data are constantly being recreated because their original data have a future date (compared to that displayed on your PC) you can have this corrected automatically. To do so, check **Automatically correct invalid file dates**.

Info This setting is transferred from the master to the slaves via function **Transfer Global Options to slave PCs**. See Transferring Global Options to slave PCs.

Logging

Extended Logging should only be chosen in special cases for analytical purposes since it may affect performance due to the high number of log entries that are made even during the presentation.

Info Even when Extended logging is deselected, any failure to load all media into the graphics memory during a presentation is still logged in the log file after stopping the presentation.

Sound cards ASIO

Click **Options** in the toolbar below the main menu and, on the left, select **Global Options** - **Sound cards ASIO**.

Output via ASIO drivers allows multi-channel sound even with standard sound cards or onboard sound chips, provided they have several outputs. You only need to install software tool **ASIO4ALL** which is available on the web at www.asio4all.de.

Settings

For driver type select **ASIO**. If you choose**WDM** the dialog for WDM sound cards will appear.

For **ASIO device** choose the corresponding ASIO sound card or **ASIO4ALL** if this tool is installed and you want to use WDM sound cards.

Click **Setup** to open the Options Dialog of the selected ASIO device.

Outputs / channels

Here you assign the sound card outputs to the Wings Platinum channels. If the sound card driver has several stereo outputs available it will do to select the first one and then enter the number of channels on the right.

Info

- ASIO mode does not allow asynchronous audio playback, i.e. audio playback with a static locator. See also Asynchronous audio playback.
- The audio track properties enable you to choose the outputs. The output is indicated in the audio track head by a figure in brackets. See also Multi-channel sound.
- You can choose a background color for the level display to distinguish between the channels. See Audio Level.

Stereo inputs

Here you select the corresponding stereo input and, on the right, **2 channels** as Wings Platinum needs a stereo input for recording.

Sound cards WDM

Click on **Options** in the function bar below the main menu and select **Global Options** - **Sound cards WDM** on the left.

Settings

For driver type select **WDM**. If you choose **ASIO** the dialog for ASIO sound cards will appear.

Note: Output via ASIO drivers allows multi-channel sound even with standard sound cards or onboard sound chips, provided they have several outputs. You only need to install software tool **ASIO4ALL** which is available on the web at www.asio4all.de.

Stereo output / Background color of level display

- Select the required output of your sound card for audio playback. Output of two channels (stereo sound) is preset for the first audio output.
- If option **SPDIF/AC3** is enabled, AC3 data stream can also be output via the S/PDIF output. **Important:** Output depends on certain conditions and restrictions. See Playback of coded AC3 data streams.
- If the Pro License or the Show Control Module is installed, you can assign up to 12 stereo outputs of your sound cards to the stereo outputs in Wings Platinum. You can use several standard sound cards or multi-channel sound cards. See also Multi-channel audio playback.
- By clicking one of the fields next to the outputs, you can select the background color for the level display. **Details on color selection**. In order to display the individual background colors, deactivate the standard colors in the Audio Level Dialog.

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
  - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

  If you want to use your own standard colors for a project or want to use a particular color several times, you can define a

Custom color. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

Info

- The figure (in brackets) in the track head of the audio track indicates which output the track is allocated to.
- The channels of multi-channel sound cards for WDM drivers must be selectable in the form of several stereo outputs, which is not the case for so-called 5.1 sound cards. You can bypass this restriction by using the tool ASIO4ALL and the ASIO driver for your WDM sound card. See Sound cards ASIO.
- When using several standard sound cards, playing back may become asynchronous, as every sound card has its own time clock which makes differences unavoidable. The longer the running time, the more will deviations and tolerances become audible. Really synchronous playback can only be achieved with professional multi-channel sound cards.
- If you want to playback multi-channel soundtrack as mixdown on a stereo output you can allocate this output several times. However, there are a few sound cards, that do not support this feature and will cause problems.

User interface

Click **Options** in the toolbar below the main menu and select in **Global Options** - **User interface**.

At next program start

- If the user interface is to be reset to its default settings check box **Reset user interface at next program start** and close the Options Dialog and Wings Platinum. When Wings Platinum is started the next time, the user interface is reset to its default settings.

Upon clicking on next to **Language** a selection of available languages will be displayed. Any changes will only be effective after the next program start.

User interface

- The timeline tabs can be displayed in different colors by checking box **Colored timeline tabs**. See also Adjusting the program window.
- **Allowing multiple sorting in pool** ...sorting can be hierarchical in accordance with several criteria. However, we recommend that this function be used by experienced users only since this behavior is often interpreted as malfunction.
- **Reduced object height** ... displays the objects at a lower height than the tracks, i.e. the objects do not reach the full height of the tracks. This allows you to click into the tracks even at locations where there is an object.
- **Large control tracks and keyframes** ... displays control tracks and keyframes at a size that is 50% larger than normal, which facilitates editing at a high screen resolution.

Snap Radius

- For **Snap to objects / mouse cursor → Locator** you define the number of pixels that a right-click may be away from the locator for the mouse cursor to jump to the locator. This is a very handy feature for cutting objects as the locator retains its position when calling up context menus.

- For **Mouse cursor** ➪ **Node** you enter the number of pixels that a mouse click may be away from the Locator for the mouse cursor to jump to the node and allow you to grab it.

Nodes

- Enter the snap radius for the object nodes.

Video input

Click on **Options** in the function bar below the main menu. Click the plus sign in front of **Global Options** and **Video input** and select one video input from the total of eight. Here you can make various settings for your video hardware.

Info For commonly used video input cards we have collected a number of time-tested settings. See Settings for commonly used video input/TV cards.

Video input configuration

Place a checkmark next to **Enable** to be able to use the video input and make the corresponding settings.

For **Driver type** select the drive type used by your input card.

For **Video hardware** select the corresponding video input / TV card. Click **Options** to open the Options Dialog of the video input card, provided there is one available.

In line **Capture format** you can specify a video format (RGB/YUV color space, etc.) and select the picture size in pixels, e.g. **YUY2** and **768** x **576** for standard PAL import. If you leave the **Default** setting and **0** x **0** pixels, Wings Platinum will attempt to find appropriate settings.

For **Video standard** choose the corresponding standards, such as PAL, NTSC, Secam, etc. in accordance with the video input. For Europe, **PAL B is** usually

the correct setting. For RGB grabber cards choose **RGB**. In this case you can reduce the frame rate if weaker computers have a problem running videos at 60 Hz without hiccups.

For **Video source** select the corresponding source, e.g. **Composite**, **S-video** or **TV tuner**, etc. If you have chosen TV tuner, you can also choose the channel to be active after loading the project at **TV channel**. Please bear in mind that your video card may not support all types of signals.

For **Input** you select the input to which the video signal is applied. If you have no idea about the numbering of the video card inputs you may need to try it out (...only required for playback of timeline objects).

Check box **Deinterlacing** if you are importing interlaced videos that need to be deinterlaced.

Crop ...is used for cutting off the black borders of video/TV images. To remove these black borders, add a checkmark next to **Activate** and enter the required values in pixels.

Project Options

Control Panel

Click on **Options** in the function bar below the main menu and select **Project Options** - **Control Panel** on the left.

Background

For Background you can select any background color for the control panel pages instead of the standard pattern, by clicking on **Color**. Following this, select the corresponding background color by clicking into the color field. **Details on color selection**.

- For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one.

Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.

- Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

Field size

For **Field size** you can define the size of a field, i.e. the size of a control panel field. The default size is 88 x 66 pixels. The default setting can be resumed by clicking **Default**.

For **Bitmaps** you can enable or disable display of buttons. This function can also be activated by right-clicking a free area in the Control Panel. See also Using individual buttons.

Header

You can specify a global header for all pages, which may contain text, page numbers, date and time.

- **Height** ...for entering the header height in pixels. **0** pixels means that there is no header.

- **Color** ...header background color. Click this field to specify the desired color. **Details on color selection**

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
  - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

  If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

  - Select a color so that it becomes visible in field **Old / New color** on the right.
  - Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
  - All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Text color** ...specifies the text color. Click this field to determine the desired color.

In the field below you can enter the applicable text. Add the current page number in the text by entering **%P**. Date and time can be added likewise. See **Syntax for date and time display format**. Click to select the text orientation.

The following format characters produce the following information:

%a ...for weekdays, abbreviated, e.g. **Fr** for Friday

%A ...for weekdays, e.g. **Friday**

%b ...for month, abbreviated, e.g. **Jul** for July

%B ...for month, e.g. **July**

%c ...for date and time in local format, e.g. **23.07.2004 11:09:58**

%d ...for the day of a month as a decimal figure (01 - 31)

%H ...for hours in 24-hour format (00 – 23)

%I ...for hours in 12-hour format (00 – 12)

%j ...for the day of a year as a decimal figure (001 - 366)

%m ...for the month as a decimal figure (01 - 12)

%M ...for the minute as a decimal figure (00 - 59)

%p ...for marking mornings/afternoons in accordance with local format, e.g. **A.M.** / **P.M.**

%S ...for seconds as a decimal figure (00 - 59)

%U ...for the calendar week as a decimal figure, with Sunday being the first weekday (00 - 53)

%w ...for weekdays as a decimal figure (0 – 6, Sunday is 0)

%W ...for the calendar week as a decimal figure, with Monday being the first weekday (00 - 53)

%x ...for the date in local format, e.g. **24.07.2004**

%X ...for the time in local format, e.g. **11:37:49**

%y ..for the year without century as a decimal figure (00 – 99), e.g. **04**

%Y ...for the year including century as a decimal figure, e.g. **2004**

%Z ...for the time zone (only possible if the time zone is known by the system), e.g. **Western European Standard Time**

%% ...for display of the percent sign in the text

The additional character **#** allows you to enter the date in ex-

tended form, examples:

%#x ...for **Friday, 23 July 2004**

%#c ...for **Friday, 23 July 2004 11:52:08**

This option is not available for all date formats.

Full screen settings

Full screen settings allow display of the Control Panel including buttons on the entire screen without any margin, which is particularly interesting for touch panels.

- **Full screen size** ....enlarges the Control Panel to fill the entire monitor area.
- **Custom** ...allows entry of position and size; the Control Panel is displayed as an area without a border around it.
- **Display as topmost window** …this is the default setting to prevent other windows from covering up the Control Panel.
- **Display in fullscreen mode when opening this project** ...is enabled when a project in an installation is to be controlled via the Control Panel immediately after loading. You may want to enable password protection for this type of application to protect the project against unauthorized closing of the Control Panel. See Password protection.

Default folders

Click on **Options** in the function bar below the main menu and select **Project Options** - **Default folder** on the left.

Here you enter the folders to be used for storing the newly created media files. These folders are created automatically in the project folder when using the Wizard for project creation. The corresponding path will be preset in the corresponding dialogs for **New media files**.

In addition to this, you can also specify a project-specific folder for **Flash-Cards** (presentation data for CF Cards) after checking this item. In this case, the presentation data for CF Card will no longer be stored centrally.

Display data

Click on **Options** in the tool bar below the main menu and, on the left, select **Project Options** - **Display data**. Here you can make a few settings for automatic display data creation:

Pictures

- **Create thumbnails** ...creates the small preview pictures for display in Media Pool and Timeline objects. This option should always be checked.

  By clicking in the selection box you can choose, whether display data are to be created for all pictures in the Media Pool or only for the pictures used in the timeline. This refers to the following options:

- **Create display data** ...creates high-resolution display data for display on the screen.
- **For presentation** ...calculates display data at the presentation resolution defined in the **Screen Properties.**
- **For preview** ...calculates display data at the preview resolution defined in the Screen Properties.

Video

By clicking in the selection box you can choose, when display data or intermediate display data are to be created for videos. The following options are available:

- **When adding files** ...display and intermediate data are created when the videos are added to the Media Pool.

- **When used in timeline** ...display data and intermediated data are created when the videos are placed in the timeline.
- **No automatic creation** ...display and intermediate video data are not created automatically. Creation must be initiated manually, e.g. by right-clicking a video file in the Media Pool, a video object in the timeline (special functions) or via the repair button in the messages list. See also Creating display data for media files.

Additionally, the following options are available:

- **Create display and intermediate data automatically** ...enables automatic creation of display and intermediate data. If the checkbox is not checked creation of data must be initiated manually.
- **Additional higher resolution for HD videos** ...creates additional display data at higher quality for HD videos thus ensuring very high preview quality. This is an appropriate setting if your computer has enough performance power and the higher storage capacity is irrelevant.
- **Create intermediate video data** ...enables usage of intermediate video data for video files that are newly added to the Media Pool, thus ensuring problem-free output at reduced performance requirements. You can define the properties of intermediate video data for video files that are newly added to the Media Pool with regard to quality and seeking:
- **Quality** ... defines the quality of video images. The better the quality, the lower the compression and the larger will the files be. The following options are available:
- **Best (Q1)** ... compression is very low and quality very high.
- **High (Q2)** ... compression is low and quality high.
- **Normal (Q3)** ... compression and quality are well-balanced.
- **Low (Q4)** ... compression is high and quality low.
- **Seeking** ... defines the speed at which a position within a video can be found. This setting affects the keyframe interval, i.e. the distance between keyframes with the entire image information. Fast seeking of the locator requires large files, slow seeking allows smaller files.

- **Fast (P1)** ... uses a keyframe interval of 10 and allows very fast positioning of the Locator.
- **Medium (P2)** ... uses a keyframe interval of 20 and allows still quite fast positioning of the Locator.
- **Slow (P3)** ...uses a keyframe interval of 300 and positioning of the Locator requires some time.

- Media Pool column **Intermediate video data** shows the properties of the intermediate video data. The first letter stands for the quality, the second for seeking and other parameters refer to the resolution. In example **Q3P2 (1280 x 720)** refers to a quality of "normal", seeking of "medium" and a video image size of 1280 x 720 pixels.
- Display data are only created if no video files are yet available. I.e. if you want to replace old display data by new ones with modified properties you need to delete the old display data beforehand. See Deleting display data.
- Display data for audio are automatically created for all the audio files located in the Media Pool.

Folder for display and intermediate data (global setting)

Here you can enter a central folder for storing future display and intermediate video data.

A central folder has the advantage that the display data are stored in one location only instead of in the corresponding media folders. However, there are certain risks connected to this:

- If the project is located on an external hard disk and you connect it to a different computer the project cannot be presented because the display data are missing.
- If different external hard disks are logged on to the computer using the same drive letter, there may be problems in assigning the display

data or they may even be overwritten. Only if the external hard drive is only run using the same drive letter will display data be assigned without any problems.

This is how you enable a central folder for display and intermediate video data:

- Place a checkmark, click and enter the corresponding folder. Choose a fast drive for this folder which has enough storage capacity.

See also

The concept for screen display

Multidisplay

Click **Options** in the function bar below the main menu and select **Project Options** - **Multidisplay** on the left.

Settings for file transfer to all slaves

Here you specify the data to be sent to the slave computer:

- **Transfer all files to all slaves** ....causes the entire project including all Media Pool files to be transferred to every slave, i.e. including the unused files.
- **Transfer only used files to all slaves** ....causes the project including all files used in the timeline to be transferred to all slaves.
- **Transfer only displayed files individually to each slave** ...causes the project and the files required by the corresponding slave to be transferred. For finished projects, this options distinctly saves transfer time.

See also Transferring project data to the slaves

Start settings for slave background

- Here you can specify whether the computer in slave mode is to show a background so as to hide the Windows desktop.
- **Display background** ...enables display of the background in the specified color. Color selection is by clicking the color field. **Details on color selection**

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
  - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

  If you want to use your own standard colors for a project or want to use a particular color several times, you can define a **Custom color**. This is how you proceed:

  - Select a color so that it becomes visible in field **Old / New color** on the right.
  - Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
  - All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

- **Display IP address** ...enables display of the slave IP address in the specified size and color.

The background can also be set up centrally on the master for all slave computers. See Background for slave computers.

Notes window 1

Click on **Options** in the tool bar below the main menu and, on the left, select **Project Options** - **Display data**. This dialog is used for defining the parameters for **Notes window 1**. Altogether there are four video notes windows, with the other windows being selectable upon clicking the plus sign in front of **Notes window 1**.

- Place a checkmark next to **Display during playback / Presentation** to enable the notes window.
- Under **Font** you can select the corresponding font used for the notes window.
- Under **Font size** you enter the corresponding font height in pixels.
- Select colors in the selection dialogs for **fonts** and **background** by clicking on the fields next to them. **Details on color selection**

  - For color specification color spaces **RGB** and **HSB** are available for selection. Grab one of the small squares in the corners with the mouse and drag it to choose the corresponding color. Field **Old / New color** allows you to compare the new color to the old one. Clicking on old color causes it to be displayed in the corresponding object, if live update is supported by the object. This way, a before/after comparison can be made.
  - Selection of colors is particularly easy via the pipette. Click the pipette and the mouse pointer takes the form of a pipette. Use it to click the corresponding color on the screen or somewhere in the program window.

  If you want to use your own standard colors for a project or want to use a particular color several times, you can define a

Custom color. This is how you proceed:

- Select a color so that it becomes visible in field **Old / New color** on the right.
- Hold the **Ctrl** key pressed and click one of the squares in field **Custom** to save the corresponding color.
- All colors saved under **Custom** can be directly selected by clicking them. This selection of colors will also be available when the dialog is opened again.

See also

Displaying text in notes windows

Text functions

Other options

Output

Click on **Options** in the function bar below the main menu and select **Project Options** - **Output** on the left. Here you can make various settings for your the output of audio, images and videos.

Graphics display settings

At **Max. used graphics memory for pictures** you can specify the maximum percentage of graphics memory that is to be used for images. Usually, a setting between 50 and 85 % is appropriate. The standard setting would be 70 % for ATI graphics cards and 50 % for nVidia. With a high-performance graphics card (e.g. 512 MB) 50 % will usually do to avoid long preloading times while starting. If your show contains mainly videos and only smaller images, you should enter about 30 % for 512 MB and 50 % for 256 MB available graphics memory to make resources available to video playback. A reduction may also be useful when a number of programs that use a lot of graphics memory run simultaneously.

Info This entry for graphics memory usage is not relevant for rendering new videos but only for realtime playback.

Enable masks for visual tracks ... enables the mask function for picture and video tracks. Check this box if you want to use mask tracks for masking other tracks (Advanced License and up). This function uses up a lot of processing power and graphics memory. Therefore, you should only enable this function on low-performance computers if you really need the masking function.

If Fullscreen Mode causes problems in **syncing**, i.e. jerky camera movements, you can use the following modes under **Synchronisation Mode.** Please remember that this is a global option.

- **Normal sync mode Windows 7** ... is the default setting for Windows 7 computers. With syncing problems you can increase the value (default value is 3). However, higher values will also reduce the speed in loading the image display data into the graphics memory.
- **Normal sync mode Windows Vista / XP** ... is the default setting or Windows XP or Vista computers. If you run into sync problems, e.g. horizontal tears, you can change the value (default value is 90).
- **Alternative sync mode 1** ...is the most drastic measure for eliminating a syncing problem, with V-Sync being active. It should only be activated if increasing the value in normal sync mode did not solve the problem. This mode performs worst when it comes to loading the images into the graphics memory.
- **Alternative sync mode 2** ... as above, but without V-Sync.
- **No synchronization...** unsynchronized output. Depending on show and hardware this mode is well suited for multidisplay applications.
- **Sync to primary output...** is primarily useful for test purposes.
- **Prioritized synchronization of all outputs...** only a useful alternative for multidisplay applications on one PC; can achieve good results depending on the type of graphics card installed.

If you activate function **Restart presentation as a result of graphics card errors** the master will be informed about graphics card problems during multidisplay presentations. In such a case the master automatically stops the show, freezes the display contents, closes the screen and restarts the presentation from its current position. Due to the fact that the display contents are frozen the audience will hardly notice this measure. For restarting a delay time can be entered to ensure that the graphics card can be reactivated, e.g. 10 seconds.

Info Additionally, trigger **Restart timeline** has been introduced which allows the same purpose to be achieved manually. See Trigger actions.

Audio

Sampling rate ...defines the sampling rate and output of high rates. The default setting is **44100 Hz**. Other settings can be made on demand. You can use files with differing sampling rates within one project since they are converted online to the sampling rate chosen herein during playback.

Resolution ...influences the number of possible volume steps. The default setting is **16 Bits** (65535 steps). When the K-System is activated a setting of 24 Bits (16777215 steps) would be appropriate since the system provides a large headroom. See also The K-System - Checking volume and dynamic range.

Playback mode ...This setting has an influence on loading times and buffer sizes for audio files while playing back. A setting of **very fast** allows only a low amount of data to be buffered, while any alterations, e.g. volume, are immediately audible. However, this setting requires a very high-quality sound card with a fast driver, otherwise there may be sound errors. A setting of **very slow** causes a high amount of data to be buffered. This is a very reliable setting for playing back which causes hardly an error. The disadvantage is that any alterations during playback only become audible with a distinct delay. Just experiment with the settings to find the most suitable one for your sound card to work without sound errors. Low computer capacity is another reason why sound errors may be caused. This, too, can be avoided by selecting a slower playback mode.

Under **Delay** you can adjust the delay for the audio signal compared to the rest of the playback. The delay is triggered in steps of about 50 ms, i.e. exact delay values, such as 36 ms, for example, would not make sense. For playback of slide shows with DLC signals a delay of 100 ms is a suitable setting. Please bear in mind that this delay is only effective for playback from the timeline but not for playback from CF Card or CD.

Audio effects ...defines whether **VST**-PlugIns (default) or the **DirectX**-PlugIns of Wing Platinum 3 are used.

System folder for VST PlugIns ... here you enter the folder to accommodate your VST PlugIns, e.g. ...**Programs\Steinberg/VstPlugIns**. or ...**Programs\VSTPlugIns**. Please note that this is a global option.

Password

Click on **Options** in the function bar below the main menu and select **Project Options** &endash; **Password** on the left.

This dialog allows you to enter a password to protect the open project against unauthorized editing.

Password protection has decisive consequences. Therefore, make sure you note down the corresponding password! At Password protection you can find more information on how to use this feature safely.

Picture processing

Click on **Options** in the function bar below the main menu and select **Project Options - Picture Processing** on the left, where you can choose picture processing which is to be applied to all pictures of a project. This is done in a non-destructive way, i.e. the data of the original pictures remain unchanged, while the picture processing only takes effect on the picture files for display in the program (work size), as well as on the scaled pictures for producing AVI videos.

Automatic scaling of processing parameters

Some parameters, such as **blurring** and **unsharp masking** (improvement of sharpness) are dependent on the picture size. Checking **Adjust to reference size** causes the specified parameters to refer to the specified reference picture size and be adjusted to the picture size during scaling. This causes identical processing for all picture sizes. If the processing parameters were

not adapted, a certain blurring effect would be distinctly stronger at a smaller output size (e.g. DVD) than at a larger output size. By adjusting the parameters the visual effect is identical for all picture sizes.

The preset reference picture size of 1024 x 768 pixels should be changed if the most important output size (monitor or video projector resolution) is considerably larger. Once the reference size has been specified for a project it should not be altered any more, otherwise any effects such as **Blurring** and **Unsharp masking** that may already have been used in the project will change in their effect.

Non-destructive picture processing

Here you can set the parameters for globally effective picture processing. In their effects, the parameters can be compared to those of the Photoshop software. The effects are only effective when they are provided with a check mark.

- **Crop** ... Here you can specify the amount of pixels (with reference to the original picture files) to be cut off the margin.
- **Flip** ... to choose a certain way of flipping
- **Change saturation** ... changes the color intensity. Values above zero increase color saturation, values below zero reduce it. At a value of &endash;100, for example, only shades of gray are visible. If you deliberately want to choose black-and-white pictures, activate **grayscale**. In this mode, the tonal values are displayed in accordance with the color brightness values.
- **Unsharp masking** ... is used for improving the sharpness and is a photographic masking process developed for traditional repro technology. We recommend using this as standard sharpening function.
    - The value entered for **Strength** specifies the amount of increase in pixel contrast. We recommend values between 80 % and 200 %.
    - Under **Radius** you define the number of pixels surrounding the edge pixels and taking an effect on sharpening. With values below 1 only the edge pixels are sharpened, whereas with higher values a wider pixel range is sharpened. We recommend values between 2 and 5.

  - Value **Threshold** defines the amount the sharpened pixels are to be different from the surrounding area before they are regarded as edge pixels and sharpened by the filter. With a threshold value of zero all pixels in the picture are sharpened, which means that larger areas, such as sky, may become grainy and busy. By choosing higher values (we recommend between 2 and 10) you can avoid these problems.

- **Sharpen** ... is a simple method to improve the sharpness effect. Compared to Unsharp masking, the contrast of all pixels is increased here. A value of about 80% is suitable. Higher values increase the effect which, under certain circumstances, may lead to unattractive and coarse-grained images.

Pictures

Click on **Options** in the function bar below the main menu and select **Project Options - Pictures** on the left. Here you can make various settings for your project:

Pictures

- For **Thumbnail size** enter the picture size for display in timeline, in the Media Pool and in the Preview window. Here you only need to enter the value for the long side of the picture, the other one is specified through the aspect ratio.

  Info The thumbnails should not be excessively large, as they are also used for the objects in the timeline. During playback all visible images on one timeline page need to be loaded at once when changing over to the next page. This could slow down the computer and cause the presentation to become jerky if the thumbnails are too big.

- Under **Lightbox size** you specify the size the fields are to be displayed in lightbox view. Pictures in these fields are always displayed with a correct aspect ratio.

Info The settings for the lightbox size are not saved along with the project but are global settings!

Aspect ratio for light box dissolves

This is the place to influence test dissolve displays on the light box, which are displayed in the timeline window.

- **Display pictures correctly** ...displays all pictures at their correct aspect ratio and, if applicable, with a black border.
- **Use from first picture** ...adjusts the format to that of the first picture. So, in case of differing aspect ratios the pictures will be distorted accordingly.
- **Fill timeline editor area** ...uses the whole timeline area for display of the picture independent of the aspect ratio. If applicable, the pictures are distorted.

Settings for new objects

Here you can specify whether Screen field clipping is to be enabled for new picture objects.

- **Enable Screen field clipping only** ...position and rotation affect insert and picture; zoom affects the picture only.
- **Enable screen field clipping** and **Lock clip area** ...the insert is not changed; all the parameters affect the picture only.

  See also "Picture-in-picture" effects

SC Net

Click on **Options** in the function bar below the main menu and select **Project Options** - **SC Net** on the left. This is where you can extend the range of functions for the SC Net.

Settings for data objects

Usually, a curve within a data object is transferred within the SC Net by means of a huge number of continuously modified values. Many simultaneous value changes on a high number of channels may lead to an enormous flood of data which may overburden the SC Net and cause jerky fades.

To avoid this you can enable **Use ramps in data objects above** and enter a time of **500 ms** for example (the range of suitable values is from 200 to 800 ms). This means that any ramps exceeding 500 ms are no longer transferred to the executing SC Net Module via a huge number of consecutive values but through one single ramp command instead. This ramp command only contains the **target value** and the **change time**, e.g. "change to value 216 in 8 seconds". Of course, these ramp commands are generated automatically in accordance with the corresponding data objects.

Settings for flashcard output

The maximum number of shows, MP3 files and remote inputs on flashcards is per default limited to 120 each. By using certain control units with up-to-date firmware the number can be increased:

- **Max. number of shows on a flashcard** ...the default number is 120; the number of shows can be increased to up to **150** with **SC Master Lite** and **2M/4M** and up to **200** with **SC Master 6/16**.
- **Max. number of MP3 files on a flashcard** ...the default number is 250; can be increased to up to **???** with **SC Master Lite**, **2M/4M** and up to **???** with **SC Master 6/16**.
- **Max. number of remote entries on a flashcard** ...the default number is 120; the number of shows can be increased to up to **150** with **SC Master Lite** and **2M/4M** and up to **200** with **SC Master 6/16**.

Info When you change the maximum number of shows and remote inputs to more than 120, show.ini may not be readable by other devices or devices with older firmware!

Folder for FlashCards (global settings)

Here you can specify the folder for saving FlashCard contents. The contents of this folder are displayed in the CF Card Dialog. This path is globally effective unless you have specified a project-specific FlashCard folder under **Project Options** - **Default folders**. See also Producing a CF Card.

Timecode

Click on **Options** in the tool bar below the main menu and, on the left, select **Project Options** - **Timecode**.

Here you can define how Wings Platinum is to sync up with incoming timecode.

Jump in presentation if timecode deviation is more than ... must be enabled to allow settings. **If this option is not checked...**

...playback synchronization may not meet the requirements of older projects. In such a case you need to proceed as follows:

- Start timecode at a time before the beginning of the presentation or Locator position, respectively. As soon as the timecode reaches the Locator position, playback will start and the Locator will be taken along by timecode, so to say. If you proceed in this order, playback will be in perfect synchrony from the very beginning. Keep in mind that the Locator will never move to a lower time value but will start moving only when it is in accordance with the timecode.
- Of course, you can also start right in the middle of a presentation. If the applied timecode signal has a higher time value than the Locator, playback will be asynchronous to start with and it will take

some time for synchrony to be achieved. The time this takes depends on the synchronization offset at playback start and on the video properties. Large video images and a long key frame interval will take longer until playback is in sync.

At **Forward** and **Backward** you define the time lag between Locator and timecode that must be exceeded before synchronization is carried out by jumping. As long as the Locator remains within this time lag, Wings Platinum synchronizes by pitching shifting.

At **Preroll** you enter the period of time that is added when jumping to incoming timecode. E.g. when a timecode of 3:00 minutes is applied, the Locator jumps to 3:05 minutes, where the presentation data are loaded, and starts when a timecode of 3:05 minutes is applied. By entering the correct Preroll time you make sure that synchronization is started accurately without hiccups.

Info Please bear in mind that syncing by pitch shifting takes longer for presentations that include HD videos with a longer keyframe interval, e.g. WMV, H264. For synced playback the computer must never be close to its performance limit.

See also

Timecode synchronization

File types and paths

Wings Platinum files

Wings Platinum produces a variety of files for many different purposes, which can be recognised by their extensions.

- **Project files** ***.pt4*** ...contain all the information, editing instructions and settings for a particular project .
- **Project files** ***.pt3*** ...contain all the information, editing instructions and settings for a particular project .

- **Template files** ***.ptt*** ...contain similar information just like ***.pt4*** files, but are used as project templates and are not overwritten by the normal saving functions.
- **Graphic files** ***.ptg*** ...contain graphics data for displaying audio files in Wings Platinum. Every sound file contains a graphics file.
- **Container info files** ***.wpci*** ...contain basic video information, such as picture size, frame rate, progressive/interlaced, etc. as well as display data at reduced picture size but original frame rate for preview on the screen and for displaying the video on the user interface.
- **Intermediate video data** ***.wpiv*** ...are pre-rendered, output-optimized video data at original resolution and frame rate which can be played by Wings Platinum while bypassing Windows routines. There may be several ***wpiv***-files with different properties for one particular video file , e.g. for multidisplay applications.
- **Graphics files** ***.288192*** ...are derived from larger original pictures and are used for display in the Media Pool or in the objects. The extension ***.288192*** used here is only an example for a work size of 288 x 192 pixels. Pictures with other work sizes also have different numbers in the extension for width and height.
- **Graphics files** ***.01920*** ...are also derived from the original pictures and are used for high-resolution dissolves via hardware rendering (3D graphics card). The file extension ***.01920*** is only an example referring to the 1920 pixels of the long edge of display data. The display data size can be entered in the **Screen Properties**. Display data are never larger than the original, they are never upscaled.
- **Button Bitmap**_***§2V.bmp*** ...are button graphics in bitmap format containing additional information in the name, e.g. **§2V**, **§2H** or **§1** for divisions or switching states. These buttons can be used for control panel fields. See Graphic design of the Control Panel.
- **Driver files** ***.ptd*** ... are used for serial control of devices. You can write your own drivers, provided you are familiar with the protocol of the device to be controlled. See Creating drivers.
- **Log files** ***.wplg*** ...contain a record of the production steps, activities, messages and support information. Production steps and messages are displayed on tab Log. See Displaying log information.

Open folders

In accordance with Windows rules, Wings Platinum uses certain folders for particular contents. Since these are difficult to find in the Windows Explorer, Wings Platinum has a function for opening such folders:

- In the main menu, click **Extras** and **Open Folder** and select the corresponding folder.

See also

Paths in Wings Platinum

Paths in Wings Platinum

Wings Platinum uses the following paths conforming to Windows standards for saving various files. Please note however, that these differ between Windows XP and Vista. Many folders can simply and directly be found via Function **Extras** - **Open folder**.

Paths in Windows XP

Note: The names in italics and bold may vary.

- **Backup files** (created via Autosave) ...Documents and Settings***Username***\Local settings\Application data\AV Stumpfl\Wings Platinum 4\Autosave
- **Media samples** ....Documents and Settings***User name***\My Documents\AV Stumpfl\Media Samples
- **Sample projects** ...Documents and Settings***User name***\My Documents\AV Stumpfl\Sample Projects WP4
- **CDDB** (data base info for audio CDs) ...Documents and Settings***User name***\Application data\AV Stumpfl\Wings Platinum 4\CDDB
- **FlashCards** ...Documents and Settings***User name***\My Documents\AV Stumpfl\Wings Platinum 4\FlashCards → to be adjusted in **Project Options** - Default folders
- **Registration of enable codes (*PlatinumXXXX.reg*)** ...Documents

and Settings***User name**\Application data\AVStumpfl\Wings Platinum 4

- **Display data** ...are saved to the same folder as the the original data but in subfolder **.wp4**.
- **Help files** ...Programmes\AV Stumpfl\Wings Platinum 4\Help\German
- **Intermediate video data** ...are saved to the same folder as the the original data but in subfolder **.wp4**.
- **Log file** ...Programs\AV Stumpfl\Wings Platinum 4
- **Media files** (subfolder in the project folder) ...Documents and Settings***User name**\My Documents\AV Stumpfl\Wings Platinum 4**Project name****Media type** → to be adjusted in **Project Options** - Default folders.
- **Presets** (video creation, etc.) ...Documents and Settings***User name**\Application data\AV Stumpfl\Wings Platinum 4\Presets
- **My projects** ...Documents and Settings***User name**\My Documents\AV Stumpfl\Wings Platinum 4 → to be adjusted in **Global Options** - General.
- **Project templates** ...Documents and Settings***User name**\Application data\AV Stumpfl\Wings Platinum 4\Templates
- **Report** (...after crash) ...Documents and Settings***User name**\Local Settings\Application data\AV Stumpfl\Wings Platinum 4\Report, see also Sending a crash report.
- **Temporary files** ...Documents and Settings***User name**\Local Settings\Application data\AV Stumpfl\Wings Platinum 4\Tmp → to be adjusted in **Global Options** - **Save**
- **Tools** (Autoplay, Disable Platinum network, etc.) ...Documents and Settings***User name**\My Documents\AV Stumpfl\Tools
- **Drivers** (serial control of external devices) ...Documents and Settings***User name**\Application data\AV Stumpfl\Drivers
- **VST PlugIns - System folder**...Programs\Steinberg/VstPlugins
- **VST PlugIns** - **Wings Platinum 4** ...Documents and Settings***User name**\Application data\Wings Platinum 4\VST

Paths in Windows Vista and Window 7

In Vista, the original paths are in English. In the Explorer, however, they are usually displayed in the corresponding language set, e.g. German, etc. Therefore, they may vary depending on the file browser used. Below you will find the original English paths. Please note that the names displayed in italics and bold may vary:

- **Backup files** (generated via Autosave) ...\Users***User name***\AppData\Local\AV Stumpfl\Wings Platinum 4\Autosave
- **Media samples** ...Users***User name***\Documents\AV Stumpfl\Media Samples
- **Sample projects** ...Users***User name***\Documents\AV Stumpfl\Sample Projects
- **CDDB** (Data base info for audio CDs) ...\Users***User name***AppData\Roaming\AV Stumpfl\Wings Platinum 4\CDDB
- **FlashCards** ...\Users***User name***\Documents\AV Stumpfl\Wings Platinum 4\FlashCards ➔ to be set under **Project Options** - **Default folders**
- **Registration of enable codes** (***PlatinumXXXX.reg***) ...Users***User name***\AppData\Roaming\AV Stumpfl\Wings Platinum 4
- **Display data** ...are saved to the same folder as the the original data but in subfolder **.wp4**.
- **Help Files** ...Program Files\AV Stumpfl\Wings Platinum 4\Help\German
- **Intermediate video data** ...are saved to the same folder as the the original data but in subfolder **.wp4**.
- **Log file** ...Users***User name***\AppData\Local\AV Stumpfl\Wings Platinum 4
- **Media files** ((subfolder in the project folder) ...Users***User name***\Documents\AV Stumpfl\Wings Platinum 4***Projektname\Medienart*** ➔ to be set under **Project Options** - **Default folders**
- **Presets** (Video settings, etc.) ...Users***User name***\AppData\Roaming\AV Stumpfl\Wings Platinum 4\Presets

- **My Projects** ...Users***User name***\Documents\AV Stumpfl\Wings Platinum 4 → to be set under **Global Options** -General
- **Project templates** ...Users***User name***\AppData\Roaming\AV Stumpfl\Wings Platinum 4\Templates
- **Report** (...after Wings Platinum crashing) ...Users***User name***\AppData\Local\AV Stumpfl\Wings Platinum 4\Report. See also Sending a crash report.
- **Temporary files**...Users***User name***\AppData\Local\AV Stumpfl\Wings Platinum 4\Tmp → to be set under **Global Options** -**Save**.
- **Tools** (Autoplay, network deactivation, etc.) ...Users***User name***\Documents\AV Stumpfl\Tools
- **Drivers** (serial control of external devices) ...Users***User name***\AppData\Roaming\AV Stumpfl\Drivers
- **VIOSO Startup-Calibration** ...Users***User name***\AppData\Local\AV Stumpfl\Wings Platinum 4\Autostart. See also Camera-based calibration.
- **VST PlugIns - System folder**...Programs\Steinberg/VstPlugins
- **VST PlugIns** - **Wings Platinum 4** ...Documents and Settings***User name***\Application data\Wings Platinum 4\VST

Info Should you be unable to find some folders, such as **Application data** or **Local settings**, these folders may not be displayed by Windows. The corresponding setting can be changed in the Windows Explorer. See Folders are missing or are not displayed.

Keys for faster operation

Function keys and key combinations provide faster access to required commands. In the menus you will find that the menu items are sometimes followed by key designations or key combinations which give you direct access to the corresponding function. Moreover, there are also keys which can be pressed while editing and modify the mouse function.

Additional functions via shortcuts

General information

Open the **Options dialog** by pressing keys **Ctrl** + **P**.

The dialog **Statistics/Diagnosis** can be opened by pressing the keys **Ctrl** + **D.**

Save your project by pressing keys **Ctrl** + **S**.

Undo editing steps by pressing keys **Ctrl** + **Z** and redo them by pressing **Ctrl** + **Y**.

For most number **entry fields** with small **larger/smaller buttons**, the alteration increments can now be changed to steps of ten by clicking the button while holding the **Shift** key. This works also when you click and hold the button or the mouse key, respectively.

Media Pool

Highlighting media files

In the Media Pool, media files can be highlighted as is customary in Windows. Hold the **Ctrl key** while clicking the individual files to highlight one after the other. Hold the **Shift key** to mark a whole series of files following each other by clicking the first file, followed by clicking the last file.

Displaying file paths

Press **Ctrl** and **F** to display or hide the file paths in the Media Pool.

Object handling

Exact shifting of objects

When grabbing an object at the front or end, holding the mouse button and pressing one of the **Cursor** keys (left/right), the object is moved pixel by pixel.

Moving following objects along

Press key **Q** to enable mode **Shift following objects**. When shifting objects and dissolves all following objects on that track are shifted along. By highlighting several tracks, this function can be extend to other tracks as well.

Move all timeline objects from Locator

Call up function **Move from Locator** by pressing keys **Ctrl** + **L**.

Highlighting several objects

In the timeline, objects can be highlighted as usual in Windows. Hold the **Ctrl key** while clicking the individual files to highlight one after the other. Hold the **Shift key** to mark a whole series of files following each other by clicking the first file, followed by clicking the last file. This works even for a number of tracks, although a few special features need to be observed concerning the order of clicking the objects. See Marking objects.

Moving objects while fixing them in time

Objects can be moved to other tracks while fixing their time position. To do so hold key **V** to activate tool **Vertical dragging** .

Shifting object contents

Here we distinguish between media with an extension in time (audio, video) and those without extension in time (images, texts):

- Video and audio: By holding the **Alt key** while grabbing the object content with the mouse you can move it in time within the object.
- Pictures and text: By holding the **Alt key** while grabbing the object content with the mouse you can move it to a different object and exchange the corresponding object contents.

Modifying fade-in and fade-out times

To do so, enable tool **Stretch/compress fades** by holding the **D** key and drag the edge of an object to the appropriate size.

Changing dissolve times

To do so, enable tool **Stretch/compress fades** by holding the **D** key and drag the beginning or the end of a fade to the appropriate size.

Stretching or compressing an object

To do so enable tool **Stretch object** by holding the **W** key, grab the object edge and drag it to the appropriate length. When the Pro License or higher the sound playing time is changed without affecting the pitch (timestretching). See also Changing playing speed and pitch. This causes a slow or fast motion effect for videos.

Aligned setting of nodes

Press the **Alt key** while double-clicking and the new node is aligned in height with the adjacent node.

Highlighting nodes

Holding the **Ctrl** key and dragging a time frame in an object with the mouse highlights all nodes in this area.

Functions in the timeline

Starting, stopping and resuming playback

Press the **space bar** to start playback in Wings Platinum. Press the **space bar** again to change to Pause Mode. Press the **Esc** key to stop playback. Paused playback can be continued by pressing the **Enter** or the **Space bar**. See also Stopping or starting playback.

If you press the space bar immediately upon stopping via the **Esc** key, playback is resumed at the location playback was started last. A sort of loop playback is created.

Optional PowerPoint-compatible keys for playback control

- Start presentation ... via the F5 key
- Enable Pause Mode ...via keys Page Up, Cursor left or Backspace
- Continue paused presentation ...via keys Page Down, Cursor right or Cursor down.
- Stop presentation ...simultaneously press Ctrl and Pause/Break or Esc

Setting position markers

You can use the **M key** to set position markers, even during playback. It allows creation of a timing pattern to align dissolves in time with the music. ... See Timing pattern for synchronization.

Positioning the Locator

Press the **Home** key and the Locator will jump to the left edge of the track marker. Press **Home** once again to make it jump to the beginning of the first object. Press the **End key** to move the Locator to the right edge of the marker or to the end of the last object, respectively. If there is no track mar-

ker, the Locator jumps immediately to the beginning or to the end of the show. Via the **Cursor keys** (right/left) the Locator can be moved pixel by pixel.

By pressing keys **Shift** + **Cursor** (right/left) the Locator jumps to the beginning of the next highlighted object. This way you can search for highlighted objects. This feature may come in handy, when you have used function **Selecting Timeline Objects** and, following that, want to move to the highlighted objects one after the other.

You can jump from position marker to position marker by clicking a **cursor** key (right/left) while holding the **Ctrl** key.

Scrolling in the timeline

By moving the **mouse wheel**, the timeline is scrolled along the time axis, i.e. towards the right or the left. By pressing the **Shift key** in addition to this, the tracks are scrolled from top to bottom or vice versa.

Keys **PageUp** or **PageDown** cause page-by-page scrolling in the timeline (along the time axis), while a combination with the **Shift** key results in vertical scrolling. The **Cursor** keys up/down cause scrolling up and down by timeline tracks.

Expanding/compressing the time axis

Just press the keys **+** / **-** of the numeric keypad. Press the **X** key (multiply) to resume normal display. You can change over between largest and smallest display by pressing the **Ctrl key** while clicking **+** or **-**.

Highlighting several tracks

Press and hold the **Shift key** while clicking one track head and you will find that all other tracks of the same type (picture, audio and video tracks, etc.) are highlighted as well. To highlight all tracks of a project, press **Ctrl** + **Shift** and click any track head. Press and hold the **Ctrl key** while clicking the required track heads to select or deselect several tracks.

Opening the slider control for audio tracks

You can directly call up dialog **Multi-channel setting** by holding the Ctrl key while clicking (audio effects in the track head are available with the Pro License and up). In addition to this, the slider controls can also be adjusted during playback.

Placing a number of devices into separate, newly created tracks

When you simultaneously drag several devices or control channels into the empty timeline space below the tracks and press the **Shift** key while releasing the mouse key, a separate track will be created for every individual device.

Assigning the pictures in the timeline to slide trays

Press keys **Ctrl** + **W** to assign all the pictures in the timeline to the virtual slide trays. This function is particularly helpful to eliminate collisions. See also Collision of dissolves and slide transports.

Display Warp

For warping screen or display contents via grids the following options are available:

Moving intersection points horizontally only

To fix the grid intersection points in height hold the **H** key to enable tool **Horizontal dragging**.

Moving intersection points vertically only

To prevent intersection points from moving laterally, hold the **V** key to enable tool **Vertical dragging**.

Moving single intersection points only

If you prefer to move one single intersection point instead of a whole grid area, keep the **Shift** key pressed.

Function keys

Function keys allow you direct access to frequently used functions. The following functions are available:

F1 → Help (context sensitive)

F2 →

F3 →

F4 →

F5 → Start Presentation Mode in Fullscreen Mode. See Presenting videos

F5 + Ctrl→ Start in Presentation Mode in window. See also Starting and stopping playback

F6 →Locate slave timelines

F6 + Ctrl → Display or close slave screens

F7 → Transfer slave files. See also Transferring project data to the slaves

F8 → Enable/disable device ports. See Synchronizing devices

F8 + Ctrl → Enable/ disable network

F9 → Change over between lists and lightbox view. See Sorting on the lightbox

F10 → Open/close screens. See Displaying/hiding screens

F11 →

F12 →

F1...F12 →Execution of triggers during playback or in Pause Mode. See Executing a trigger.

F1...F12 + **Shift →Execute trigger**. See Executing a trigger.

See also

Additional functions via shortcuts

Optimizing the computer

Production and presentation of digital shows with high-resolution pictures and videos make extremely high demands to the computer. For a presentation, all pictures, videos and the sound must be played back at high quality and in perfect sync, thus putting great emphasis on performance and reliability of the playback computer.

As a professional presenter, e.g. for events or permanent installations, you need to provide for and configure a computer in accordance with our guidelines. If this is not what you had in mind, try following the tips below as largely as possible.

PC Hardware

Last reviewed: September 2009

Creation and, in particular, playback of an HDAV presentation make quite high demands on hard and software. This is why we would like to make a few recommendations with regard to the setup of your system. We would like to inform you about components we or our customers have had positive experience with. However, with computer technology being continuously developed further, we can neither assume responsibility for completeness nor for correctness of these recommendations. These tips have been compiled to the best of our knowledge and belief. Despite this fact, we cannot guarantee full operability of a computer based on these specifications.

What should be in it....?

It may be quite tempting to buy the computer equipment on offer in supermarket chains. Past experience, however, has shown that their "performance described in the brochure" is usually much better than what they've got to offer in practice. Very often no information is available as to the type of components these computers contain. Sometimes misleading component

names are used which tend to be similar to those of brand components and which suggest a brand component quality that does not come up to expectations in the hard reality of practice. E.g. onboard chips are very used instead of sound, exchangeable brand components. For these reasons we cannot comment on special offers currently available in a number of chain stores.

Computer for HDAV presentation

Main boards

High-quality and high-performance main boards are available from a number of manufacturers. To an increasing extent, main boards are equipped with components and interfaces that can be selected in accordance with personal requirements. An important factor is the chipset used. Currently, main boards with X48 or X58 chipset by Intel and nForce 430 chipset for AMD are the most up-to-date. Both generations feature the new bus system PCI Express and Hyper-Threading, as well as a serial ATA controller.

Barebones: These compact computers usually come as a complete unit with a main board and a case. Recommendable units are barebones by Shuttle, e.g. XPC SX48 for Intel systems. For thermal reasons, the choice of further components (graphics card and power supply) is rather critical. We therefore recommend contacting an experienced dealer for that purpose.

Processor

Playback of high-resolution HDAV shows and HD videos requires extra performance and you should acquire a very fast processor. You should at least go for a dual-core processor, e.g. Intel Core 2 Dual or AMD Athlon 64 X2 or Core 2 Quad with 4 processor cores for very demanding applications, e.g. Q9450. These processors can process two to four threads simultaneously, which is quite an advantage for many processes in Wings Platinum. Relatively new are Intel Core i5 and i7 processors, which offer four cores on one die, are able to process 8 threads independently and are therefore highly recommendable.

For PCs that serve as a **multidisplay system** and supply contents to several video projectors or displays we recommend using an i5 or i7 processor.

RAM

For Wings Platinum, the computer should have a minimum RAM of 2048 MB or, preferably, even 4096 MB. If you are planning to do video editing by means of supplementary software such as Premiere or Edius, a RAM of 4 GB would definitely make sense. Please note that 32-bit Windows can only address 3 GB RAM. I.e. for a RAM of more than 3 GB you need to use a 64-bit operating system. If the main board supports "Dual Channel DDR technology" the memory throughput is doubled and system bottlenecks can largely be avoided. To take advantage of this feature, usually two same-size memory chips must be used. The clock should be at least 800 MHz or better 1333 MHz.

PCs that serve as **multidisplay system** and supply content to several video projectors and displays should have at least 6 or 8 GB RAM (depending on the number of memory slots). However, this requires also a 64-bit operating system. In such a case, Wings Platinum can handle up to 4 GB RAM!

Graphics card

For playback of images and videos, the graphics card is a decisive factor. We have found graphics cards by ATI an excellent choice, which are based on ATI chips. The ATI-Radeon models offer two outputs and good acceleration through hardware 3D rendering, which is used by Wings Platinum for real time playback. Unfortunately, these models consume a lot of power, which may be a problem for power supply and cooling system in barebones. With Barebones, you should therefore restrict yourself to one Radeon HD4850. This card, compared to the large Radeon HD4870, has the advantage that it does not cover up a second PCI slot. Graphics cards with nVidia chips are also quite interesting. However, they do not always fit into a Barebone. The graphics memory is also greatly important. It should have a minimum of 512 MB. Cards with a memory of 1024 MB usually show only distinct advantages for extremely complex projects. Moreover, the graphics memory also should have a high clock frequency, which is not always the case with "cheap" cards.

A very high screen resolution (1600 x 1200 and higher) or usage of two monitors requires a minimum graphics memory of 256 MB or maybe even 512 MB, depending on the monitor size. Under Screen Properties you can adjust a different display data size, if necessary. In any case, optimization of graphic

display data to match the size that is actually required makes sense. See Optimizing display data for pictures.

If you want to use **live video / TV** in a presentation you need a graphics card supported by Wings Platinum. In principle, all input cards with WDM or "Video for Windows" driver are suitable, although we cannot guarantee proper function in all cases. If you want to buy a new card you should either get one of those listed below or inquire about alternatives to suit your individual needs.

An alternative without TV tuner are the top models ATI Radeon X1950 XT(X) and nVidia 7900 GX2 with video input (Video-In depends on the manufacturer or model). They feature two DVI-I-ports, which are capable of supporting both digital and analog output (VGA via the supplied adapter). The video inputs usually work with a certain time delay, which is no longer acceptable for live imports.

For mere video input cards we can recommend BlackMagic Design, which offer proper performance, excellent results and minimized delay. For the import of videos with higher VGA resolution, the Datapath Vision RGB-Pro is well suited. See also Settings for commonly used video input/TV cards.

Hard disks / controller

Today's hard disks offer sufficient capacity and speed for playback of HDAV presentations. For extensive video editing you need a very large hard disk as one minute of DV video requires about 250 MB. Nowadays, Seria-ATA-II-Controllers are state-of-the-art. Combined with Serial-ATA hard disks they are able to supply data, via the Southbridge, directly to the RAM and offer excellent performance. If you would also like to use external hard disks, the computer should be provided with an eSATA port. It allows operation of the corresponding external hard disks at high performance and does not put any extra load on the PCI bus. To allow hot plugging (automatic detection of plugged-in devices) the SATA controller must be set to AHCI mode. This mode has a decisive advantage as it allows the controller to make simultaneous requests to the hard disk, which in turn optimizes the order in which the commands are executed (NCQ, Native Command Queuing).

Tip: If you do not want to use a separate computer for presentation you should arrange for an additional hard disk for separate installation of the operating system. This installation can be kept "slim" and be adjusted for optimum presentation performance.

Sound card

In addition to high audio quality, the sound card should also feature a fast driver which does not put any extra strain on the CPU. These demands are very often met even by low-cost sound cards or onboard soundchips. An interesting alternative are also external sound interfaces which are available with a variety of different features. Make sure they can be connected via Firewire or USB 2 ports. We cannot recommend a USB 1.1 port as its usage could interfere with system performance.

When it comes to balanced outputs or multi-channel sound, you can also choose between internal and external solutions. For a number of years and with a whole range of different operating systems we have been quite successful with RME sound cards of series Digi 96. The drivers for these cards are extremely efficient and reliable but are no longer compatible with Vista. For multi-channel sound, the Digi 96 sound cards can be extended by adding optional, analog multi-channel expansion boards. External Vista-compatible solutions by RME are Fireface 400 and Fireface 800. You could also resort to the M-Audio FW 410, which we have used successfully under Windows XP. Good PCI cards, however, still offer better overall performance for extreme HDAV applications.

Asynchronous audio playback, e.g. for loop playback of some interval music while Wings Platinum is pausing at a pause marker and the speaker is making his live comments, requires a sound card with "multi-client capability". While the normal, up-to-date stereo sound cards usually have "multi-client capability", this is not necessarily so for professional sound cards and interfaces. If you want to use a professional multi-channel sound card, you may need to use an additional stereo output for asynchronous playback to allows synced soundtrack and asynchronous interval sound to be mixed externally. This, however, requires the Wings Platinum Pro License featuring multi-channel support.

Tip: Those who use sound cards with unsymmetrical outputs for events should always have a ground isolation circuit or a DI box handy to help eliminate ground loop hum problems. Good ground isolation circuits with suitable cables for your computers are available from specialists dealers.

Monitor

For convenient editing we recommend a resolution of 1280 x 1024 pixels and up. The higher the screen resolution, the easier editing gets with a great

number of tracks. Particularly interesting are monitors with a 16 : 10 format, available with a resolution of up to 1920 x 1200 pixels, which allow you to enjoy HDTV at 1920 x 1080 pixels at full quality. We recommend dual monitor mode as the extended desktop offers more space for editing.

For evaluating your production the good old tube monitor still does a good job. Being an analog device it is able to display the video signals virtually without any delay &endash; which is not true for LCD monitors. Moreover, the on/off time, i.e. the time required for changing over from white to black and back again, plays an important role. If it is too long (> 20 ms) unwanted streaks may be found at moving objects. Unfortunately, the values for on/off times in the data sheets must be treated with caution, as they provide no information as to the change time for medium tonal values.

On the other hand, a tube monitor would put you on the safe side in analyzing moving images. It would allow you to judge whether what you have produced in Wings Platinum can actually be played on your computer without any jerks or whether data projector or display (plasma, LC, etc.) are to blame for the problem.

Those who want to use videos should get hold of a monitor that features sRGB mode, which is particularly suited for web and video applications. This mode is necessary for a correct joint display of images and videos, since it is used as the standard default output color space by the HDTV standard. Good monitors and video projectors in particular have a distinctly larger color space than sRGB which may lead to oversaturated colors in videos. For images this problem can be remedied by correcting the output device's color profile. See also **Global Options** - **Color management.**

Further components

Most of the other computer components, such as keyboard, mouse, etc. have no influence on the operation of Wings Platinum, provided they are in working order. Refer to Valuable information about DVD systems for info about DVD players or writers and to Information about data projectors for info about video projectors.

Notebooks for HDAV presentation

Using a notebook for a mobile presentation is quite a tempting idea. However, we advise you not to use notebooks for ambitious and professional

HDAV presentations to an audience and when HD videos are included. They differ from conventional computers in three aspects.

2.5" Hard Disks

The 2.5" hard disks that are customary for notebooks tend to create a bottleneck during presentations. Their performance is frequently only half or only one third of that of conventional 3.5" hard disks. An accumulation of several HD videos may result in loading or display problems.

Graphics Hardware

Even notebooks that contain "real graphics cards" with separate memory tend to use energy-saving GPUs and memories that clearly lack performance compared to desktop models. Tests have shown that their performance is frequently only half of that of desktop models. Moreover, current graphics drivers are less easily available than those for desktop variants, since suppliers of notebooks do not take such an active interest in them.

Thermal problems

Intensive use of a notebook often causes temperature problems for graphics card and processor. This is mainly due to the compact build of notebooks and the fact that the graphics processor is seldom or not at all provided with a fan, which, on top of all this, tends to be undersized. All this, combined with continuous strain such as a presentation, may lead to delays (cooling periods) of the processor and irritating jerky playback. Usually, these effects only show after a period of 20 minutes or more. A slight improvement of this situation can be achieved by using a cooling pad for notebooks, which is available in specialist shops. These cooling pads, however, can only cool the outside, which is not the optimal solution.

Configuration for trouble-free operation.
If you still want to use a notebook to run Wings Platinum it should have an S-ATA hard disk with at least 7200 rpm and a fast graphics system with separate graphics memory. Shared memory systems usually offer modest performance for playback of HDAV shows. Also the integrated sound chips have a bad reputation for the interfering noise they produce and the fact that the cannot meet the high demands in terms of audio quality. A solution might be external sound interfaces to be linked up via a USB 2 port or preferably a Firewire port.

To achieve best-possible performance and long battery operating time, you should give preference to dual-core processors designed for mobile applica-

tions and low power consumption, e.g. Intel Core 2 Duo or AMD Turion 64 X2. High-performance graphics chips are those of the AMD Radeon 3000 or of the nVidia 9000 series. Helpful information on the classification of numerous variants can be found at the following location:

http://www.notebookcheck.com/Vergleich-mobiler-Grafikkarten.358.0.html

If you are planning to get hold of a notebook you should perform extensive tests by running high-resolution HDAV videos on the models in question. The problem is that once you have bought it, you can't replace the components any more. An alternative might be a standard PC in a compact housing adapted for mobile operation by adding handles, etc. A compact computer to be acquired would be a barebone version. In this context, barebones by Shuttle can be recommended. They have been used successfully for HDAV applications by many users. See also further above under Barebones.

System info...

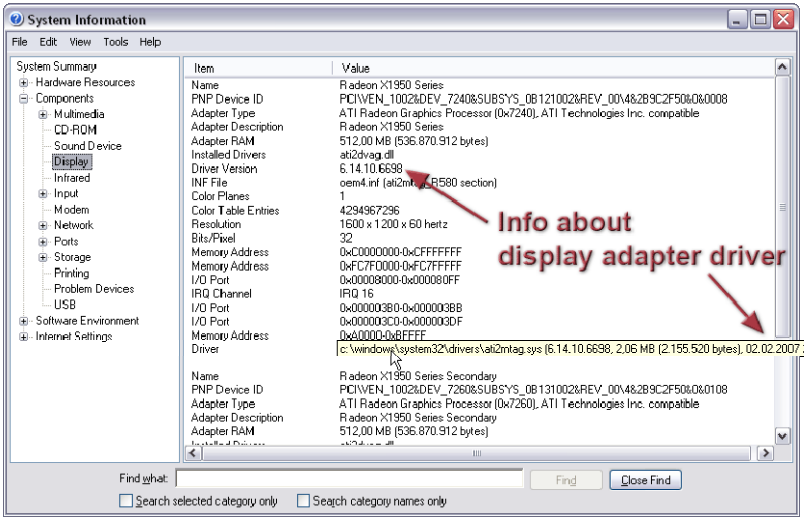
Microsoft system information actually provides all the information on computer and hardware or software and may be invaluable for analysing problems. Interpretation of all this information, however, requires years of experience and is therefore only suitable for power users.

This is how you call up this dialog:

- In the tool bar click **About Wings Platinum...** followed by clicking on **System info...** Further information on this dialog can be found in the Wings Platinum Online Help.

Graphics card driver version

Information about the graphics card installed and its driver can be found under **Components** - **Display**. In the dialog box on the right, **Adapter Type** (type of graphics card), **Adapter RAM** (graphics memory) and the **Driver Version** are the corresponding items of information you need to be looking for. Information on the driver version is available by moving the mouse in line **Driver** to **c:\windows\...**.



Software configuration

Software configuration

In addition to suitable hardware, the software configuration is of paramount importance. Usually, other programs are also installed on a PC which may perform useless and disturbing tasks in the background. They use up capacity urgently required for playback of HDAV presentations and may cause the presentation to come to a halt.

The most consistent solution for optimum presentation computer is a "slim" installation, optimized exclusively for Wings Platinum and playback of HDAV presentations, i.e. without Microsoft Office programs, anti-virus program, Internet connection, etc. If you do not want a separate computer for presentations you can still install a separate operating system with Wings Platinum on an additional hard disk (or on a removable hard disk). For presentations, the computer is in this case started up from this hard disk while being able to use the same hardware.

What operating system?

Wings Platinum is suitable both for Windows XP and Windows Vista. As the DirectX structures in Vista have been changed significantly, it offers better performance with Wings Platinum, which is particularly noticeable with projects containing videos. In terms of reliability, both operating systems offer a reasonable solution. For Wings Platinum, **Windows XP Home** or **Vista Business** or **Windows 7 Home Basic** will do. Basically, the 64-bit version of Vista works too, but is no direct advantage for Wings Platinum. Older Windows operating systems are no longer supported.

Since both operating systems deviate in their menus and dialogs you can refer to two different topics that describe steps for optimizing the individual operating systems:

Optimizing Windows XP

Optimizing Windows Vista

Optimizing Windows 7

Optimizing Windows 7

Below you will find a few tips for optimizing your Windows 7 PC, sorted according to importance. The first set of suggested measures is appropriate in most cases, the second category just helpful, whereas the settings at the end of the list are for experts who are setting up computers used only for presentations.

Attention! The modifications suggested below deviate considerably from the standard and security settings and serve for optimal and trouble free presentation only. Before making these modifications create a restore point, that allows you to change back to the old configuration, if necessary. For computers that are also used for other purposes it may be useful to create a new user, e.g. "Presentation", which lets you start the computer with this user profile for presentations.

Recommended measures

The settings listed below are useful and are mostly made in the **Control Panel**. You'd better leave this dialog open and select **Display Small icons**, as the following explanations refer to this type of display.

Settings for visual effects, driver updates and remote desktop

Visual effects

1. Click on the Windows icon and select **Control Panel**.
2. Click **System** and **Advanced System Settings**.
3. On tab **Advanced** under **Performance** click on **Settings**.
4. Click **Adjust for best performance**. Close the dialog by clicking on **OK**.

Info If you should find out that important functions have been turned off you can turn them on again individually in the above dialog box. In our experience, the "colorful world of Windows 7" uses up less performance than one might suspect.

Hardware

1. Click tab **Hardware** and **Device installation settings**.
2. Enable **No, let me choose what to do** and **Never install driver software from Windows Update**. Close the dialog by clicking **OK**.

Info Now that the automatic search function for drivers has been disabled, you may have to perform a search manually.

Remote

1. Select tab **Remote** and clear check box **Allow Remote Assistance connections to this computer**.
2. Click **OK** and close this **System** dialog.

Configuring screen savers, sounds and user interface

Screen saver and energy saving measures may seriously affect the presentation on a presentation PC. It may also be useful to have a black desktop, in order to prevent some Windows desktop images to show in case of problems.

1. Click on the Windows icon and select **Control Panel**.
2. Click **Appearance and Personalization** and select a theme under **Areo Themes**. **Info:** Using an Aero theme may improve particularly multidisplay playback from a computer.
3. Click on **Desktop background** and under **Picture location** choose **Solid colors**. Click the black pattern followed by **Save changes**.
4. At the bottom click on **Sounds** and from the **Sound schemes** list select **No sounds**. Clear check box **Play Windows startup sound** and click **OK**.
5. At the right bottom click **Screensaver**. Under **Screensaver** click **Non** and clear check box **On resume, display logon screen**. Close the dialog by clicking on **OK**.

If the Beep sound during working with Wings Platinum are getting on your nerves...

...e.g. when clicking the Media Pool, you can change this as follows:

1. Click the Windows symbol , and enter **regedit** in the search field. After Regedit has appeared as search result, click **Regedit** followed by **OK**. If a question keeps reappearing click **Continue**.
2. In the dialog on the left open the following tree structure: **HKEY_CURRENT_USER - Control Panel** and highlight **Sound**.
3. In the window right-click **Beep** and select **Modify**.
4. In field **Value** enter **no** and click **OK**.

Setting up Power Options

The follow steps allow you to make numerous settings for energy management:

1. Click on the Windows icon and select **Control Panel**.

2. Click **Power Options**, followed by clicking **Show additional plans** and select **High performance**.
3. On the right click **Change plan settings** and select **Never** for **Turn off the display** and **Put the computer to sleep**.
4. Now click **Change advanced power settings**. In this dialog choose **High performance [Active]** and make the following changes below:
    - Hard disk - Turn off hard disk ➔ Never
    - Sleep - Sleep after ➔ Never
    - Sleep - Allow Hybrid Sleep ➔ Off
    - Sleep - Hibernate after ➔ Never
    - Power buttons and lid - Power button action ➔ Shut down
    - PCI Express - Link State ➔ Off
    - Display - Turn off display after ➔ Never
    - Multimedia Settings - When Sharing Media ➔ Prevent idling to sleep
5. Close the dialog by clicking **OK** followed by clicking on **Save changes**.

Disabling automatic playback

1. On the Control Panel click **AutoPlay**.
2. For all media change the settings to **Take no action** and click **Save**.

Disabling indexing

Windows 7 automatically creates an index for the contents for certain folders and updates it regularly. Since these hard disk accesses are superfluous for presentation computers you should disable indexing.

1. On the Control Panel click **Indexing Options**.
2. Click **Modify** followed by clicking **Show all locations**.
3. Clear check box **Change selected locations** and there will be no more entries below.
4. Close the dialogs by clicking **OK** or **Close**.

Disabling automatic hard disk defragmentation

After a pause of approx. 30 minutes Windows 7 automatically starts hard disk defragmentation. This might lead to problems during a presentation. The defragmentation result achieved such is also anything but good. This is how you can turn off automatic defragmentation:

1. On the Control Panel click **Administrative Tools** followed by clicking **Task Scheduler**.
2. In the dialog on the left open the following tree structure: **Task Scheduler (Local)** - **Task Scheduler Library** - **Microsoft** - **Windows** and highlight **Defrag**.
3. In the window at the top you will find a Scheduler entry which you delete by right-clicking it.
4. Now close the **Task Scheduler** dialog.

It's a good idea to use a good defragmentation program, e.g. **O&O Defrag** and defragment the hard disk after playing all media but before actually starting the presentation.

Setting SATA controller to AHCI mode

When Windows is installed, Bios is sometimes set to IDE mode. AHCI mode is usually the more up-to-date and more efficient mode. It supports hot-plugging of eSATA hard disks and NCQ (native command queuing), so that the controller is enabled to make simultaneous requests to the hard disk which in turn optimizes the order in which the commands are executed. However, NCQ must also be supported by the hard disks, which is usually the case with newer models.

Normally, AHCI mode in Bios must be set during SATA configuration before Windows 7 is installed to allow the corresponding drivers to be enabled. With Windows 7 already being installed, you can check in Bios or the Windows Control Panel whether AHCI mode is active. If this is not the case, AHCI mode can also be enabled without reinstalling Windows by resorting to a little trick.

1. In the Windows Control Panel double-click the **Device Manager** and click the plus sign next to **IDE ATA/ATAPI-Controller**. Below it entry **Standard AHCI1.0 Serial ATA Controller** should be visible. Depending on the controller driver the entry might differ although it should con-

tain **AHCI**. If this **AHCI** entry does not exist, you will not be able to enable AHCI mode. Close the System Properties.

2. Click the Windows symbol and select **All Programs** - **Accessory** - **Execute**.
3. In the field enter **regedit** and click **OK**. Confirm any messages that may come up with **Continue**.
4. In the dialog on the left open the following tree structure: **HKEY_LOCAL_Machine** - **System** - **CurrentControlSet** - **Services** and highlight **msahci**.
5. Double-click entry **Start**, change the value to **0** and click **OK**.
6. While rebooting the system open Bios during the restart. Now change the **SATA configuration** mode from **IDE** to **AHCI**.
7. Save the Bios settings, reboot again and wait for Windows 7 to appear. It will take a little while for Windows 7 to install the new drivers after which you will be requested to reboot again.

If a restart causes a blue screen and a crash there may be no suitable driver available or your hardware is incompatible with AHCI mode, which may be particularly apply to RAID systems.

Graphics card and drivers

For smooth playback of high-resolution HDAV shows a high-quality, fast 3 D graphics card with a lot of graphics memory and an up-to-date driver are highly important. Color rendering must be set to a minimum color depth of 24 bits. For fluent movements and panning, the refresh rate should match the display and the frame rate of the video. See also Media integration.

1. Right-click some free space on the Windows desktop, select **Personalization** and click **Display Settings** at the bottom.
2. Under **Color depth** click and select the **highest value (32 bits)**.
3. In order to adjust the Refresh rate click on **Advanced Settings** and tab **Monitor**. For usage with video projectors or LCD displays always choose a **Screen refresh rate** of 60 Hz. For tube monitors a value of 75 Hz,

for usage with PAL videos 100 Hz and 60 or 90 Hz for NTSC videos (a multiple of the frame rate of the videos used). See also Media integration.

Info Properties and graphics card type, as well as driver version and date can be determined via the Microsoft system info. See System info...

Current DirectX version

Wings Platinum 4 requires at least **DirectX 9.0c of November 2008** to execute the program. This DirectX version must be installed in addition to DirectX 10 or 11. If you should have problems, we advise you to get the latest DirectX 9 update which can be downloaded from the Microsoft website. DirectX 9 is also available on the Wings Platinum DVDs, although this may not be the latest version.

Useful measures

Here you will find a few recommendations that are not absolutely necessary but that may facilitate working with media and Wings Platinum.

Adjusting folder options

1. Click on the Windows icon and select **Control Panel**.
2. Click **Folder Options** and click the **View** tab.
3. Clear the check box next to **Hide extensions for known file types**.
4. Under **Hidden files** and folders click option **Show hidden files, folders and drives**.
5. Click **OK**.

It is a good idea to adjust the folder views for different contents to meet your requirements.

1. For this purpose, adjust the folder view (e.g. for files, images or videos) as desired.

2. Then click **Organize** and select **Folder and Search Options**.
3. Click the **View** tab, click **Apply to Folders**.

Repeat these steps for all types of folders (files, images, videos, etc.)

Disabling messages from the Action Center

Windows Action Center, via popups, automatically informs about problems and incidents that may not altogether be so important and which may disturb during a presentation. These popups can be disabled although this means that in the future you will have to look for this information yourself.

1. Click on the Windows icon , click **Control Panel** and click **Notification Area Icons**.
2. Click **Action Center** and select **Hide icons and notifications**.
3. You can also change the settings for any other icons if they should get in the way of your presentation.
4. Finish by clicking **OK**.

Measures for mere presentation computers without Internet connection

The following steps should only be performed by experts for computers that are not connected to the Internet and are exclusively used for presentation purposes.

Attention! The modifications suggested below deviate considerably from the standard and security settings and serve for optimal and trouble free presentation only. Before making these modifications create a restore point, that allows you to change back to the old configuration, if necessary. For computers that are also used for other purposes the steps described below should not be performed.

Avoiding the login dialog when starting up the computer

For permanent installations, which are activated in the morning via timer control and run automatically, the logon dialog may be a nuisance. There is a way around this.

Info Please note that avoiding the logon dialog and the password query may allow unauthorized access to your data!

1. Call dialog **Execute** by pressing the **Windows**-key and **R**.
2. Enter ***netplwiz*** and click **OK**, and the **User accounts** dialog will pop up. Confirm any messages that may come up with **Continue**.
3. In the field, highlight the user account that is to log in automatically in the future.
4. Clear check box **Users must enter a user name and password to use this computer** and click **OK**.
5. In the following dialog enter the password twice for the specified user account and click **OK**.

Next time Windows 7 starts up the user is logged in automatically.

Optimizing the network properties

On a presentation computer only those network connections and functions should be enabled which are absolutely necessary. Disable any superfluous connections, protocols and services. Wings Platinum only requires TCP/IP protocol and the Client for Microsoft networks.

1. On the Control Panel click **Network and Sharing Center**, followed by clicking **Change adapter settings** on the left.
2. Right-click the LAN connection and select **Properties**. Confirm any messages that may come up with **Continue**.
3. Clear all check boxes except those next to **Client for Microsoft networks** and **Internet protocol version 4 (TCP/IPv4)**.
4. Close the dialog by clicking **OK**.

Info Computers that are used for multidisplay presentations should not obtain their IP addresses automatically. Make sure you enter the IP

address manually for such applications. See Static IP addresses on the network.

Turning problem reports off

Changing these setting also affects the Help suggestions by Windows 7 and should only be made by experienced users.

1. In the Control Panel click **Problem Reports and Solutions** and **Change settings** on the left.
2. Under **Choose how to check solutions to computer problems** select **Off**.
3. Close the dialog by clicking **OK**.

Adjusting firewall, defender and windows updates

Note: These settings should only be changed, if your computer is not connected to the Internet and is run within a network controlled by you. Otherwise there is a security risk!

1. Click on the Windows icon and select **Control Panel**.
2. Click **Windows Firewall** and on **Turn Windows Firewall on or off**.
3. Confirm any messages that may come up with **Continue**.
4. Enable **Turn off Windows Firewall**, click **OK** and close the Firewall dialog.

Now disable the Defender functions

1. In the Control Panel click **Windows Defender**.
2. At the top click **Tools** followed by **Options**.
3. Disable the following items (you may have to scroll further down):
    - Automatic scanning - Automatically scan my computer
    - Real-time protection - Use real-time protection
    - Advanced - Scan archive files
    - Advanced - Use heuristics

- Advanced - Create restore point
- Administrator - Use this program

4. Click **Save** to accept the changes.

It is not useful to have the presentation computer automatically search for updates. This feature should be disabled.

1. In the Security Center click **Windows Update** and **Change settings** on the left.
2. Enable **Never check for updates**, click **OK** and close the Update dialog box.

Info Disable automatic update for all programs (e.g. Adobe Photoshop CS). If your computer runs an anti-virus program, disable it before you start the presentation.

Turning the user account control off

These steps prevent continual prompting for permission for tasks requiring administrative rights. **Important note:** Since turning the user account control disables some Windows 7 security functions, only experienced PC users should do so.

1. Click on the Windows icon and select **Control Panel**.
2. Double-click **User Accounts** and click **Turn User Account Control on or off**.
3. Confirm all messages with **Continue**.
4. Clear the check box next to **Use User Account Control (UAC) to help protect...** and then click **OK**.

Searching for interfering tasks

If no sufficient performance could be achieved, despite heeding the tips above, the reason may be difficult to find. Usually, it's some programs that are still active in the background that you need to track and deactivate. In order to prevent the installation from becoming inoperative by deactivating

any "essential" programs, you should create **restore points** for Windows. How this is done, is explained in the Windows Help. Otherwise a defective installation may never be repaired again.

Attention! Following the tips for PC optimization is at your own risk. We cannot accept any liability for any damage that may be caused. If necessary, ask a computer expert to perform these measures for you to rule out any damage.

Determining and removing tasks

The paragraph above contains some information for optimizing tasks. If your program still does not run without any problems, you can have a look at the Task Manager and see which tasks and processes are being performed. The next step is to find out if any of the tasks performed interferes with Wings Platinum.

1. Right-click a free area in the task bar and select **Task Manager**.
2. Click on tab **Processes** for a list with the currently running processes to be displayed. To find out what the abbreviations stand for, have a look at the Windows Help or the Internet, e.g. at **http://frankn.com** (German).
3. Terminate one process after the other and keep checking whether the malfunction has been eliminated, e.g. jerky playback for HDAV shows. Start with user-specific processes and make a note of the process you have just terminated.
4. Once you have found out about the interfering task, uninstall the corresponding program or disable it as explained above at the example of Messenger or Task Scheduler. Otherwise this task will be reactivated when the computer starts up the next time.

If this does not help eliminating the problem, it may be due to the devices or drivers. Update all drivers and test disable those devices in the device control system which are not really necessary.

See also

Saving resources

Optimizing Windows Vista

Below you will find a few tips for optimizing your Vista PC, sorted according to importance. The first set of suggested measures is appropriate in most cases, the second category just helpful, whereas the settings at the end of the list are for experts who are setting up computers used only for presentations.

Attention! The modifications suggested below deviate considerably from the standard and security settings and serve for optimal and trouble free presentation only. Before making these modifications create a restore point, that allows you to change back to the old configuration, if necessary. For computers that are also used for other purposes it may be useful to create a new user, e.g. "Presentation", which lets you start the computer with this user profile for presentations.

Recommended measures

The settings listed below are useful and are mostly made in the Control Panel. We suggest leaving this dialog open all the time.

Turning the Welcome Center off

After every start of Vista the Welcome Center usually appears and should definitely turned off for presentation PCs used for installations.

1. Click on the Windows icon and select **Control Panel**.
2. Double-click the **Welcome Center** and clear the check box next to **Run at startup** at the bottom of the dialog box.

Settings for visual effects, driver updates and remote desktop

Visual effects

1. Click on the Windows icon and select **Control Panel**.

2. Double-click **System** and click **Advanced System Settings**.
3. Confirm any messages that may come up with **Continue**.
4. On tab **Advanced** click the **Settings** button under **Performance**.
5. Click **Adjust for best performance**. Close the dialog by clicking **OK**.

Info If you should find out that important functions have been turned off you can turn them on again individually in the above dialog box. In our experience, the "colorful world of Vista" uses up less computer capacity than one might suspect.

Hardware

1. Click tab **Hardware** and click **Windows Update Driver Settings**.
2. Enable **Never check for drivers when...** and the close the dialog box by clicking **OK**.

Info Now that the automatic search function for drivers has been disabled, you may have to perform a search manually.

Remote

1. Now click on tab **Remote** and clear the check box next to **Allow Remote Assistance connections to this computer**.
2. Click **OK** and close this **System** dialog box, too.

Disabling the screen saver

Screen saver and energy saving measures may seriously affect the presentation run on a presentation PC.

1. Click on the Windows icon and select **Control Panel**.
2. Double-click **Personalization** and click **Screen Saver**.
3. Under **Screen saver** click **None**, followed by clicking **OK**.

Setting up power options

The follow steps allow you make numerous settings for power management:

1. Click on the Windows icon and select **Control Panel**.
2. Double-click **Power Options**, select **High performance** and click on **Change plan settings** below.
3. Now click **Change advanced power settings**: In this dialog make the following modifications:
    - Additional Settings - Require a password on wakeup ➔No
    - Hard disk - Tun off hard disk after ➔ Never
    - Sleep - Sleep after ➔ Never
    - Sleep - Allow hybride sleep ➔ Off
    - Sleep - Hibernate after ➔ Never
    - Power buttons and lid - Power button action ➔ Shut down
    - Power buttons and lid - Start menu power button Netzschalter und Laptopdeckel - Energiespartastenaktion ➔ Shut down
    - PCI Express - Link state Power management ➔ Off
    - Display - Turn off display after ➔ Never
    - Display - Adaptive display ➔ Off
    - Multimedia settings - When sharing media ➔ Prevent idling to sleep
4. Close the dialog by clicking **OK**.

Adjusting automatic playback and sounds

1. In the Control Panel, click **AutoPlay**.
2. Set all media to **No action** and click **Save**.

Since your audience will not be very pleased to hear Windows system sounds you should switch them off:

1. In the Control Panel click **Sound** and click the **Sounds** tab.
2. Under **Sound Scheme** select entry **No sounds**.
3. Clear the check box next to **Play Windows Startsound** and click **OK**.

If the **beep** sounds from your Vista computer tend to get on your nerves, e.g. when clicking the Media Pool, turn them off:

1. Click on the Windows icon and select **All Programs - Accessories - Run**.
2. In the field enter **regedit** and click **OK**. Confirm any messages that may come up with **Continue**.
3. In the dialog on the left, open the following tree structure: **HKEY_CURRENT_USER - Control Panel** and highlight **Sound**.
4. In the window right-click **Beep** and select **Modify**.
5. In field **Value** enter **No** and click **OK**.

Removing folders from the index

Vista automatically stores information about the contents of certain folders to keep track of the files on the computer. A presentation computer definitely does not need any index searches. This is why you should remove the folders in question from the index.

1. In the Control Panel, click **Indexing Options**.
2. Click **Modify** followed by **Show all locations**.
3. Click **Change selected locations list**, followed by **Options**. Confirm any messages that may come up with **Continue**.
4. In the field below highlight a folder, clear the check box to remove the folder from the index.
5. Repeat these steps until all folders have been removed.
6. Close the dialogs by clicking **OK** or **Close**.

Disabling automatic hard disk defragmentation

After a pause of approx. 30 minutes Vista automatically starts hard disk defragmentation. This might lead to problems during a presentation. The defragmentation result achieved such is also anything but good. This is how you can turn off automatic defragmentation:

1. In the Control Panel, click **Administrative Tools**, followed by **Task Scheduler**.
2. In the dialog on the left, open the following tree structure: **Task Scheduler (Local) - Task Scheduler Library - Microsoft - Windows** and highlight **Defrag**.
3. In the window at the top you will find a Scheduler entry which you delete by right-clicking it.
4. Close the **Task Scheduler** dialog.

It's a good idea to use a good defragmentation program, e.g. **O&O Defrag** and defragment the hard disk after playing all media but before actually starting the presentation.

Setting SATA controller to AHCI mode

When Windows is installed, Bios is usually set to IDE mode. AHCI mode is usually the more up-to-date and more efficient mode. It supports hot-plugging of eSATA hard disks and NCQ (native command queuing), so that the controller is enabled to make simultaneous requests to the hard disk, which in turn optimizes the order in which the commands are executed. However, NCQ must also be supported by the hard disks, which is usually the case with newer models.

Normally, AHCI mode in Bios must be set during SATA configuration before Windows Vista is installed to allow the corresponding drivers to be enabled. With Vista already being installed, you can check in Bios or the Windows Control Panel whether AHCI mode is active. If this is not the case, AHCI mode can also be enabled without reinstalling Windows by resorting to a little trick.

1. In the Windows Control Panel double-click the **Device Manager** and click the plus sign in front of **IDE ATA/ATAPI**-Controller. Below it entry **Standard AHCI1.0 Serial ATA Controller** should be visible. If this **AHCI** entry does not exist, you will not be able to enable AHCI mode. Close the System Properties.
2. Click the Windows symbol and select **All Programs** - **Accessory** - **Execute**.

3. In the field enter **regedit** and click **OK**. Confirm any messages that may come up with **Continue**.
4. In the dialog on the left, open the following tree structure: **HKEY_LOCAL_Machine - System - CurrentControlSet - Services** and highlight **msahci**.
5. Double-click entry **Start**, change the value from **4** to **1** and click **OK**.
6. While rebebooting the system open Bios. Now change the **SATA configuration** mode from **IDE** to **AHCI**.
7. Save the Bios settings, reboot again and wait for Vista to appear. It will take a little while for Vista to install the new drivers after which you will be requested to reboot again.

Graphics card and drivers

For smooth playback of high-resolution HDAV shows a high-quality, fast 3 D graphics card with a lot of graphics memory and an up-to-date driver are highly important. Color rendering must be set to a minimum color depth of 24 bits. For fluent movements and panning, the refresh rate should match the display and the frame rate of the video. See also Media integration.

1. Right-click some free space on the Windows desktop, select **Personalization** and click **Display Settings** at the bottom.
2. Under **Colors** click and select **Highest (32 bits)**.
3. In order to adjust the Refresh rate click on **Advanced Settings** and tab **Monitor**. For usage with video projectors or LCD displays always choose a **Screen refresh rate** of 60 Hz. For tube monitors a value of 75 Hz, for usage with PAL videos 100 Hz and 60 or 90 Hz for NTSC videos (a multiple of the frame rate of the videos used). See also Media integration.

Info Properties and graphics card type, as well as driver version and date can be determined via the Microsoft system info. See System info....

Current DirectX version

Wings Platinum 3.50 requires at least **DirectX 9.0c of November 2007** to execute the program. This DirectX version must be installed in addition to DirectX 10 or 11. If you should have problems, we advise you to get the latest DirectX update which can be downloaded from the Microsoft website. DirectX is also available on the Wings Platinum DVDs, although this may not be the latest version.

Useful measures

Here you will find a few recommendations that are not absolutely necessary but that may facilitate working with media and Wings Platinum.

Turning off the sidebar

1. Click on the Windows icon and select **Control Panel**.
2. Double-click the **Windows Sidebar Properties** and clear check box **Start Sidebar when Windows starts**.

Adjusting folder options

1. Click on the Windows icon and select **Control Panel**.
2. Double click **Folder Options** and click the **View** tab.
3. Under **Hidden files and folders** click option **Show all files and folders**.
4. Clear the check box next to **Hide extensions for known file types**.
5. Click **OK**.

It is a good idea to adjust the folder views for different contents to meet your requirements.

1. For this purpose, adjust the folder view (e.g. for files, images or videos) as desired.
2. Then click **Organize** and select **Folder and Search Options**.
3. Select the **View** tab and click **Apply to Folders**.

Repeat these steps for all types of folders (files, images, videos, etc.)

Turning off ClearType font

Windows Vista uses so-called ClearType font technology which may lead to unclear and bold representation of the main menu in Wings Platinum. This is how you turn off ClearType font:

1. Right-click some free space on the Windows desktop, select **Personalization** and click **Window color and Appearance**.
2. At the bottom click **Open classic appearance properties** ....and **Effects** in the next dialog box.
3. Clear the check box next to **Use the following method to smooth edges...** and close the dialog box by clicking **OK**.

Please bear in mind that the text displayed in other programs, e.g. Microsoft Word may be less clear and sharp.

Measures for mere presentation PCs without Internet connection

The following steps should only be performed by experts for computers that are not connected to the Internet and are exclusively used for presentation purposes.

Attention! The modifications suggested below deviate considerably from the standard and security settings and serve for optimal and trouble free presentation only. Before making these modifications create a restore point, that allows you to change back to the old configuration, if necessary. For computers that are also used for other purposes the steps described below should not be performed.

Optimizing the network properties

On a presentation computer only those network connections and functions should be enabled which are absolutely necessary. Disable any superfluous

connections, protocols and services. Wings Platinum only requires TCP/IP protocol and the Client for Microsoft networks.

1. In the Control Panel double-click **Network and Sharing Center** and click **Manage network connections** on the left.
2. Right-click the LAN connection and select **Properties**. Confirm any messages that may come up with **Continue**.
3. Clear all check boxes except those next to **Client for Microsoft networks** and **Internet protocol version 4 (TCP/IPv4)**.
4. Close the dialog by clicking **OK**.

Info Computers that are used for multidisplay presentations should not obtain their IP addresses automatically. Make sure you enter the IP address manually for such applications. See Static IP addresses in the network.

Turning problem reports off

Changing these setting also affects the Help suggestions by Vista and should only be made by experienced users.

1. In the Control Panel, click **Problem Reports and Solutions** and click **Change settings** on the left.
2. Click **Advanced settings** and **Change setting** at **Allow each user to choose settings**.
3. Select **Off** and click **OK**.
4. Answer any question that may come up with **Continue** and close the Problem Report dialog box.

Adjusting firewall, defender and windows updates

Important: These settings should only be changed, if your computer is not connected to the Internet and is run within a network controlled by you. Otherwise this poses a security risk!

1. Click on the Windows icon and select **Control Panel**.

2. Double-click **Windows Firewall** and click **Turn Windows Firewall on or off**.
3. Confirm any messages that may come up with **Continue**.
4. Click **Off**, followed by **OK** and close this Firewall dialog box, too.

Now disable the Defender functions.

1. In the Control Panel, double-click **Windows Defender**.
2. Click **Extras** at the top and **Options**.
3. Disable the following items (you may have to scroll further down):
    - Automatically scan my computer
    - Use realtime protection
    - Scan the contents of archived...
    - Use heuristics to detect...
    - Create a restore point before...
    - Use Windows Defender
4. Click **Save** to accept the changes.
5. In the Control Panel, click **Security Center** and **Change the way Security Center alerts me** on the left.
6. Click **Don't notify me and don't display the icon**.

It is not useful to have the presentation computer automatically search for updates. This feature should be disabled.

1. In the Security Center click **Windows Update** and **Change settings** on the left.
2. Click **Never check for updates**, click **OK** and close the Update dialog box.

Info Disable automatic update for all programs (e.g. Adobe Photoshop CS). If your computer runs an anti-virus program, disable it before you start the presentation.

Turning the user account control off

These steps prevent continual prompting for permission for tasks requiring administrative rights. **Important remark:** Since turning the user account control disables some Vista security functions, only experienced PC users should do so.

1. Click on the Windows icon and select **Control Panel**.
2. Double-click **User Accounts** and click **Turn User Account Control on or off**.
3. Confirm all messages with **Continue**.
4. Clear the check box next to **Use User Account Control (UAC) to help protect....** and then click **OK**.

Searching for interfering tasks

If no sufficient performance could be achieved, despite heeding the tips above, the reason may be difficult to find. Usually, it's some programs that are still active in the background that you need to track and deactivate. In order to prevent the installation from becoming inoperative by deactivating any "essential" programs, you should create **restore points** for Windows. How this is done, is explained in the Windows Help. Otherwise a defective installation may never be repaired again.

Attention! Following the tips for PC optimization is at your own risk. We cannot accept any liability for any damage that may be caused. If necessary, ask a computer expert to perform these measures for you to rule out any damage.

Determining and removing tasks

The paragraph above contains some information for optimizing tasks. If your program still does not run without any problems, you can have a look at the Task Manager and see which tasks and processes are being performed. The next step is to find out if any of the tasks performed interferes with Wings Platinum.

1. Right-click a free area in the task bar and select **Task Manager**.

2. Click on tab **Processes** for a list with the currently running processes to be displayed. To find out what the abbreviations stand for, have a look at the Windows Help or the Internet, e.g. at **http://frank.com** (German).
3. Terminate one process after the other and keep checking whether the malfunction has been eliminated, e.g. jerky playback for HDAV shows. Start with user-specific processes and make a note of the process you have just terminated. Windows will refuse to terminate "essential" system tasks, but some crashes may be caused by terminating tasks.
4. Once you have found out about the interfering task, uninstall the corresponding program or disable it as explained above at the example of Messenger or Task Scheduler. Otherwise this task will be reactivated when the computer starts up the next time.

If this does not help eliminating the problem, it may be due to the devices or drivers. Update all drivers and test disabling those devices in the device control system which are not really necessary.

See also

Saving resources

Optimizing Windows XP

Below you will find some tips for optimization of your XP installation.

Disabling screen saver, energy-saving mode and other irritating effects

Screen saver, energy saving measures, automatic cleanup functions and visual effects may seriously affect the presentation run on a presentation PC.

1. Right-click the desktop and select **Properties**.
2. Click on tab **Desktop**, followed by **Customize desktop...**
3. Clear the checkbox next to **Run Desktop Cleanup Wizard every 60 days**.
4. Click on tab **Screen saver** and select **None**.

5. Click on **Power Management** and select **Presentation** under **Energy Schemes**. Check whether there is **Never** at any three items below. For notebooks an additional scheme is active for battery operation. For a presentation, however, you should choose mains power supply anyway.
6. Click on tab **Display** and on **Effects...**
7. Clear the checkmark next to **Use the following transition effect for menus...** and **Show shadows under menus**.
8. Close the dialog by clicking on **OK**.

Graphics card and drivers

For fluent playback of high-resolution HDAV shows a high-quality, fast 3 D graphics card with a lot of graphics memory and an up-to-date driver are highly important. Color rendering must be set to a minimum color depth of 24 bits. For fluent movements and panning, the refresh rate should match the display and the frame rate of the video. See also Media integration.

1. Right-click a free area of the desktop (Windows background), select **Properties** and tab **Settings**.
2. Under **Color quality** click on and select **True Color (24 bits)** or, even better, **True Color (32 bits)**. If your graphics card does not have sufficient frame buffer available, the resolution may be reduced. In this case it is unsuitable for the required setting.
3. In order to adjust the **Refresh rate** click on **Advanced** and tab **Monitor**. Under **Monitor refresh rate** always choose 60 Hz for video projectors and LCD displays, for CRT monitors either 75 Hz or 100 Hz for PAL videos or 60 Hz or 90 Hz for NTSC videos (a multiple of the frame rate of the video used). See also Media integration.

Info Properties and graphics card type, as well as driver version and date can be determined via the Microsoft System Info. See System Info...

Disabling system sounds

During a presentation there is nothing more embarrassing than a Windows system sound coming from the loudspeakers. System sounds are played at

any conceivable but sometimes at highly unsuitable moments. However, there is a simple way to avoid this:

1. On the Windows 2000 **Control Panel**, double-click **Sounds and Multimedia**, or **Sounds and Audio Devices** for Windows XP.
2. Click tab Sounds and select **No sounds** under **Sound Scheme**.

Optimizing the system properties

These settings refer to Windows XP and system recovery, automatic updates, remote support and visual effects. Keep dialog **System Properties** open until all modifications have been made.

System restore applet

Consistent installation of all system data and programs on drive C: allows you to disable monitoring of the other drives. Do not save your own data to the system drive to prevent modifications due to system restore and to facilitate a new system installation if it should be necessary.

1. In dialog **Control Panel** click on **System** - **System restore**.
2. Make sure that the checkbox next to **Turn off System Restore on all drives** is cleared.
3. Now highlight the drive for which monitoring is to be disabled and click on **Settings**...
4. Place a checkmark next to **Turn off System Restore on all drives** and close the dialog by clicking on **OK**. Note the next message and click on **Yes**.
5. Repeat this procedure for all the other drives except for the system drive.

Disabling automatic updates

6. In dialog **System Properties** click tab **Automatic update** and select **Disable automatic updates.** You will have to search for the appropriate updates yourself.

Disabling remote support

7. In dialog **System Properties** click tab **Remote** and clear the checkbox.

Optimizing the system performance

8. In dialog **System Properties** click tab **Advanced** and under **Performance** click on **Settings**.
9. Click on **Adjust for best performance** to disable all visual effects. Should you be unwilling to take such far-reaching steps, click **Custom** and enable only those effects that you can't do without in the field below. Avoid all shadow and fade effects!!
10. Close all dialogs by clicking **OK**.

Optimizing the network properties

On a presentation computer only those network connections and functions should be enabled which are absolutely necessary. Disable any superfluous connections, protocols and services. Wings Platinum only requires TCP/IP protocol and the Client for Microsoft networks.

1. In dialog **Control Panel** click on **Network connections**.
2. Right-click the LAN connection and select **Properties**.
3. Clear all checkboxes except those next to **Client for Microsoft networks** and **Internet protocol (TCP/IP)**.
4. Close the dialog by clicking on **OK**.

Info Computers that are used for multidisplay presentations should not obtain their IP addresses automatically. Make sure you enter the IP address manually for such applications. See Static IP address in the network.

Disabling automatic hard disk drive defragmentation

After a pause of approx. 30 minutes Windows XP automatically starts hard disk drive defragmentation. This might lead to problems during a presentation. The defragmentation result achieved such is also anything but good.

The current version of the Microsoft program **Tweak UI** allows you to disable automatic defragmentation.

1. After installing start **Tweak UI** by clicking **Start** – **Programs** – **PowerToys for Windows XP**.
2. Highlight **General** by clicking it.
3. In field **Settings** scroll to the very bottom and remove the checkmark next to **Optimize hard disk when idle**.
4. Click **OK**. Or click **Apply** and disable CD/DVD Autorun likewise. Refer to the next chapter in this topic.

It's a good idea to use a good defragmentation program, e.g. **O&O Defrag** and defragment the hard disk after playing all media but before actually starting the presentation.

Disabling CD/DVD ROM Autorun

One of the most annoying functions is the CD/DVD Autorun feature. This functions checks about every second whether a CD/DVD ROM is inserted in the corresponding drive or not. This in itself would not matter at all, but the annoying thing is that CPU and bus are temporarily blocked every time this happens. The Microsoft Program **Tweak UI** allows you to disable the CD/DVD Autorun function.

1. After installing **Tweak UI**, click **Start** – **Programs** – **PowerToys for Windows XP**.
2. Click the plus sign in front of **My computer** and **AutoPlay**.
3. Click on **Types** and deselect both checkboxes under **Autoplay Drive Types**.
4. Click **OK**.

Activating Ultra-DMA Mode

Modern hard disks and CD/DVD drives need to be run in Ultra DMA Mode to develop their full potential. Deactivating this mode might even cause intermittent sound problems. Usually, this mode is enabled automatically, but whenever problems come up, you should check the settings:

1. Click **Settings** – **Control Panel** – **System** – **Hardware** - **Device manager** and then the plus in front of **IDE ATA/ATAPI-Controller**.
2. Right-click **Primary IDE channel**, select **Properties** and click tab **Extended properties**.
3. **DMA, if available** must be chosen for transfer mode; in the field below **Ultra DMA Mode** must be displayed as transfer mode. This setting should be the same both for unit 0 and, if applicable, for unit 1, provided that a drive is connected.
4. The same way, you also check the **Secondary IDE channel**.

Info If, despite correct settings, file access is slow or problems with intermittent sound or jerky videos should occur, install the current version of a suitable Ultra-DMA driver. Installing the current driver version is always a good thing to do and a basic prerequisite to allow your computer to develop its full potential. The latest driver can be downloaded from the website of your main board producer. It is important that the driver matches exactly the main board type or chip set.

Setting SATA controller to AHCI mode

If your PC features a SATA controller that supports AHCI mode you should make use of it. It is usually the more effective mode. AHCI mode supports hot-plugging of eSATA hard disks and NCQ (native command queuing), so that the controller is enabled to make simultaneous requests to the hard disk which in turn optimizes the order in which the commands are executed. However, NCQ must also be supported by the hard disks, which is usually the case for hard disks produced in 2006 and later.

In Bios under **SATA Controller** you can check which mode has been set and whether AHCI mode is supported. It may also be helpful to search the Internet as only the later main boards produced in 2006 and later support AHCI mode.

Unfortunately, any subsequent activation of the AHCI mode in Windows XP is a bit tricky. Detailed instructions can be found on the Internet at ***www.media-addicted.de*** or ***www.heise.de/ct/faq*** when you search the pages for **AHCI**.

When you reinstall Windows XP and set AHCI mode in Bios you need to press F6 at the beginning of the installation to install a SATA driver which supports AHCI mode. But you can also generate a boot CD containing this driver. The corresponding instructions can be found on the Internet.

Using hardware profiles to disable troublesome drivers

When a computer is used for a number of different tasks a number of devices may be installed which are actually not needed for usage of Wings Platinum. Very often drivers and the pertaining tools perform some activities in the background which may give you a lot of trouble. Hardware profiles can be used to disable certain devices and their drivers. This means that you could configure a profile **Office** with all the necessary devices and a profile **HDAV** which enables all those devices that are not required. During Windows startup you can choose the corresponding hardware profile that suits your application. Further information can be found in the Wings Platinum Online Help under **Hardware profiles**.

Current DirectX version

Wings Platinum 3.50 requires at least DirectX 9.0c of November 2007 to run the program. If you should have problems, we advise you to get the latest DirectX update which can be downloaded from the Microsoft website. DirectX is also available on the Wings Platinum CD-ROM, although that may not be the latest version.

Avoiding the logon dialog when starting up the computer

For permanent installations, which are activated in the morning via timer control and should run automatically, the logon dialog may be a nuisance. This dialog, too can be avoided by means of **Tweak UI**.

Info Please note that avoiding the logon dialog and the password query may allow unauthorized access to your data!

1. Start **Tweak UI** by clicking on **Start** – **Programs** – **PowerToys for Windows XP**.
2. Click the plus sign in front of **Logon** and **Autologon**.

3. Click and add a checkmark next to **Logon automatically**.

Searching for interfering tasks

If no sufficient performance could be achieved, despite heeding the tips above, the reason may be difficult to find. Usually, it's some programs that are still active in the background that you need to track and deactivate. In order to prevent the installation from becoming inoperative by deactivating any "essential" programs, you should create **restore points** for Windows. How this is done, is explained in the Windows Help. Otherwise, a defective installation may never be repaired again. Usually it makes sense to have only the system drive (usually drive C) monitored by the system recovery applet and not to store your own data on this drive. The drive to be monitored can be specified under **Control panel** – **System** on tab **System restore**.

Attention! Following the tips for PC optimization is at your own risk. We cannot accept any liability for any damage that may be caused. If necessary, ask a computer expert to perform these measures for you to rule out any damage.

Terminating the task scheduler

The task scheduler is started by Windows or any other programs, such as anti-virus programs, in order to perform periodic tasks, such as checking the Internet for updates, etc. Upon disabling the task scheduler you need to check whether it is not reactivated after starting up the computer again.

1. Click **Start** – **Control Panel** – **Administrative Tools** and double-click **Services** for the Services dialog box to open.
2. Right-click **Task Scheduler** and select **Properties**.
3. Right-click **Start type** and select **Disabled**.
4. Restart the computer and open the **Services** dialog again. In column **Status** check whether the Task Scheduler is disabled. Unless this is the case, a program will still activate the task scheduler when starting up Windows.

Info Please bear in mind that this measure may prevent certain functions, e.g. automatic update of the anti-virus program from being performed.

Disabling Windows Messenger

Windows Messenger is a program for delivering messages to other computers (chat program) which is started automatically by Windows. This is how you disable the Messenger:

1. Terminate all programs. Click **Start** – **Run**... and enter **msconfig**, followed by **OK** for the system configuration dialog to be displayed.
2. On tab **System start** uncheck checkbox **MSMSGS** (abbreviation for "Messenger").
3. Click **OK** and restart Windows for this alteration to take effect.

Determining and removing tasks

The paragraph above contains some information for optimizing tasks. If your program still does not run without any problems, you can have a look at the Task Manager and see which tasks and processes are being performed. The next step is to find out if any of the tasks performed interferes with Wings Platinum.

1. Right-click a free area in the task bar and select **Task Manager**.
2. Click on tab **Processes** for a list with the currently running processes to be displayed. To find out what the abbreviations stand for, have a look at the Windows Help or the Internet, e.g. at **http://frankn.com** (German).
3. Terminate one process after the other and keep checking whether the malfunction has been eliminated, e.g. jerky playback for HDAV shows. Start with user-specific processes and make a note of the process you have just terminated. Windows will refuse to terminate "essential" system tasks, but some crashes may be caused by terminating tasks.
4. Once you have found out about the interfering task, de-install the corresponding program or disable it as explained above at the example of

Messenger or Task Scheduler. Otherwise this task will be reactivated when the computer starts up the next time.

If this does not help eliminating the problem, it may be due to the devices or drivers. Update all drivers and try disabling those devices in the device control system which are not really necessary.

See also

Saving resources

Tips & Tricks

Media integration

It's a matter of fact that a superior HDAV show concept usually comprises audio, high-resolution images and video. But there are other factors that need to be considered. Does the presentation run on a TV set, plasma display or video projector, do you want to produce a DVD of the show or multi-channel sound or any other special functions via Show Control?

One of the strengths of Wings Platinum is definitely its far-reaching media integration. However, a few physical characteristics with regard to media, standards and devices need to be considered to achieve optimum results for your project.

It is important to clarify the following questions:

- What media are used for the project?
- What are the properties of these media?
- What form of output will you choose?

Audio

Only few obstacles need to be overcome with regard to audio. Due to its automatic conversion of sampling rates, Wings allows usage and output of a variety of different formats. To achieve best possible quality, the audio files should be output using the same format (resolution/sampling rate) as they were recorded with.

For multi-channel sound, you need to think about the type of output device to be used. As HDAV productions are almost exclusively presented on computers, it is possible to output on up to 24 channels by using multi-channel sound cards or interfaces. Optionally, output of encoded AC-3 wave files via the S/PDIF ouput is also possible.

Output of surround sound on a DVD is possible by exporting the sound track as a number of stereo files, which are then encoded into a **Dolby Digital** file (AC-3) by external software.

Pictures

When it comes to pictures, Wings Platinum is capable of accepting more than 40 different file formats. What is important is the picture size, which must at least be as large as the planned maximum output size. For camera movements, the pictures need to be larger, depending on the zoom factor. See also Picture size for camera movements.

In order to achieve color rendering identical with other image editing programs all pictures should be converted to the standard color space **sRGB IEC61966-2.1**. See also Color management.

Video

For the integration of videos, standards and the resulting differences in image size and frame rate play an important role. It is still quite easy to cope with different video image sizes within one project by choosing the corresponding screen fields. However, when it comes to the frame rate the problem gets quite serious. As a rule, only videos with the same frame rate, only 25 frames/s (PAL standard) or 30 frames/s (NTSC standard) should be used within the same project. When the frame rates differ, some pictures must be left out or shown twice during playback, which results in insufficient timing and the video tends to have a jerky effect.

If your video camera supports progressive recording (non-interlaced mode) you should choose this mode for videos in HDAV shows. The usual recording of double the number of interlaced images only has an advantage for playback on TV and fast movements. For HDAV shows, however, choosing this mode is no good idea, as the interlaced images have to be put together again anyway in a very complex deinterlacing process, which again causes losses.

For reasons of synchronization, output of a presentation video should be at the same frame rate as the video integrated in the show. I.e. 25 frames/s for PAL videos and 30 frames/s for NTSC videos. In critical cases, i.e. for fast movements, the frame rate can be increased to double or three times the value. However, it's usually the computer performance that puts a limit to higher values. WMV format provides good preconditions as it allows modern computers to display videos at 1400 x 1050 pixels and 60 f/s without any problems. See also Producing Windows Media Videos.

For optimum playback, synchronization of output devices with the input signal plays an important role. Modern plasma displays and CRT monitors are

very flexible in adjusting to a variety of frame rates in the signal. Choose the frame rate of the graphics card to be a multiple of the HDAV video frame rate.

Unfortunately, LC displays or video projectors do not synchronize with the input signal but work, at least internally, at a fixed rate of 60 Hz. If you want to follow the instructions as described above, you should ideally use videos at 30 frames/s for the show and output your HDAV video for presentation at 30 or 60 frames/s. But if you want to produce a PAL DVD (25 frames/s) on top of all this, problems will come up at the other end.

In order to play videos with different frame rates without any problems, the frame rate for output must be a high as possible. This is the case for playback via hardware rendering, which allows frame rates of 60 f/s or more even with very high resolution. For optimum video playback quality, the SmartSync Engine has been developed. See Advantages and limits of the SmartSync Engine.

Advantages and limits of the SmartSync Engine™

For output of visual contents, e.g. pictures, videos and texts, Wings Platinum makes extensive use of hardware rendering via a modern 3D graphics card. The image blend is no longer produced by the main processor but by the graphics processor. It is considerably faster than the main processor and has been optimized for this task. Therefore, it's no surprise that a graphics card has become the most complex and most expensive component of a computer.

However, the users keep making higher demands. Even though the resolution of affordable video projectors is still at SXGA+ (1400 x 1050 pixels), many users are eyeing at real HDTV resolution of 1920 x 1080 pixels. Despite all this, multidisplay technology allows you to exceed these standards even now. An interesting feature in this connection is dual display technology with one PC.

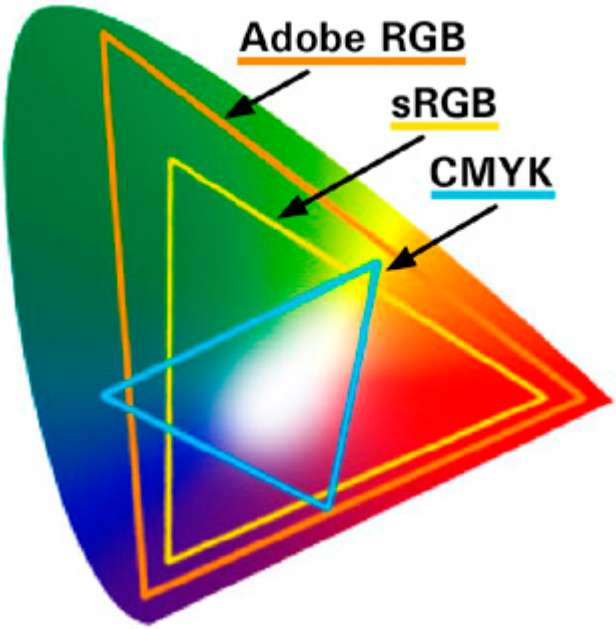
For efficient hardware rendering and highest-possible playback quality we have equipped Wings Platinum with the **SmartSync Engine** which offers numerous advantages but cannot eliminate the physical limits though.

- The **SmartSync Engine™** offers high performance and playback quality for all visual media, but for videos in particular. By harmonizing video frame rate and graphics card refresh rate, playback is absolutely smooth and soft without any jerks or frame drops.
- Playback via the **SmartSync Engine** only works properly if the video frame rate is equal to or smaller than the graphics card refresh rate. The max. video frame rate must consider a possible pitch. This means that for a video of 30 f/s and a refresh rate of 60 Hz a maximum pitch factor of 2 would be admissible.
- Another precondition for optimum playback via the **SmartSync Engine** is integer divisibility of graphics card refresh rate and video frame rate. This means that for a refresh rate of 60 Hz only videos with a frame rate of 30 or 60 f/s would be admissible. For videos with a frame rate of 25 f/s to be played optimally, the graphics card refresh rate must be 50, 75 or 100 Hz.
- Since a number of graphics cards on different multidisplay computers do not always work in time with each other, forced synchronization during a multidisplay presentation may lead to frame drops. According to our experience, however, they are hardly noticeable due to the **SmartSync Engine** which generally leads to improved playback.
- The necessary precondition is a perfect match between graphics card and video projector or display. The display unit must be able to sync up with the graphics card refresh rate. Failure to do so, causes jerks and frame drops, which cannot be influenced by Wings Platinum and the **SmartSync Engine**. Some video projectors and displays only work properly at a refresh rate of 60 Hz.
- Hardware rendering via the **SmartSync Engine** offer high performance, thus providing ample scope for complex montages. If at a certain point of your show the hardware is pushed to its limits, e.g. with a high number videos of simultaneously running videos, you can produce a mixdown of that particular passage and use it in the place of the individual objects in the project. It is therefore possible to use and mix both mixdown videos and original media in one timeline.

Interesting facts about color management

Color management provides for uniform color rendering on computer systems. All input devices (scanners, digital cameras, etc.), the computer and all the programs running on it and the output devices (monitors, printers, video projectors) should be able to detect and display color information uniformly. Due to the different technology used in these devices they differ greatly in their capability of detecting and displaying color information. This capability is defined by color spaces, also called gamut. A printer, for example, uses a different color space compared to a monitor and a video projector again a different one. Color management acts as an intermediary between these different color spaces.

For the computer colors are only figures and there are no such technological limits as there are for input and output devices. The only important thing is that you need to decide on one particular color space. In the world of PCs, the Internet and HDTV the standard color space is **sRGB IEC61966-2.1**. As this color space has become too small for superior image editing and the detailed display of color shades other color spaces were defined as well, e.g. **Adobe RGB 1998** or **Apple RGB**, to name just a few.



But how can we achieve uniform color rendering? It seems only too logical that a printer with its CMYK print color range cannot print all colors that can be displayed in the RGB color space. Color management uses color profiles to convert RGB colors into CMYK colors that are as close to RGB color rendering as possible. Ideally, every input and output device has an individual color profile for accurate color rendering. And if you use a different sort of paper or ink for your printer you actually need a new color profile so to say.

An important fact is that the media files are to be saved and archived in a sufficiently large color space. The aim is to produce as "output-neutral" media files as possible, which in combination with color profiles, can be prepared and used for output by a number of different devices and still achieve optimum results. Even if your device is not yet capable of printing or projecting all the available color shades – the future will bring new and advanced technology which will be able to do so. Therefore it would be definitely a bad idea to archive an image in a CMYK color space, as it is smaller than a RGB color space and is only useful for printing. Monitors, displays and video projectors always produce images in accordance with RGB

color space. In their color palette they correspond more or less to sRGB color space, which actually corresponds to HDTV color space. Good monitors and video projectors, however, have a much greater color space than sRGB and definitely require a color profile for correct color rendering.

Color management and Wings Platinum

Wings Platinum can prepare for output to any color space required. Under **Global Options - Color management** you can define the corresponding color space by entering a color profile. If you have no color profile available for your output device you can used the standardized color space **sRGB IEC1966-2.1/HDTV**. For color conversion there are two methods available:

During display data creation images are converted from the document color space to the output color space. Since this is done before the presentation it saves performance but calls for a recreation of display data as soon as a different monitor or video projector is used. Wings Platinum, however, supports several display data sets. If you have created display data with the corresponding color profile for your monitor or video projector you can change over between these profiles without having to create new display data.

Images are only converted to the output device's color space during playback. This uses up extra system resources but the advantage is that the output device can be exchanged at any time.

It is clear that all pictures should have an embedded color profile, otherwise accurate color rendering is not possible. Therefore, the use of a color profile must be enabled in the Options. **Important:** Wings Platinum can only read color profiles in **JPG**- and **TIF**-format!

Tip: If restricted memory capacity is no major issue, you should use TIF format for the pictures, **Advantages of the TIF format**.

All in all, TIF format offers the best properties:

- A **color depth of up to 16 bits per channel** offers extra capacity for editing of tonal values.
- Lossless LZW compression
- **Embedded color profiles** can be read and considered by Wings Platinum.

- **Storage of layers** maintains full editability of pictures created in editing programs, e.g. Photoshop (text, layer effects, etc.).
- **Alpha channels or transparent backgrounds** can be saved and allow extracting of objects, for example.
- **Semi-transparent areas** are displayed at high-quality by Wings Platinum without any "gray veil".

Color profiles for monitors and video projectors

For superior image editing and presentation of AV shows you can calibrate your output devices, i.e. monitors and video projectors. A measuring instrument compares the displayed colors with standard values and prepares a color profile containing the color correction values. This color profile is passed on to the graphics card which corrects color rendering for the corresponding device. If you have no measuring units for fine calibration of input and output devices you can have calibration and profiling also performed as a service by an expert.

Saving resources

Wings Platinum permits design of very sophisticated and complex shows which may push even high-power computers to their limits. That's why it is worth thinking about how the available power can be used most efficiently or how you could adopt a resources saving strategy in terms of programming.

- If you are using pictures that are separated from the background with transparent areas or text pictures with transparent background you should restrict the size of the pictures to the visible areas, i.e. cut off the transparent area. This way you can save graphics memory, as even transparent areas use up graphics memory, even if they are not displayed. **Example.**

saving 76 %

This title image was created at such a large size so as to allow the text to be correctly positioned on the screen at standard full-format display. The data volume of the cropped title is reduced by 76 % and can very easily be positioned on the screen via keyframes.

- You can have display data for pictures optimized, i.e. they are displayed at exactly the size they are needed for your show. This is particularly interesting for displaying pictures at a reduced size, e.g. picture-in-picture. See Optimizing display data for pictures.
- The log file logs the locations in the show where media could not be loaded properly into the graphics memory. See Displaying log information.
- For camera movements that require huge amounts of display data, which can no longer be processed adequately by the graphics card, the display data resolution can be reduced manually for individual objects. This helps to save graphics memory. Although it reduces picture sharpness, it is still less obvious than jerky picture movements. See Picture Object Properties.
- If a show contains a high number of simultaneously running videos, you need to make sure that you have sufficient graphics memory available. Usage of the graphics memory should be balanced sensibly between pictures and videos. **Example:** If you have a graphics card with high memory capacity, the memory setting for pictures can be reduced in favor of videos, e.g. to 50 to 70 % for a 256 MB graphics memory, 35 to 50 % for a 512 MB and 30 - 40% for a 1024 MB graphics memory. See **Options** - **Project Options** - **Output**.

- If you use no transparency masks you can disable this function in the Project Options since it uses up graphics memory and computer power. See **Options** - **Project Options** - **Output**.
- During a presentation the timeline should not be compressed and a large time portion should remain visible. If the Locator reaches the right margin and the timeline portion is changed, a great number of objects must be updated. This causes peak performance requirements and may result in jerky playback. It is also a good idea to hide the tracks containing the media objects (picture, video, audio tracks) by grouping them and to avoid the timeline from being displayed. See Grouping tracks
- For multidisplay shows with softedge masks and overlaps you should limit the output of tracks or their media to the necessary slaves. **Example:** For playback of a 3-video projector show via split video the central slave PC would have to play three videos while the left and the right would still have to play two videos if the output of split videos was not restricted to the necessary slave PCs. See Restricting the output of visual contents to one PC
- Also Display Warp uses up graphics card resources and should only be enabled if the function is definitely required. See Using Display Warp.

Pixel, dpi, ppi - Picture size and resolution

When talking about the appropriate size of digital pictures, the term **pixel** is normally used, which is another word for **picture element**. But there are also other abbreviations, such as **dpi** or **ppi**. These are measuring units for the resolution, i.e. the amount of information per unit length and stands for **dots per inch** (print parameter) or **pixels per inch** (scanner, monitor, file parameters, etc.) Quite frequently, these terms are inappropriately used, which is not really such a serious thing to do, because they nearly mean the same. The resolution is important for scanning and printing but not for HDAV applications, i.e. for display via monitor or video projector.

Depending on the application we distinguish between scan resolution and output resolution. **Scan resolution** refers to the size of the picture or slide to be scanned. Scanning a small format slide (36 x 24 mm) at a resolution of

1000 ppi results in a picture file of about 1400 x 934 pixels. Doubling the scan resolution to 2000 ppi creates a picture file of 2800 x 1868 pixels, which, due to the area (width by height), corresponds to four times the information quantity. Scanning a 6 x 7 medium format slide (exactly 69 x 54 mm) at 2000 ppi creates more picture elements in proportion tothe area scanned: 5433 x 4252 pixels. This shows very clearly why small format scanners require a higher resolution than medium format scanners.

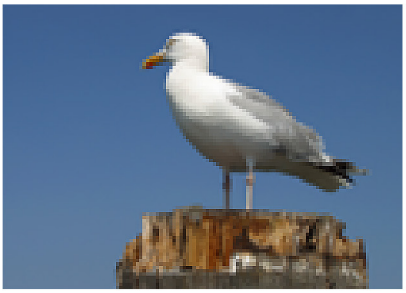
The **information quantity in pixels is absolute** and therefore quite important in terms of sharpness and detail accuracy of a picture.

When a picture is to be printed, the picture file information quantity is output onto paper at a certain size. The sharpness depends on the resulting **output resolution**. In other words: When a printing process requires a certain output resolution, the file information quantity sets the limit for the printable image size. Here are a few examples with regard to image width in pixels and centimetres as well as resolution and sharpness:

For a resolution of 355 ppi, an image file width of 1,400 pixels results in an image width of 10 cm

Resolution = Number of pixels / side length
Resolution = 1400 pixels / 3.94 inches = 355 ppi
1 inch = 2,54 cm, i.e. 10 cm = 3.94 inches

An image width of 40 cm for a 1400-pixel file results in a resolution of 89 ppi.



With an image width of 40 cm, a resolution of 355 ppi requires a file width of 5590 pixels

The two large pictures show that a large print-out at high quality requires a correspondingly large picture file. For an existing picture file specifying the resolution only has an influence on the output size but not on the quantity of printable picture information.

As mentioned above, resolution specifications in **dpi** or **ppi** are insignificant for **display on monitors** or **video projectors**. Depending on graphics card, LCD panel or image chip, a video projector or monitor can only display a certain information quantity. This is very often referred to as resolution, but

in the sense of absolute information quantity. When using a video projector with a resolution of 1400 x 1050 pixels for pictures of the same size (native 1 : 1 display), the resolution in **ppi** depends on the size of the projected image. For a width of 300 cm, for example, it's about 12 ppi. Display of the same picture on a monitor with a screen width of 35 cm results in a resolution of about 100 ppi. This means that resolutions in ppi for these output formats can be calculated, but they have absolutely no influence on the display as they are picture file parameters. Optimum quality rather depends on creating pictures at pixels that correspond exactly to the physical resolution of the devices (monitor, video projector). For optimum output, Wings Platinum features very flexible management for image scaling and subsequent sharpening. See also Appropriate picture size and Tips for sharpening pictures.

Resolution specifications in ppi (...or dpi) are irrelevant for monitors and video projectors, as the resolution is defined by the existing pixels of a picture and the physical resolution of the devices.

Let's add a few words on **printer resolution**. The term **dpi** must actually only be used for printers as this is the only case where the term **dots per inch** is definitely appropriate. Modern color printers feature resolutions of more than 4000 dpi. Now you may ask yourself, if you may have to prepare and print your pictures at this resolution to achieve highest possible quality, which would require a picture file at 47,000 x 33,500 pixels and about 4 GB for DIN A 4 output.....!? The answer is no. The printer requires the high resolution only to produce as many different color shades as possible. For a pixel it produces 16 and more dots for every color which allows very fine nuances of tonal values to be created. A pixel created by a very high number of small dots is called a **Sample Cell.** Depending on printing method and picture size to be printed, picture files with resolutions between 100 and 400 ppi are sufficient for a print-out. Larger print-outs require a lower resolution than smaller ones. After all, the viewing distance is longer and any unsharpness in details cannot be perceived.

Tips for sharpening pictures

Many users prefer to "sharpen" or "unsharp mask" the original images and perform these operations during scanning, in the image editing program or digital camera. Wings Platinum, however, **requires a different approach**!! You should consider the following:

- Sharpening only makes sense for output size pictures &endash; scaling largely nullifies the sharpening effect and may even reduce the image quality in some cases. The solution is quite simple: In Wings Platinum, use the globally effective picture effects to sharpen the pictures. This type of sharpening takes effect on all pictures and is only performed at the scaled picture during output. Which function you use, i.e. **Sharpening** or **Unsharp masking**, is a matter of taste &endash; just try it out. We have had very positive experience with sharpening. The default setting is 85 %, but the value can be increased to 90 to 95 % depending on the basic sharpness of the original pictures. See **Options** &endash; **Project Options** &endash; **Picture processing**.
- Global sharpening of all pictures is always recommended. As opposed to sharpening in Photoshop or other image editing programs, global sharpening is non-destructive and can be modified or undone at any time. If global sharpening does not achieve the required results, you can sharpen the pictures individually using different values or methods. See Picture processing for individual image files.
- Only if these two measures do not achieve the required effect - and this should remain an exception - should you start thinking about sharpening the original file in the image editing program. In this case, however, the picture should be scaled to output size (presentation size), although this reduces the possible ways the show can be output. If, for example, the new mega video projector with ultra-high resolution should be available in a few years, you may end up with the problem that the image edited a few years before is too small and must be replaced by a larger image edited likewise. This does not only require extra time, but the original file must also still be available in the archives.....
- If you want to sharpen original images because the digital camera has produced an "unsharp" image or the image has become unsharp after scanning, you should only do so very moderately for the above reasons. Special editing steps, such as partial sharpening, sharpening or blurring of individual channels can only be performed in the corresponding image editing programs. This is why in such a case you should make sure that the picture can be scaled and resharpened again at a later time.

Use the non-destructive image editing features in Wings Platinum, in particular sharpening or unsharp masking, because it gives you maximum flexibi-

lity for output and allows you to output your show at maximum quality and appropriate size at any time. This, however, requires correspondingly large original pictures. See Appropriate picture size.

Further considerations on programming and projection

- To achieve best-possible sharpness of the projection, the picture or the display data of the picture, respectively should be available at the same resolution as the physical resolution of the video projector and should be output unscaled at 1:1 by the graphics card to the video projector. Connection of video projector or display to the graphics card should preferably be via DVI or HDMI as it allows for loss-free transfer of the image information.
- Unscaled output of an image by the graphics card works only if no zoom effects are used and the image is only projected at **one particular size**. Strictly speaking, every change in size by the graphics card during the presentation results in reduced picture sharpness. Only representation at **1:1** size produces optimum sharpness. In its picture size optimization, Wings Platinum always takes the largest representation necessary as a basis, i.e. an image, when zoomed smaller, appears to be more out of focus than an image that is placed as an object at its smallest size without any zoom effect.
- Therefore, demanding professionals usually use a trick for camera movements and zoom effects: For the initial setting, e.g. an enlarged stationary section of a landscape, you should use a picture object with optimum sharpness and **1:1** size. At the beginning of the camera movement you fade in to a second version of the image, which is less sharpened in order to avoid flickering at the high-contrast edges during the movement. For the end position, e.g. a stationary picture with many details, you fade in to the third image version which is again represented at **1:1** size and has optimum sharpness.

Admittedly, the variant suggested last is very time consuming. But if you are set on sharpness, this is the way to still achieve further improvements.

Scan Software Settings

Every scan software has individual features. This is why we can only provide some general tips.

1. If the scan software allows adjustment of the color space, select **sRGB IEC61966-2.1**.

   Info If you want to achieve higher quality for print-out, you should choose a larger color space, e.g. **Adobe RGB 1998**. For Wings Platinum, however, you need to create an additional file in **sRGB IEC61966-2.1**. See also Color management.

2. Scan software is used for adjusting **color**, **brightness** and **contrast**. See if you can find a setting which produces a satisfactory visual effect for most slides. A highly important factor for evaluating pictures is the **correct monitor setting**. If possible try to get hold of test pictures for adjusting the monitor or for professional applications, calibrate it with a measuring device. See also Color management.

3. Some scan software is able to automatically perform global editing steps, such as, for example, cropping, improving the sharpness, rotating the picture, etc. In any case, you should deactivate filters which improve sharpness (e.g. unsharp masking)! Wings Platinum will perform these tasks for you at a later time. See also Tips for sharpening pictures.

4. What is important is the **picture size**, which must at least be as large as the planned output size. Different scan software may offer different settings. This is why we are offering several parameters below. They refer to 35 mm format and high quality.

   - The simplest setting is the direct input of the **picture size of 3000 x 2000 pixels**. In your entry you can choose between centimetres, inches and pixels.
   - Should no pixel entry be possible for your scan software, enter a **scan resolution of 2200 ppi** (pixels per inch).
   - If your Scan Software only allows you to enter the pictures size for a later print-out, adjust it, for example to **27 x 18 cm at a resolution of 300 DPI.** See also Pixels, dpi, ppi - Picture size and resolution

Save all these values in your Scan Software as **Basic Settings**.

The display data concept for images

Wings Platinum features a highly sophisticated display data concept for images, which, on the one hand, allows a flexible approach to large pictures and, on the other, ensures output of various media ranging from a video DVD to a multidisplay show at optimum quality.

If you consider the following items, Wings Platinum makes it easy for you:

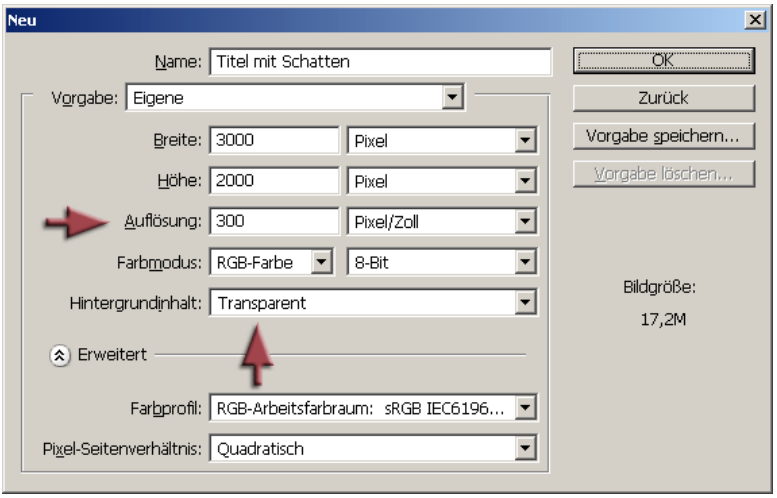
- You can directly add images at any size to the Media Pool and use them in Wings Platinum, as display data at the required presentation size are always created for every image. The size is always determined automatically when the project is created or is specified individually by yourself. This value should correspond to the width of the monitor or video projector resolution. The reference is always the longer side of the image, no matter whether it is in portrait or landscape format. If you have already created the project, you can change the setting in the Screen Properties.
- Once you have added pictures to the Media Pool, creation of display data is started and runs in the background. When adding large numbers of pictures, weaker computers may require all display data to created before adding the pictures to the timeline in order to avoid waiting times during scrolling or jerky playback. See Creating display data for media files.
- For multidisplay shows, one additional aspect is highly important, i.e. the differentiation between **Preview** and **Presentation Mode**, as different sizes of display data can be defined for both playback modes. During creation of multisplay projects the Project Wizard usually does this automatically. All this is very important for complex shows with a high number of slaves and a large overall screen, to ensure swift editing. See also Playback modes for screen display via hardware rendering.
- The display data created as described above can be used for your show any way you want. If you modify the pictures by zooming or use portrait format the globally created display data will no longer be optimum size, but at this creative stage this does not matter, provided the computer can cope with them and the pictures do not appear to be completely out of focus after zooming.

- When the display starts being jerky, the pictures are completely out of focus or when the show is finished, it's about time to optimize the display data. By doing so, all objects are provided with display data at the required size. This method brings distinctive advantages in terms of performance and quality. See Optimizing display data for pictures.
- Every time you modify the show, optimize the display data or output you show at a different size a separate version of display data is created, which can be recognized by the extension to the file name in the picture directory, e.g. ***Image name.1400***. Existing display data are not automatically deleted as it may be necessary to show different versions of a show and all display data would have to be created anew whenever a different version was loaded.
- If you are fed up with the high number of display data in the picture directory or just need more storage space you can delete the display data for the pictures and recreate them at the corresponding resolution. See Deleting display data.

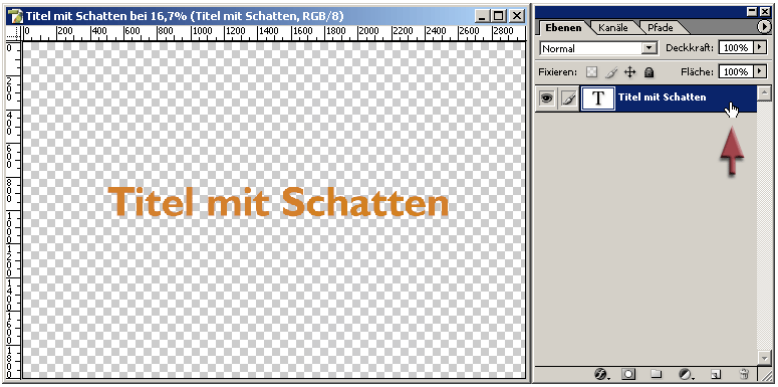
Creating titles with shadows and 3D effects

In this example, we would like to explain how a title with a shadow and 3D effects is produced. For this purpose you need an image editing program which supports transparency. The explanations in this example refer to Photoshop CS, but in principle the approach will be the same for other programs as well.

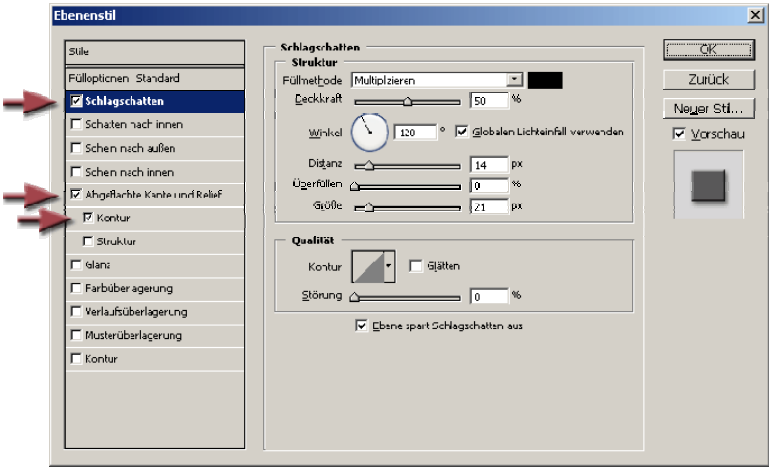
1. Create a file at the corresponding size with a transparent background. Select a resolution of 300 pixels/inch for the text to allow reasonable scaling.



2. Choose the text tool and create a layer containing the title text. Set the font size to about 60 pixels. Choose the text color to match the planned background image.



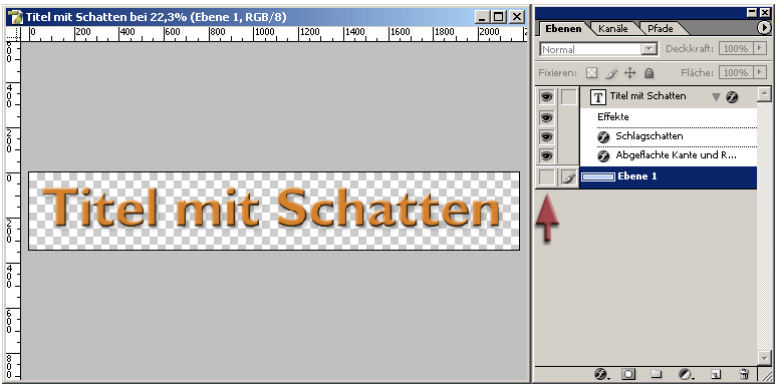
3. Double-click the text layer on the right next to the text and the dialog for effect selection will open up. Place a checkmark next to **Drop Shadow**, as well as **Bevel and Emboss** and **Contour**.



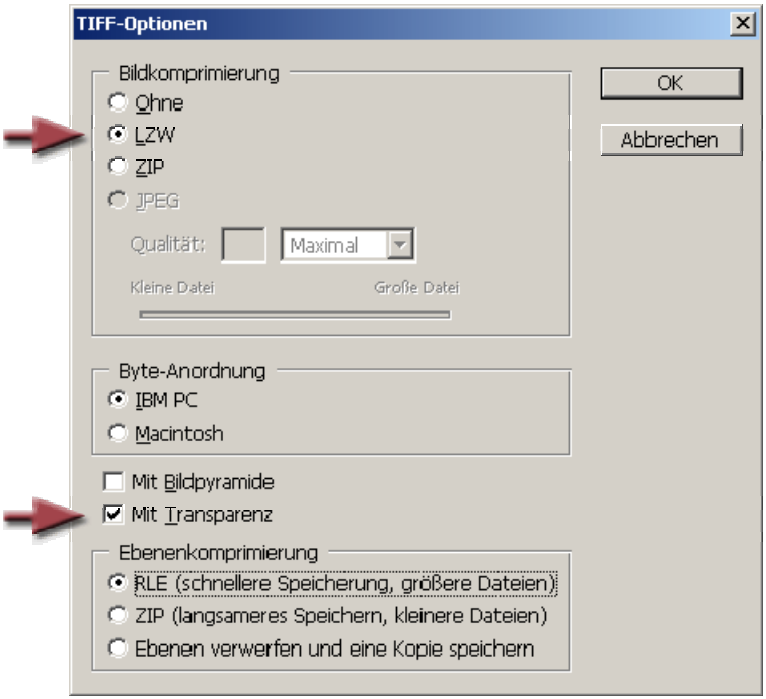
4. The shadow opacity default setting of 75 % is usually somewhat too dark. To be able to judge the effect better you should add a new layer via **Shift** + **Ctrl** + **N** and choose a color that corresponds more or less to the planned background picture in the show.

In the illustration above the title image has already been cropped since the unused areas would use up graphics memory unnecessarily during the presentation. The text can later on be positioned in Wings Platinum via In-Screen Editing and Keyframes.

5. Before saving you need to hide the background layer **Level 1** for the checkerboard pattern to be come visible and the background to turn transparent.



6. Save the title image as a TIF file. This allows further editability of the layers and guarantees a proper shadow. If you chose PhotoShop format, for example. the shadow in Wings Platinum sometimes has a grayish color. For TIFF options choose the following:



LZW compression produces smaller files and option **Save transparency** generates the appropriate alpha channel for transparent display. Further information on transparency and alpha channels can be found in the documentation for your image editing software.

7. This completes the tile and allows you to combine it in Wings Platinum with many different background images as explained starting from item 16 in workshop Editing sequences of pictures and objects. How to adjust the size to match your motifs can be found under Motion: Position - Zoom - Rotation.

Info If you find that the shadow is still too dark or the font does not fit you can still change these without any problems. An elegant and interactive approach to this is described in topic External editing of media files.

Video image formats - correctly used

When it comes to editing videos, those who are used to working with pictures will hot on some peculiarities as to the picture format, which date back to the analog roots of video technology. Digital video technology partly uses different resolution for the X and the Y axis, which results in "rectangular" pixels. Videos produced by DV cams or video DVDs, as a rule, have a size of 720 x 576 (corresponding to 5 : 4), which, however, does not provide any indication as to the correct aspect ratio of the video image. Other than the video pixels, the aspect ratio is specified as a ratio of 4 : 3 or 16 : 9.

Info To be able to assess the following examples on the monitor, you must not use a monitor resolution of 1280 x 1024 pixels. Choose a resolution which corresponds to the aspect ratio of your monitor, e.g. this would be 1024 x 768, 1280 x 960 or 1600 x 1200 pixels for a standard monitor with an aspect ratio of 4 : 3.

DV and HDV videos

Copying the recordings of a video camera onto the hard disk, creates DV files with a picture size of 720 x 576 pixels or 1440 x 1080 pixels for HDV, respectively. Both formats do not feature enough pixels horizontally and must be stretched to the video aspect ratio to be correctly displayed. This is done by entering the aspect ratio in the Video Properties. The following modifications are made thereby:

DV Video (720 x 576 px)

Screen 4 : 3

The slightly egg-shaped wheels and the faces of the dancers show you that both videos are compressed when uncorrected (left), as the computer always assumes that the pixels are square. Only when you stretch the picture on the screen to 4 : 3 or 16:9, will the picture be shown in its correct proportions.

Video DVD

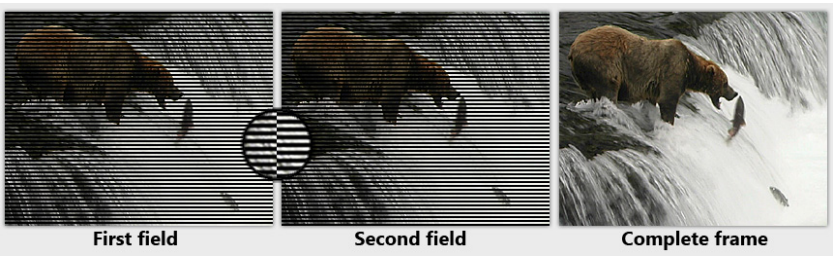
For video DVDs the situation is similar. You have created a screen with the required output format, i.e. 4 : 3 or 16 : 9 for your show. During MPEG-2 creation for DVD, Wings Platinum automatically adjusts the aspect ratios using a correction factor of 1.094 based on the standard ITU-R BT.601 for DV/D1 PAL resolution. This way the picture is correctly displayed when played on a DVD player. The steps from the screen in Wings Platinum to the TV monitor look as follows:

How the picture is displayed on the TV monitor depends on picture tube and device settings. Unfortunately, the picture is frequently truncated by TV monitors. Information on how to correct this problem can be found at Border for playback on TV screens.

For shows with a different aspect ratio, e.g. based on small format slides with an aspect ratio of 3 : 2, the same screen format with the corresponding aspect ratio is also used for MPEG/DVD creation. This causes black borders in the video for the picture to be displayed without any distortion.

Better video quality through deinterlacing

Most videos are based on interlaced images (TV/DVD, DV, partly also HDV and HDTV), which means that every individual video image consists of two fields consisting of lines, which were recorded with a time lag. This technology which is internationally called **Interlacing** originated in the analog video world and was introduced because 50 interlaced images per second allow for a smoother display of movement than 25 non-interlaced images or frames.



The disadvantage, on the other hand, is the flickering of fine, horizontal structures and an images with a slightly less homogenous look. A computer cannot really use interlaced pictures properly it converts interlaced pictures into a progressive picture. A video image based on two interlaced images results in frayed contours for horizontally moving objects due to the time lag of the two interlaced images. This is clearly visible in the greatly magnified example (bottom left). In the right picture, Wings Platinum has performed high-quality deinterlacing (adaptive method) which results in conside-

rably better quality. Information on how to improve your videos can be found at Deinterlacing of videos.

As mentioned above, a video based on interlaced pictures is called **interlaced**. When a video consists of non-interlaced images, e.g. cinema films and any DVDs produced on the basis of such cinema films, it is called **progressive**. The designations of video formats reflect the number of lines, the frame rate and way the image is created, e.g. **576/50i** (PAL-TV, 576 lines, 50 interlaced pictures), **480/60i** (NTSC TV, 480 lines, 60 interlaced pictures), **720/30p** (HDTV, 720 lines, 30 progressive pictures) or **1080i** (HDTV, 1080 lines, interlaced, without indication of the frame rate).

How to deal with volume and audio level

You may have noticed that there can be great differences in volume between pop music and classical music and even between your own recordings. This is due to the volume optimisation achieved by compressors and limiters contained in virtually all sorts of canned music, but usually not in your own recordings. ...Improving loudness through sound editing. In order to evalua-

te this rather subjective factor of loudness, Wings Platinum offers the so-called RMS Level. However, it must not be confused with the Peak Level which is required for correct audio level control. When creating your soundtrack please bear the following in mind:

- To create a soundtrack we recommend reducing the first pieces of music by 10 to 15 dB via the Object **Properties** dialog directly after adding them to the track. This provides enough scope for adjusting the volume of samples which appear to be low-volume, so as to achieve a harmonic arrangement.
- Adding sound object by sound object you should adjust the volume for each sample so that it fits harmoniously within all the other samples of the soundtrack. Sometimes it may be necessary to consider the RMS Level. See also Adjusting the volume.
- Before starting a session it may be a good idea to listen to what you have produced so far as a reference for your ears. Try listening to the sound track with the same volume setting at the amplifier.
- Take a break in time to avoid overtaxing your ears. Marathon sessions over hours are no good precondition for correctly evaluating location, sound or volume of the samples.
- After finishing the soundtrack, take a break and make sure you are fresh and awake before you listen to long sound tracks in one go. This is the only way to judge the harmony of the arrangement as a whole and to make corrections, if necessary.
- Only adjust the audio level of the soundtrack after finishing the project. This is how it is done.

When is it useful to export a file?

Wings Platinum usually works non-destructive, i.e. all editing steps can be modified or undone. The actual files on hard disk remain unchanged. When exporting files, however, new data are saved on the hard disk which also contain all editing steps for the objects. The following examples show that, despite this fact, exporting files may sometimes be useful:

Cutting comment versions

You only need to keep the very best comment versions that you produced on the basis of a raw recording. For this purpose it may useful to select particular comments and export them as individual audio files to the hard disk. After you have finished, you can delete the voluminous original file including all versions from the hard disk again.

Writing sound mix onto CD

Once you have finished creating a sound track or a radio play you may want to write it as a whole onto a CD. To do so, you will, first of all, have to export all audio objects into a wave file of 44,100 Hz and 16 bits. This file can then be written onto CD.

Exporting files to other programs

The export function can also be used when a sample prepared in Wings Platinum is to be used in a different program as well. Please consider the formats supported by the other program.

Saving computer power

Comprehensive sound arrangements with a high number of parallel sound objects and active Effect PlugIns may result in reduced computer speed for older models. Such passages can be exported and replaced by the exported file. If you activate Option **Replace original objects by exported audio file**, an object is automatically inserted at the corresponding position in the timeline.

Tips for video rendering

The right codec

For video rendering choosing the right video codec (**co**mpressor / **de-**compressor) is a decisive factor. It reduces the data volume to a tolerable amount, but also increases the rendering period and reduces the quality compared to the original picture. This can become a vicious circle, where compromise is the only way out!

Windows is usually supplied with a number of codecs. However, it is frequently useful to install further codecs, e.g. **DivX**, which is very fast in rendering, produces low data rates and offers satisfactory picture quality. The latest version can be found on the Internet at www.divx.com/divx. **Intel Indeo 5.10** renders quite sufficient quality but is considered to be outdated.

For superior video quality we recommend the **MPEG 2 codec** by MainConcept or the WMV codec by Microsoft which is based on MPEG-4 and allows good quality at a low data rate. See also MPEG-2, H.264 or WMV format?

Parameters for video rendering

Picture size

A larger picture requires longer rendering time and, consequently, produces a higher data rate. Moreover, playback requires increased computer capacity and a data source which maintains a constant data rate. The latter is particularly important for Internet applications. For most codecs, e.g. DivX and Intel Indeo 5.10 and WMV, pixels for height and width must be dividable by 4. This means that a picture with a resolution of 750 x 500 pixels would not be admissible, but only one with a resolution of 752 x 496 pixels. Below you can find out about the dependencies between required computer performance, processor clock and picture size for a video of 25 f/s produced with the DivX codec:

Processor clock 500 MHz ➔ 592 x 400 pixels

Processor clock 800 MHz ➔ 912 x 608 pixels

Processor clock 1200 MHz ➔ 1024 x 672 pixels

Processor clock 1800 MHz ➔ 1280 x 848 pixels

Processor clock 2500 MHz ➔ 1400 x 932 Pixel

In accordance with the computer configuration, sometimes even larger, but sometimes even only smaller picture sizes are possible. This depends on a variety of factors, as you will notice.

Frame rate

The frame rate has a direct effect on rendering duration, data rate and computing speed required for playback. Too low a frame rate results in

jerky dissolves or movements. For a dissolve show with still images 20 to 30 frames/second would be a good solution. For shows containing screen field movements, panning or zoom movements via high-resolution still images, you should choose a minimum of 30 frames per second or possibly 60 frames/s for fast movements - modern WMV codecs and fast computers easily come up to this task. When videos are to be integrated, too, it is a good idea to choose the original or double the original frame rate, i.e. 25 or 50 frames/s for integrated PAL videos. See also Media integration.

Key Frames

A video, just like a film, consists of a number of consecutive pictures. When a video is compressed, for some pictures only the keyframes (also called I-frames) are saved instead of the complete pictures. For all the other pictures, the codec only saves the differences compared to the previous picture, which has a favorable effect on the data rate. When there are longer intervals between the keyframes, the video is difficult to scroll and you may have problems starting it from any possible location. The default setting of the DivX saves one keyframe for every 300 pictures, which corresponds to an interval of 12 seconds at 25 frames/second. This has an unfavorable effect on scrolling, but allows a low data rate. In DV videos, on the other hand, each picture is one frame, i.e. it virtually consists of keyframes only. For MPEG-2, the keyframe interval is usually 15 pictures.

Data rate / compression quality

As explained above, the data rate depends on a variety of factors. Another one of these factors is the compression quality, which can be adjusted for some codecs. Avoid high values as the improvements in quality will no longer be visible and rendering will take unnecessarily long. Other codecs feature a data rate adjustment, which in turn has an influence on the compression when picture size and frame rate are predefined. The data rate actually produced also depends on the show (type of media, number and type of dissolves, etc.) and can not be specified exactly in advance. In DV videos, on the other hand, each picture is one frame, i.e. it virtually consists of keyframes only.

Keep experimenting

This is particularly true for video rendering. Usually, presets are a good basis for your own experiments. Start with shorter videos and smaller picture sizes and try out various settings until you have found the optimum solution. Choosing too large a picture size to start with will cause jerky playback and you may not be able to find out what parameter settings cause this. You may also have to consider that somebody else's playback computer may not be as powerful as your own computer. Do not push your computer to its limits. You may need some "spare capacity" during a presentation to avoid jerky display and intermittent sound and this might wreck your show.

By the way: Windows 2000/XP features a task manager which provides information on the system resources (open by right-clicking the task bar). This may come in handy for video playback tests. It will tell you about the available resources of your computer during playback. What is also important is the performance of the graphics card and the memory throughput. Tab "System Resources", however, does not provide sufficient information on this. Notebooks in particular may have distinct weaknesses in that respect ... See also Computer configuration and Optimizing the presentation PC.

Well, have fun Producing your video!

Valuable information about DVD systems

DVD standard has been around for some time, but in no other area have producers and syndicates managed to create such a lot of incompatible and competing systems and formats. That doesn't make it any easier either for us as software producer or for you as user. We would like to provide a few basic tips on to how to deal with this situation and on the usage of video DVDs.

DVD writer

Basically, every type of functional DVD writer installed in your computer will do for production of video DVDs. Depending on your type of writer you will have to decide on a certain type of blank DVDs, e.g. DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM etc. Of course, the chosen format should be compatible with the DVD player. But even the different reflectivity of the

various types of blank DVDs may be blamed for the fact that some video DVD can be read by one player but not by another.

In addition to compatibility between writer and player, some practical considerations may influence the format you choose. Finalizing DVD-Rs or -RWs, for instance, takes about three minutes, while it's only a few seconds for DVD+Rs or +RWs.

To those who are thinking of buying a new DVD writer, we recommend systems that can write on all sorts of blank DVDs and formats. In case of incompatibility problems you will then be able to simply use a different blank DVD or a different format.

DVD player as stand-alone unit

The DVD players to be connected to your TV set or your home cinema system are only compatible with certain formats, which are usually listed in the technical documentation. Older units, very often cannot read "homemade" DVDs. We have found that simple, low-cost no name players frequently offer higher compatibility than expensive branded equipment. As mentioned above, it may be quite useful to try out a different DVD format if you have problems reading a DVD.

Some DVD player have problems handling data rates of nearly 10 MBit/s and tend to slow down during playback. In this case you should reduce the variable data rate of the DVD presets, e.g. to 6500/5000/2500. This may cause a slight drop in quality but may help your DVD player to play the DVD without intermissions.

Please note that video CDs are only rarely recognized or played back without any problems by DVD players. So you'd better write the data of a video DVD onto a DVD.

DVD player software

For video DVD playback on computer you require a DVD ROM drive and DVD player software which installs a corresponding MPEG 2 decoder in the system. This player does not only allow you to play DVDs but also high-resolution MPEG 2 videos.

Installing several DVD players on one computer may cause problems. In this case several MPEG 2 decoders are installed in the system and a player may select the least suitable. You should therefore try to specify a decoder via

the Player Options. If this is not possible, uninstall any decoder that does not work properly.

Valuable information about video projectors

The quality of the data projectors plays an extremely important part for a high-quality image representation on the projection screen. Different from slide projectors, the image is only created in the projector by the image chips based on the display data. The image chips are therefore a highly important part of the projector. Together with the lamp, the prism/mirror system and the lens, they define the most important factors for a projected image: Resolution/sharpness, brightness, contrast and color rendering, but also fast signal processing, play an important role for HDAV.

Resolution and sharpness

For playback of high-end videos the projector should have a resolution of 1024 x 768 pixels or more. In addition to the number of pixels, it's also the design and the image chip quality that count. With transparent LCD panels the pixel structure is usually more clearly visible than with reflective DLP or LCoS chip technology. The manufacturers of high-quality LCD projectors try to reduce visibility of the gaps between pixels for LCD panels by incorporating microprisms in order to come as close to photorealistic image representation as possible.

Here are two examples for different pixel structures:

Sony LCD panels with 1024 x 768 pixels

JVC D-ILA chip technology with 1365 x 1024 pixels (similar to LCoS)

Of course, a high-quality projection lens will also add to the quality. What stands out is usually excellent sharpness even in the image corners as there are no flatness problems as seen in slides.

The following abbreviations have become established for particular resolutions:

VGA (640 x 480 pixels), outdated standard

SVGA (800 x 600 pixels), for Office applications and TV/DVD video

XGA (1024 x 768 pixels), for highly sophisticated data and video presentations

WXGA (1280 x 720 pixels), HDTV at a lower resolution

SXGA (1280 x 1024 pixels), CAD and high-end video

SXGA+ (1400 x 1050 pixels), CAD and high-end video

UXGA (1600 x 1200 pixels), CAD and high-end video

WUXGA (1920x1200 pixels), CAD and high-end video, HDTV at full resolution

QXGA (2048 x 1536 pixels), HDTV and high-end video

Brightness

In terms of brightness, video projectors nearly always exceed slide projectors. Even small devices with a weight of roughly three kilos produce a very bright picture. The secret lies in lamp technology. These video projectors use metal vapour lamps, so-called UHP lamps, which are highly pressurized and have an excellent degree of efficiency. They convert about 70 % of electrical energy into visible light, whereas for halogen lamps it is only 20 %. The rest is radiated as heat.

There are data projectors with a rating ranging from 800 to 20,000 ANSI lumens and more. The term ANSI Lumen stands for the measure used to record the amount of brightness as standardized by the American National Standards Institute (ANSI). It consists of measuring nine fields distributed across the projection image and forming a mean value.

The required projector brightness depends on the projection environment and the desired image size. In well blacked-out rooms with a luminous flux of 1500 ANSI lumens an image width of more than 5 m is possible. The larger the projected picture, the darker it gets. If you divide the luminous flux by the size of the projected picture, you receive a value in lumens per square meter. The following rule of thumb with reference to the ambient light applies:

- less than 100 lumens/m^2 → allows only a limited projection quality even in dark rooms

- 100 to 250 lumens/m^2 → black out room well enough
- 250 to 400 lumens/m^2 → room need not be completely dark
- more than 400 lumens/m^2 → allows daylight projection although room should be protected from direct sunlight

Lamp life

Modern high-pressure lamps have a very long life ranging from 1,000 to sometimes 3,000 hours. Compared to this, the halogen lamps of slide projectors only have a lifetime of 35 to 200 hours. Data projector lamps, on the other hand, are distinctly more expensive. According to the chosen type, they are about 400 to 700 Euros. Normally, high-pressure lamps last forever, although their luminosity will drop over the years. This is why manufacturers always specify the lamp life and the time after which the lamp is reduced to 50 % of its original brightness. Most data projectors have an operating hours counter to control this factor.

Color rendering and contrast

The achievable image quality essentially depends on contrast and color rendering. Only high contrast allows nuanced image display rich in tonal value.

Contrast

Even more important than the brightness is the contrast ratio, i.e. the difference between the brightest and the darkest tonal value to be displayed. In projecting a brilliant slide we can achieve a contrast ratio of 1000 : 1, while video projectors have a contrast ratio between 300 : 1 and more than 2000 : 1 depending on the model. Devices with DLP chip, in particular, show very high rates, which can also be reproduced in practical tests. For good and photorealistic display of pictures the video projector should have a contrast ratio of more than 800 : 1. With too low a contrast ratio, the projector, for example, may not be able to display black. It then looks as though there was a gray veil over the picture and dark areas frequently lack contrast. Make

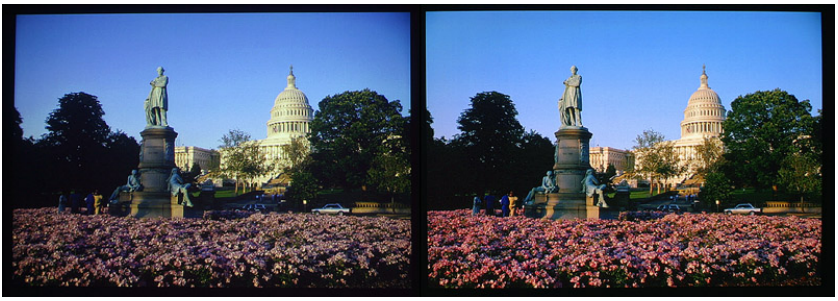
sure that contrast values are determined in accordance with ANSI, otherwise they are not comparable.

Color rendering

Color rendering essentially depends on the image chip and the lamp used. Most image chips, in particular LCD panels, are not able to display all tonal values equally well. And, what makes things even worse, the most frequently used UHP lamps show a discontinuous spectrum, i.e. some colors are stronger than others.

Some color hues are critical for data projectors, such as red and yellow, for example, and can cause a particularly unpleasant effect with regard to skin colors. Data projector manufacturers are trying to optimize color fidelity through intensive color signal processing. Systems with three separate image chips, e.g. one for each of the colors red &endash; green &endash; blue, have a distinctly better basis for color rendering than one chip systems. For DLP systems, however, the color wheel, which is responsible for color creation, has been distinctly improved. Modern DLP projectors, such as the Optoma H56, for example, now have a very fast color wheel with six segments (RGBRGB) which provides for very balanced color rendering. Be warned of older DLP video projectors with 4-segment color wheel containing a white segment (RGBW). These devices feature very moderate color rendering with a distinct weakness in red and yellow as well as mediocre color gradation. However, there are also a few video projectors which allow deactivation of the white segment to improve color rendering. This is the case for all Optoma projectors with 4-segment color wheels.

Projectors with a special emphasis on color fidelity and high contrast very often have a relatively low luminous flux. To achieve optimum color rendering, Xenon lamps are used for high-end applications, which have a similar spectrum in the visible range than daylight. Most JVC D-ILA projectors feature these types of lamps. On the last Photokina 2002, JVC has shown that it is also possible to build low-cost high-end projectors using modern NSH lamps with optimized spectrum due to vaporization and other measures, e.g. the JVC DLA-SX21 for about 10,000 Euros.



Left: normal system with UHP lamp, right: color-corrected JVC system

Signal processing

Virtually all data projectors are able to play back analog video signals from video recorder or DVD player clearly and fluently. They interpolate the low TV resolution of a maximum of 768 x 576 pixels up to image chip resolution. This is where the first quality differences become apparent. Most data projectors have no problems projecting high-resolution still images.

However, the situation changes abruptly when it comes to projections of high-resolution moving imagery, which is usually the case for HDAV. Many projectors have a signal processing system which is just not able to cope with the huge amounts of data that need to be passed on to the image chips. They are too slow, so that the movement becomes jerky. We have found the JVC DLA-SX21 to perform very well for playback of highly demanding HDAV shows, which can optionally be put into a particularly effective signal processing mode (60 Hz). Also Canon XEED SX50 in an HDAV optimized version had no problems panning.

For production you should use a tube monitor for reference purposes. Being an analog device it is able to display the video signals virtually without any delay &endash; which is not true for LCD monitors. For an analysis of moving images a tube monitor will always put you on the safe side.

Connectors

Data projectors normally accept a variety of signals. What is important is a VGA port (analog RGB signal) for connecting the graphics card of a computer or notebook. More up-to-date is a DVI port (digital RGB signal), but it is only supported by a few graphics cards and notebooks. Due to the fact that no digital-analog-digital conversion is necessary, this type of port offers better quality. A further advantage of DVI is communication between the devices. The graphics card dialog, for example, automatically offers the resolution supported by the video projector (important for SXGA+ i.e. 1400 x 1050 pixels). Standard DVI cables are limited to 3 m in length. Longer distances require special solutions, e.g. special high-quality cables, repeaters to refresh the signal allow extension by 5 m each, or DVI-CAT5-DVI extenders allow up to 30 m for UXGA via a standard low-price network cable).

HDMI ports have been introduced for the new generation of HDTV units. Image transfer is compatible with DVI, but HDMI can additionally transfer audio. HDMI connectors are very compact; there are HDMI-DVI adapters and vice versa. Those who want to digitally transmit HD-DVDs to a video projector should also make sure that HDCP standard for secure encryption and copyright protection is supported. Otherwise the player may refuse digital playback.

Analog VGA connections up to 30 m are relatively easy, provided a high-quality, low-attenuation cable is used. The loss depends on length and quality of the cable, but also on the resolution used. The higher the resolution, the more emphasis must be placed on this. A DVI-I port (**I** = integrated) additionally offers a VGA connection via an adapter.

Other video ports, such as component or S-VHS ports do not play a role in presenting high-end videos as they use interlaced, low-resolution TV signals. Also audio inputs for integrated loudspeakers are of little importance. They do not offer the high quality required for professional presentations. A USB port for mouse control and projector configuration via the computer, however, can be quite useful.

Lenses and setup

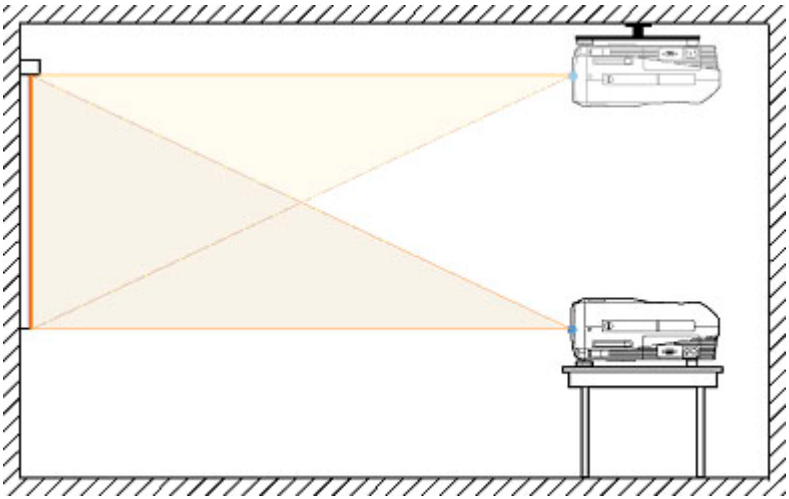
Virtually all data projectors are equipped with a zoom lens, which, at a medium focal lens setting, corresponds roughly to the image angle of a 90-mm lens for 35-mm slide projectors. For data projectors, a projection ratio,

which is the ratio of the projection distance to the image width, is normally specified for the lenses. So a lens with a projection ratio of 2 : 1 produces a 3 m wide image at a distance of 6 m. For zoom lenses, specifications such as 1.85 – 2.35 : 1 can be found.

Projections over larger or extremely short distances require exchangeable lenses. These are only available for projectors in the medium or upper price range. For some models, special lenses are available, e.g. wide-angle lenses (0.8x) and telelenses (1.2x). For the JVC DLA-SX21 telelenses will be available shortly, which have been developed in a cooperation between AV Stumpfl, JVC and Schneider.

Setting up the projector

As opposed to slide projectors, virtually any data projector has a fixed image offset. When the projector is horizontal, the bottom edge of the projected image is at about the height of the projector. The advantage is that the projector is at the bottom and does not obstruct the view to the projection screen on the one hand, and that the image remains undistorted, on the other. As an alternative, the projector can also be mounted to the ceiling. If you can't help inclining your projector, the trapezium distortion caused be this can be corrected digitally by the projector. This, however, may result in blurring due to the conversion of the image.



Fixed image offset allows the video projector to be placed on a table or mounted to the ceiling.

What is more flexible and better is keystone correction via a real and adjustable lens shift system. Usually, it allows motor adjustment via the IR remote control unit. In this case the height of the projector location can also be chosen arbitrarily, which may be an advantage for complicated or fixed projection conditions.

Special types of installation

For permanent projector installation in a room, ceiling mounting is the preferable type of installation. For this purpose the projector is attached to the ceiling up-side-down by means of a special bracket. The projected picture will be upside down as well, so it has to be inverted by the projector software, which can easily be done via a setting in the menu. Ceiling mounting requires a special bracket and the projector must allow rotation of the picture.

For rear projection there are lenses with a projection ratio of 1:1 for short distances without image offset. This means that the projectors are centred and aligned at right angles with the rear projection screen. As the image is displayed right-left reversed, the projector must be able to flip the image.

Recommendation

In principle, any data projector with a resolution of 1024 x 768 can be used for HDAV presentations. Those who make very high demands to sharpness, brilliance and color rendering should go for projectors with a resolution of 1400 x 1050 pixels, e.g. Canon XEED models SX50, SX60, SX80 and SX7 (starting from Euro 2,600.--). The highest "affordable" resolution class (EUR 7,000,- and up) is 1920 x 1200 Pixel, which can be provided, e.g. by Canon XEED WUX10 (3500 lumens), Leica Pradovit D-1200 (2000 lumens) or Panasonic DZ6700 (6000 lumens). Those who do not want to spend so much money will also find a few interesting models among home cinema video projectors, which are available at prices starting from Euro 1,000.-- but which can only be used for image widths of up to about 2 m. It is important to know that many video projectors have been designed for computer and business

presentations (PowerPoint, etc.) and focus on brightness instead of true-to-nature, photorealistic image representation. Home cinema projectors are slightly better when it comes to image representation, but very often they do not have the necessary brightness. Moreover, they usually feature an image chip with a 16:9 format, which may prove an inspiration for your creativity, but would mean inefficient utilization of the resolution for 4 : 3 pictures.

Try to get as much advice as possible from HDAV dealers and test the video projectors with your own shows. Always use presentation data at a resolution that corresponds to the physical video projector resolution to avoid interpolation loss.

Problems ...

If you have any problems...

If there is anything that does not work as explained in the Help Menu, check first of all, whether your Wings Platinum version actually supports the corresponding function. See Versions and Licenses.

Tips and problem solving measures

- Answers to frequently asked general questions can be found in the FAQs.
- A Wings Platinum update is always recommendable...See Software Update.
- We are sorry to say that the latest version may still contain some known problems and faults that we have not yet been able to resolve. The corresponding information can be found in the Online Help topics.
- Wings Platinum records a number of processes and messages in the log file, so as to allow problem analysis. See Displaying log information.
- Problems that are probably caused by your PC can be analyzed by means of the System Info.
- For network problems involving your Wings Platinum PCs function Statistics and Diagnosis may be quite useful.
- In the event of a Wings Platinum crash, you can send us a report to analyze the reasons for the crash. See Sending a crash report.

Typical problems

If all the information above should not help to solve your problem, you will find some solutions for typical faults below:

Further answers to frequently asked questions can be found on the Internet in the Stumpfl user forum, under multidisplays.freeforums.org (Englisch) and on the Stumpfl FAQ page.

Unfortunately, there are a number of problems in Wings Platinum which we have not been able to resolve in this version. See Known problems.

We'll certainly help you ...

if all this has been without success ... Just turn to our Support for help. See Support Function.

Software Update

This function offers two very simple ways to update Wings Platinum: Directly via the Internet or via update file.

Info If you want to update all computers within a presentation network, go to Updating the entire presentation network.

Via Internet connection

1. Start up Wings Platinum. **Important:** With Windows Vista or Windows 7, you need to start Wings Platinum for the update as follows: Right-click the link and select **Run as administrator**.
2. In the main menu help click **?** and **Software Update**, followed by **via Internet...**
3. If a more topical version is available start updating by clicking **OK**. Before that you can click on **Detailed list of modifications** and get some information about new developments.
4. After the file download a note is displayed saying that Wings Platinum is terminated and restarted again in its new version. Confirm with **OK**.
5. For a user-specific online help the preferred help version should be downloaded separately. Otherwise the help will refer to **All information**. See Separate update of the online help.

Via Update File

1. Using a different computer, download an Update File from the Internet. Make sure to choose the correct type of file: Full Version (Platinum.upd), Basic Version (Platinum_Basic.upd) or Demo Version (Platinum_Demo.upd). It has to correspond to your Wings Platinum version installed.
2. Start up Wings Platinum. **Important:** With Windows Vista, you need to start Wings Platinum for the update as follows: Right-click the link and select **Run as administrator**.
3. In the main menu help click **?** and **Software Update ▶ via Update File...** Now choose the Update File you downloaded before. It must be available on a data carrier or LAN for the Wings Platinum computer.
4. If the update file is a later version than the installed version, proceed with the update by clicking **OK.** Following this the program is updated, with Wings Platinum being briefly terminated and automatically restarted.
5. After copying the file a note is displayed saying that Wings Platinum is terminated and restarted again in its new version. Confirm with **OK**.
6. For a user-specific online help the preferred help version should be downloaded separately. Otherwise the help will refer to **All information**. See Separate update of the online help.

Info

- When you update Wings Platinum via the Internet as opposed to an update from CD-ROM, the help version **All information** is updated and used. This help contains a lot of information for advanced and professional users. It would therefore be a good idea to download your preferred help separately. See Separate update of the online help.
- In some cases, the full Wings Platinum installation may be required. However, during the update process you will provided with the corresponding information.

Separate update of the Online Help

When Wings Platinum is updated via the Internet only the global help containing all the information is updated. A user-specific help version must be downloaded separately.

This is how you proceed:

Go to the Stumpfl website, select the corresponding help version from the five available versions and download it. The fastest and simplest way to do so is via the following link: http://www.stumpfl.com/LinkE/WPHelp.html.

Copy the downloaded help file (***.chm***) into the Wings Platinum program folder to the following location:

...AV Stumpfl\Wings Platinum 4\Help\English

Old help versions must be overwritten without Wings Platinum being started.

Now start Wing Platinum and enable the downloaded help. In the main menu click Help ? and click **Select help...** The options dialog will appear listing all the available help versions.

Select the help that you have just downloaded and copied. Leave the options dialog by clicking **OK**.

Info

- **Attention:** Any problems in displaying topic contents may be due to Windows blocking the contents. **This is how you can unblock the Help file**.

  Right-click the Help file *.***chm** and select **Properties**.

  At the bottom of tab **General** click **Allow** next to **Security**.

  After closing the dialog by clicking **OK** the contents of the Help files should be displayed.

- There some demo videos showing examples contained in the help topics. They can be found in the program folder under **Help\MMContent**. When downloading from the Internet these files are not updated or

supplemented automatically but need to be downloaded separately and copied to folder **MMContent**.

See also

Optimum utilization of the Help topics

Support Function

If you have any problems using Wings Platinum or if any errors crop up, please send an email to the Support Function. This is how it is done:

1. In the main menu help click **?** and menu **E-Mail to Stumpfl Support**.
2. In the E-Mail popping up describe the error and send off your mail.

This way our support team will receive your project file, a log file containing the last editing steps and the initialization file with the current settings in addition to your error description. This information forms a sound basis and ensures that we can provide the best possible help.

How is my Support Mail answered?

- Users of **Wings Platinum with installed modules** will receive an answer directly per a-mail.
- Users of the **Demo Version** will receive an answer on the FAQ Forum on our website a few days later, which also provides further additional information.
- Users of **Wings Platinum Basic** are not entitled to any support, as this is a free version.

It may also be advisable to look at the Website of the Stumpfl User Team, which hosts a forum with a great number of professional users. For users of multidisplay applications, the English website multidisplays.freeforums.org is a good source of information.

Telephone Support via our Hotline ...is also possible, provided the following preconditions have been met:

1. You have a Wings Platinum Module Version with dongle.

2. You have sent an e-mail to Stumpfl via the Support Function beforehand.
3. You cannot solve the problems by carrying out the suggestions received by AV Stumpfl via e-mail.

Our telephone support is available from Monday to Friday from 8.00 a.m. to 10.00 a.m. CET (UTC + 1:00). For inquiries on the phone, always have your 4-digit serial number available which can be found on your copy protection dongle or in the Wings Platinum Info Dialog.

Sending a crash report

Wings Platinum is a very stable program, as many users keep confirming. If Wings Platinum crashes, it has usually got to do with other components such as drivers or operating system routines. In order to find out about the errors caused by Wings Platinum we have developed a routine to record the last activities and send us a report.

Let's have a look at what might happen:

1. Wings Platinum crashes, for whatever reason...
2. During the last milliseconds, the project information is automatically collected and saved in folder **...\Wings Platinum\Report**.
3. Following this, an entry dialog is displayed asking you to describe the circumstances of the system crash.
4. Check the box below if Wings Platinum is to restore the project. **Important:** Whether the project is still in working order depends on the circumstances of the crash and needs to be verified by you before you continue.
5. After you have made your entries, click **Send report now**. If this fails or if you prefer to send the report manually from a different computer you can access the file ***report.zip*** in the following folder:

   ...Documents and Settings***_User name_**\Local Settings\Application data\AV Stumpfl\Wings Platinum 4**Report**

   Please send the file ***Report.zip*** to ***support.wpc@stumpl.com***. It contains important information that can help us analyse and solve the problem.

Info

- The information contained in the report is exclusively used for error analysis and should help us locate the problem on your computer. This way we can improve the Wings Platinum operational reliability even further.
- Among other things, the last project status is saved as ***Report.ptp***. Therefore, you can also try to open this project at a later time. Whether the project is still in working order depends on the circumstances of the crash and needs to be verified by you.

Displaying log information

The log file contains all working steps performed in Wings Platinum and can be used for error analysis in case of problems.

Showing log entries

- In the bottom right-hand corner of the program window click tab **Log**. In addition to the date and the time, it also contains the type of action and the purpose. Please note that the latest entries can be found at the end of the list. The last entry is shown automatically unless function **Scroll automatically** has been disabled.
- Current log entries referring to errors, warnings and information are displayed in the info line at the bottom right corner of the program window. This information remains visible even if tab **Log** is not in the foreground.

Copying log information

- Right-click some free space on tab **Log** and select **Copy support information**. Following this, all the log information but also any other information such as the properties of imported videos are copied to the clipboard. This information can be copied and pasted to a text document or directly to an e-mail, e.g. via the key combination **Ctrl** and **V**.

Exporting log information as CSV file

- Right-click some free space on tab **Log** and select **Export as CSV file**. In the dialog box, enter name and target directory for the CSV file and click on **Save**. Following this, all the log information but also any other information such as the properties of imported videos are exported to A CSV file (comma-separated values) which may be opened in MS Excel, for example.

Deleting log entries

Right-click some space on tab **Log** and select

- **Delete previous entries** ...following which all entries older than the one you clicked on will be deleted.
- **Delete all entries** ...deletes all log entries.

Info Only the visible entries will be deleted. When deleting the entries Wings Platinum stores all log entries in separate files in folder **Log**. See also Extras - Open folder.

Statistics and Diagnosis

This dialog informs you about the required storage capacity, the type and number of files, tracks and objects for a project. In addition to this, it also offers a number of diagnostic functions, e.g. for Wings Platinum PCs within a network.

1. Click on **Extras - Statistics/Diagnosis...** for a dialog box to open up. As an alternative, you can open the dialog by pressing keys **Ctrl** + **D**.
2. On the left, select the corresponding category **Pool**, **Timeline** or **Network,** for the corresponding dialog to appear. For **Network** there is also the subcategory **Graphic display**. It serves for analyzing the clock rates of multidisplay PC within a network.

See also

Sorting files in the Media Pool

Configuring a presentation network

Advantages and limits of the SmartSync Engine™

Missing information

Should any information provided in the Help topics be insufficient for working with Wings Platinum or be unclear, please inform us about this. This is the only way to improve the Help system. Thank you!

Please send your suggestions via email to the Help author or directly to us.

Checking the computer configuration

As a rule, most modern computers are efficient and powerful enough to cope even with highly demanding tasks. However, sometimes there may be faults due to incorrect settings, missing drivers or incorrect computer configurations.

Activating Ultra-DMA Mode

Modern hard disks and CD/DVD drives need to be run in Ultra DMA Mode to develop their full potential. Deactivating this mode might even cause intermittent sound problems. This is how you can check the settings:

Windows XP

1. Click **Settings** – **Control Panel** – **System** – **Hardware** - **Device manager** and then the plus in front of **IDE ATA/ATAPI-Controller**.
2. Right-click **Primary IDE channel**, select **Properties** and click tab **Extended properties**.
3. **DMA, if available** must be chosen for transfer mode; in the field below **Ultra DMA Mode** must be displayed as transfer mode. This setting should be the same both for unit 0 and, if applicable, for unit 1 - provided that a drive is connected.

4. The same way, you also check the **Secondary IDE channel.**

Info

- If, despite correct settings, file access is slow or problems with intermittent sound should occur, install the current version of a suitable DMA driver. Installing the current driver version is always a good thing to do and a basic prerequisite to allow your computer to develop its full potential. The current driver can be downloaded from the website of your main board producer. It is important that the driver matches the main board type.

Correct adjustment of virus scan

Another reason for poor hard disk performance or for intermittent sound might be anti-virus programs which keep searching for viruses when opening files (this is mostly done in the background without you noticing!). Adjust your anti-virus program so that it does not interfere with your work or simply deactivate it while you are using Wings Platinum.

Adjusting the color depth

In the case that pictures and videos are displayed showing unnatural colors or color jumps, too low a color depths may have been set. This is how you set a suitable color depth:

1. Right-click a free area of the desktop (Windows background), select **Properties** and tab **Settings**.
2. Under **Colors** click on and select **True Color (24 bits)** or, even better, **True Color (32 bits)**. If your graphics card does not have sufficient frame buffer available, resolution may be reduced.

Graphics card

For smooth uninterrupted video playback a high-quality, fast graphics card is extremely important. Onboard graphics card very often do not have enough

memory to do this job properly. This is particularly true for cases where these cards do not have their own memory but use shared memory only, so that the general computer performance may be reduced by up to 50 per cent. Usually, a normal computer can be rigged up by installing a separate graphics card. For notebooks this is not possible. So please make sure when buying a computer that the graphics card is integrated and has a separate graphics memory.

Problems and solutions

Program start / Installation

No appropriate dongle could be detected

The message **No appropriate dongle could be detected!** upon starting Wings Platinum

may be due to four reasons:

1. The dongle is not or only incorrectly plugged in.

   Solution: Check whether dongle is plugged in properly.

2. You have entered the wrong enable code.

   Solution: Enter the enable code. Serial number and the enable code of Wings Platinum 4 can be found on the back of the Wings Platinum box.

3. You do not have administrator rights for your computer.

   Solution: Configure Wings Platinum for your user account. See Using Wings Platinum without administrator rights.

4. The dongle driver is not correctly installed or is incompatible with an old driver.

   Solution: Uninstall all driver components and reinstall the driver.

   1. Remove all USB devices incl. any cordless mouse that may possibly be used by disconnecting their USB plug. After successful operation you can plug in the cordless mouse again.

2. Double-click ***SSDCleanup.exe***, which can be found on the Wings Platinum DVD in folder **Software\Sentinel Driver 7.4.0\Cleanup Windows 32 Bit**. When a Windows 64-bit version is used, double-click file ***SSDCleanupx64.exe*** in folder **Cleanup Windows 64 Bit**.

   Attention: Please note that this tool removes all Sentinel dongle drivers. I.e. You may also have to reinstall the drivers for any other *Sentinel* dongles used on your computer.

3. Follow the instructions and restart the computer when asked to do so.

4. Following this start up Wings Platinum after which the driver can be reinstalled.

Dongle could not be initialized

The error message **Dongle could not be initialized!** is an indication that the dongle driver was not properly installed.

Solutions:

- Terminate Windows and restart your computer. Start up Wings Platinum and have the driver reinstalled.
- If, after this, Wings Platinum cannot be started, proceed as explained in topic **No appropriate dongle could be detected**.

Error – d3d9_40.dll not found

When Wings Platinum or the EXE presentation does not start up and a message is displayed saying that file **d3d9_40.dll** has not been found, the current DirectX version is not installed on your computer.

Solution: Install the current DirectX version for your Windows operating system, i.e. **Direct X 9.0c of November 2008**. It can be found on the Wings Platinum DVD or on the Microsoft website.

Info If you are using file ***directx_nov2008_redist.exe*** for Direct x installation, please consider the following:

- Create a new folder somewhere on your hard disk and name it ***DX***, for example.

- Double-click file ***directx_nov2008_redist.exe*** and enter the previously created folder **DX** as target for unpacking.
- Following this you will find the file ***DXSETUP.exe*** in folder ***DX*** which you can double-click to start the actual installation.

Wings Platinum does not start correctly

If Wings Platinum does not start properly but no error message appears either, this may be due to the fact that Wings Platinum is searching for the master computer in the network. The time the search takes depends on the network configuration. The waiting period, however, may take several minutes and is often a nuisance for the person who has to wait.

Solutions:

When the computers are linked up with the network...

- Start the master including Wings Platinum and enable the network connection so that the button is depressed or is highlighted in gray.
- Then start the computer with the additional license or the slave computer.

When there is not link between computer and network...

If no network connection can be established for the computer because you are intending to present at a different location using an additional license you should disable the network connection before you start Wings Platinum. This can be done in file **Disable Platinum Network.reg**, which is located in the program folder under **...\My Documents\AV Stumpfl\Tools\Wings Platinum 4 Settings**.

Info Please bear in mind that this procedure does not work with Windows 98/ME.

This is how you proceed:

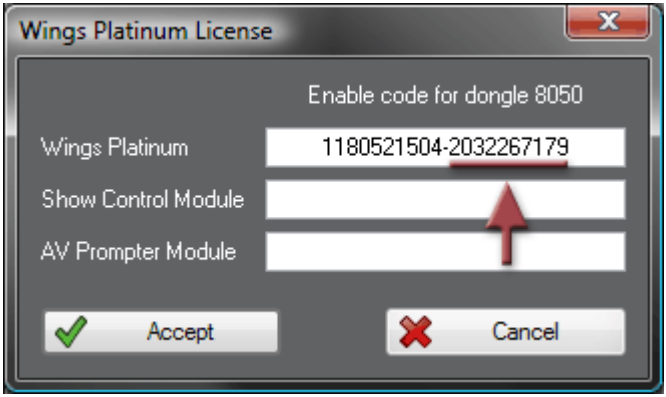
- Make sure that Wings Platinum has not been started up yet and double-click file ***Disable Platinum Network.reg***.

- Confirm the question whether the information is to be added to the registry in the positive (**Yes**), followed by clicking **OK** in the next dialog.
- Now start up Wings Platinum.

The effect is that Wings Platinum now starts with a disabled network and there will be no search for the master computer. If you want to use this method more frequently you can create a link on the desktop taking you to file ***Disable Platinum Network.reg***.

The Enable Code Dialog keeps popping...

Continued prompting for entry of the enable code during program start indicates an error in the second part of the enable code. This part of the enable code enables the corresponding license, e.g. **Starter**, **Advanced**, **Pro**, etc.



Solution:

5. Check correct entry of the second part of the enable code. The enable code can be found on the back of the black box containing Wings Platinum 4.
6. Click **Accept** and confirm the next message by clicking **OK.**
7. Restart Wings Platinum.

Should a start-up of Wings Platinum be impossible although the enable code was entered correctly and the dialog keep popping up, ask our support service to check the enable code.

Black screen upon starting....

Should the monitor be completely dark upon starting Wings Platinum, the screen window is presumably set to full screen mode.

Solution: Double-click or press the **Esc** key (twice, if necessary).

The Basic License cannot be enabled...

Even though the enable codes were entered correctly the Basic version could not be enabled and Wings Platinum does not start up or an error message appears.

Solution: Enter the enable code and your name exactly as you received them from us. Wings Platinum Basic can only be enabled when both entries are made correctly.

Using Wings Platinum without administrator rights

If you want to use Wings Platinum as **user**, i.e. via a user account with restricted rights, you should bear the following in mind:

1. For the duration of the installation, the user account of the future Wings Platinum user must be granted administrator rights.
2. Then register as a user and install Wings Platinum.
3. After the installation take away the administrator rights again.

An old project cannot be opened

Older projects created with Wings Platinum versions earlier than **1.18** (February 2003) cannot be opened by means of the current version. This applies both to projects and to project templates.

Solution:

1. Install a Wings Platinum version up to **1.31** on top of the existing installation. If you have no such version, get in touch with us and we will send you a CD-ROM for your installation.

2. Now open the old project and save it again (***ptp*** file update). Take the chance to update any other older projects you may still have.
3. Finish by reinstalling the current Wings Platinum version and you will then be able to open the updated projects.

General

An old project cannot be opened

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2. Now open the old project and save it again (***ptp*** file update). Take the chance to update any other older projects you may still have.
3. Finish by reinstalling the current Wings Platinum version and you will then be able to open the updated projects.

Access to the project is not possible...

When a project cannot be edited or saved as usual, or the Options Dialog can't be opened, it may be protected against unauthorized edited. This means that the following functions are blocked:

- Saving the project and Undo/Redo Function
- Modifying the settings in the Options Dialog
- Export functions for video, EXE presentation, Audio CD, Video DVD and FlashCard
- Group tracks cannot be opened or closed
- Control Panel fullscreen mode can only be terminated by pressing **Shift** + **Esc**, followed by entering the corresponding password.

Solutions:

- Enter the password for legitimization. See Legitimization for editing protected project.
- Permanently remove password protection for the project. See Removing password protection.
- Restart Wings Platinum and load a project that is not password protected.

Project cannot be saved...

When a project cannot be saved, it may be protected against unauthorized edited.

Solutions:

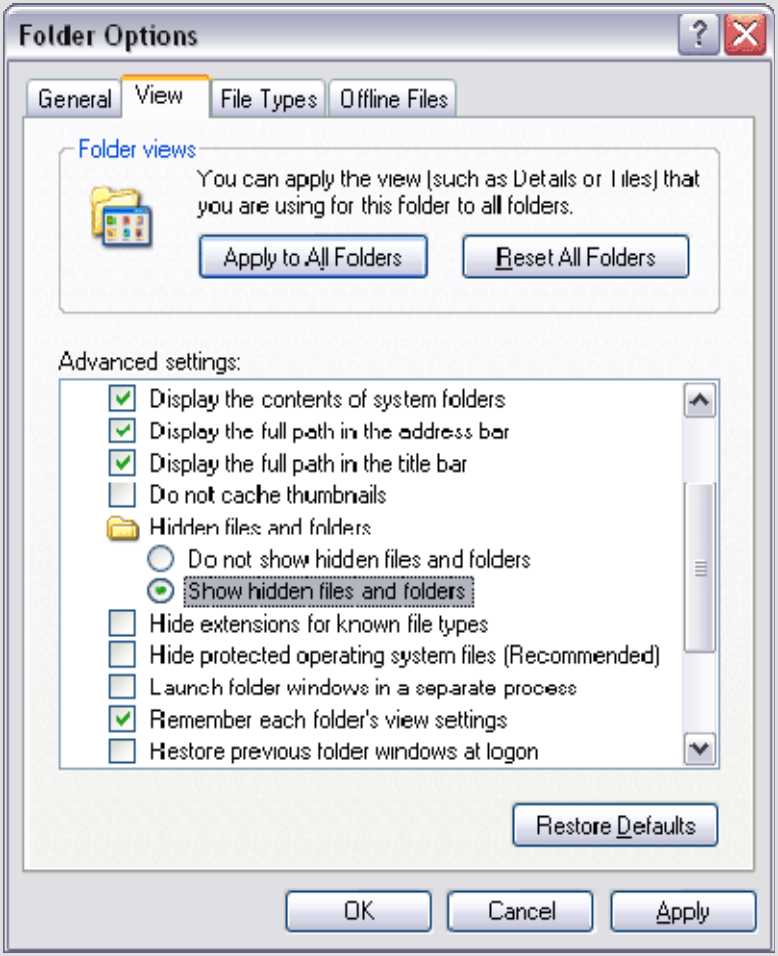
- Enter the password for legitimization. See Legitimization for editing protected project.
- Permanently remove password protection for the project. See Removing password protection.

Folders are missing or are not displayed in Windows

Should you be unable to find some folders, such as **Application data** or **Local settings**, these folders may not be displayed by Windows. The corresponding setting can be changed in the Windows Explorer Options:

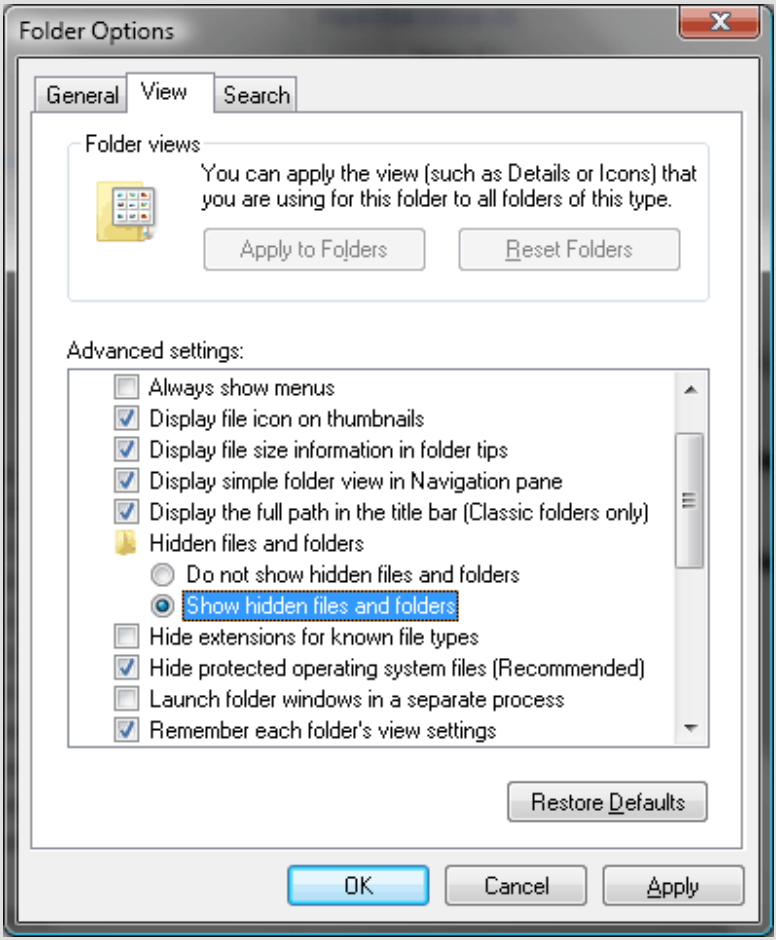
Windows XP

1. In the Windows Explorer, click **Extras** - **Folder options...**
2. Select tab **View** and scroll down field **Advanced Settings**.
3. Enable **Show hidden files and folders** and folders and click **OK**.



Windows 7 or Vista

1. In the Windows Explorer, click **Organize** and select **Folder and Search Options**.
2. Click tab **View** and scroll down field **Advanced settings**.
3. Enable **Show hidden files and folders** and click **OK**.



Why are the tracks not visible?

If the tracks in your project suddenly disappear you may have closed the Timeline window accidentally. This is how you can open it up again:

- In the Media Pool, click category **Timelines** and double-click the required timeline.
- Click button **Display** to disply the corresponding timeline.

Following this the tracks should be visible again.

Playback cannot be started

If playback does not start or the message "The currently used device identification is outside the admissible range for your system" appears this may be due to the following reasons:

1. The computer does not have a functional sound card, or none has been selected for Wings Platinum.

   Solutions:

   - Install a sound card including driver and select it under **Options** &endash; **Global Options** &endash; Sound cards.
   - If you do not need any audio playback, you can use the PC clock for synchronizing or timing. See Timeline properties.
   - For sound cards or interfaces with digital inputs, the problem may be due to the fact that no valid audio signal is applied to the digital input. See also Tascam US-224 refuses audio playback.

2. Playback may also fail when Mode **Timecode Synchronization** was chosen for the timeline but no Show Control Module is installed.

   Solution: In the timeline properties choose **Audio** or, in exceptional cases also **PC clock** for synchronization. See Timeline properties.

Playback stops prematurely...

If playback stops prematurely this may be due to the following reasons:

- The show contains a redundant pause, stop or reset marker.

  Solution: Disable all marker tracks and check whether playback continues at the corresponding position. Remove the redundant marker by right-clicking it and selecting **Remove**. See also Marker.

- The location where playback stops contains an erroneously coded MP3 file.

  Solution: Try exporting the MP3 files in wave format (*.***wav**) and use this file instead of the MP3 file. If export is impossible, this MP3 file cannot be used. See Exporting sound objects.

Notebook freezes during presentation

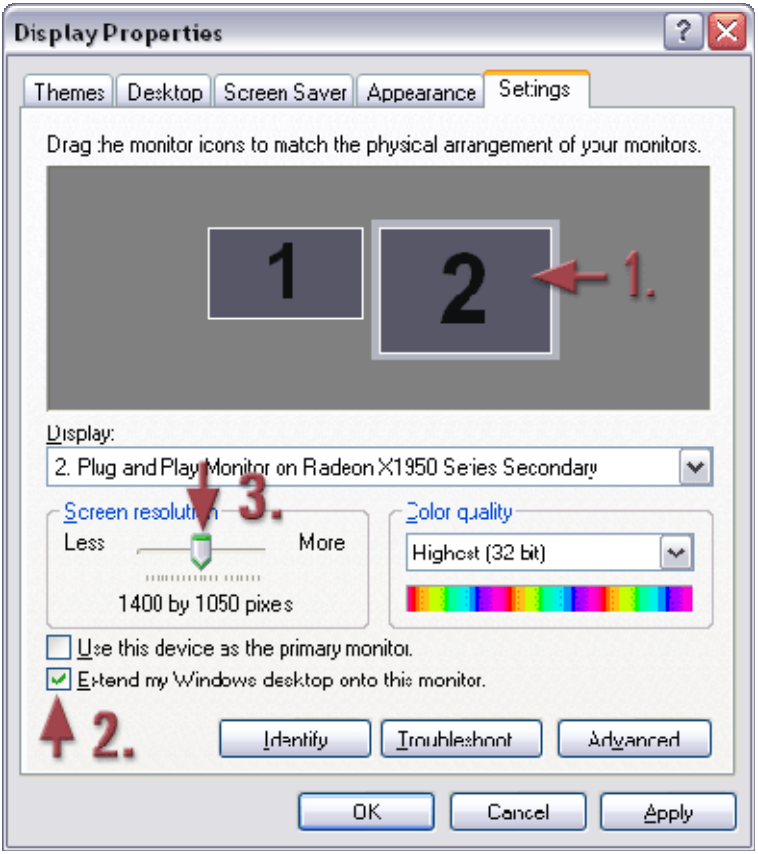
If the screen contents are played without any problems on a notebook while editing and scrolling but after starting the presentation by pressing the **F5** key the notebook freezes, this may be due to the following problems:

Your notebook has a display with a lower resolution than the video projector used and the higher video projector resolution is set in the graphics card dialog. In particular with nVidia graphic chips, full screen display may cause a conflict as the full screen is larger than the notebook display.

Solutions:

1. Disable the notebook display so that playback is only via the external output. If this is not possible, try the second option.
2. As an alternative, you can try to use an extended desktop. The settings can be made in the dialog box **Display Properties** which can be opened by right-clicking the desktop and selecting **Properties**.

1. highlight the second display
2. place a checkmark next to it
3. adjust the resolution for the external output



All the objects can no longer be shifted

Presumably, objects got jammed while shifting or editing them. This is why they seem to be blocked or fixed. This problem may come up when overlapping objects were shifted towards each other to the maximum possible position, i.e. as far as they will go, or when the display time is zero.

Solution: Use function **Check project** to check your project and repair the faulty position. If you want to find out how this is done, click here.

The Locator only moves jerkily

If the Locator can only be moved jerkily and does not allow any fine adjustment, this is probably due to the tool **Snap to objects** being enabled.

Solution: Disable this magnetic effect for the Locator by clicking on **Snap to objects** for the button to be no longer depressed. See also Snapping Locator to objects.

Editing is very slow

Could it be that you opened a project on CD/DVD-ROM?

Copy the project onto hard disk before opening it. If, upon opening the project, not all media files are found, enter the corresponding hard disk in the search dialog and not the CD/DVD- ROM drive.

Why are the tracks not visible?

If the tracks in your project suddenly disappear you may have closed the Timeline window accidentally. This is how you can open it up again:

- In the Media Pool, click category **Timelines** and double-click the required timeline.
- Click button **Display** to disply the corresponding timeline.

Following this the tracks should be visible again.

White lines in the timeline

If the separating lines between the tracks in the timeline have suddenly turned wide and yellow you have accidentally highlighted a certain period with the mouse. For info on how to remove the highlighted portions, turn to Marking a portion.

Failure to create display data and thumbnails

Failure to create display data is essentially due to the following two reasons:

- The media are located on a write-protected data carrier, e.g. on a CD/DVD.

Solution: Copy the media on hard disk, remove the CD/DVD from the drive and search for the files in Wings Platinum. See Finding missing files.

- The media files are located on a hard disk without sufficient access authorization and the user account control prevents creation of display data.

  Solution: As an administrator give sufficient write authorization to the drive or disable the user account control. However, only do the latter for tests without the computer having access the Internet as this may influence the Windows security system.

- The creation date for the media file is somewhere in the future, e.g. the date in the digital camera has been set incorrectly. Wings Platinum uses the file date to check whether the display data need to be recreated. Therefore, it keeps trying to recreate the display data.

  Solution: Under **Options** &endash; **Global Options** &endash; Save enable function **Automatic date correction** and reload the project in question.

- The media path names are too long (more than 200 characters).

  Solution: Move the project data to a folder with a shorter path name, e.g. **D:\Shows\India 2010**. The current path can be displayed in the Media Pool. See Displaying pathnames.

When creating display data there is a message that the data carrier is full...

If Windows displays a message that the data carrier is full while creating the display data, this may be due to the following reasons:

- The data carrier is write-protected or you do not have any write permission for the drive.
- **Solution:** Remove the write protection or allow full access to the drive.
- The data carrier does not have sufficient storage space.
- **Solution:** Use a drive with sufficient storage space. It is also possible to save the image display data to a different folder on another drive. See **Options** - **Global Options** - **Save**.

Screen windows are not displayed...

When you click **Display screens** or press the **F10** key, the screen windows are not displayed at all or only some of them.

Solution: Check whether the required number of screens and screen fields have been checked and enabled in the **Media Pool** category **Screens**. Only those screens will be displayed that are provided with a checkmark and have at least one screen field enabled . Please consider that there must only be one screen in fullscreen mode.

Screen is always square...

If the screen remains square although you entered a different aspect ratio in the Screen Properties, you DirectX version may be outdated.

Solution: Install the current DirectX version for your Windows operating system, i.e. **Direct X 9.0 of November 2008** or up. It can be found on the Wings Platinum DVD or on the Microsoft website.

There is no image in the screen window...

If no images are displayed in the screen window, this may have various reasons:

Solutions:

1. Screen and screen field are not linked up with the tracks in the timeline.

   Solution: In the Track Properties, check whether the tracks are linked up with the appropriate screen field. See Track Properties.

2. Your images and videos are located on a CD/DVD or on a hard disk requiring a write-permission.

   Solution: Copy all project media onto a hard disk you are holding a write-permission for. Search for the files if the path has changed. See Finding missing files.

If this doesn't help eliminating the problem, your graphics card may be unsuitable for hardware rendering. See also Graphics card.

There are colored frames displayed in the screen window

If colored frames are suddenly displayed on the screen, you may have accidentally activated the display of frames for screen fields, text fields or multidisplay areas.

Solution: Right-click the screen window and select the entry provided with a tick. Repeat this process for all entries with a tick.

See also

Color code for frames in the screen window

Displaying screen field frames

Text does not appear in the screen window

When the text of a ticker object is not displayed on the screen, this may be due to the following reasons:

- There is no contrast between the color of the text and the background picture. **Solution:** Choose a different color for the text. This can be done in the Ticker field properties or by applying color control via keyframes.
- If the text still does not appear, the ticker track may not be linked up with the ticker field. **Solution:** Assign a ticker field to the ticker track. See also Displaying text in a show.

Bad quality of pictures and videos on the screen

Bad display quality in the screen window may be due to a variety of reasons. Check the following:

1. If the quality of still pictures is still quite bad, this may be due to low-resolution original pictures or the display data.

   Solutions:

   - Check whether the original pictures are at least the same size as the monitor resolution. This can be recognized in the Media Pool List View (change over by clicking button in the top right Media Pool corner) in columns **Width** and **Height**. If the image files

are too small, you can scan your pictures again at a higher resolution.

- If the display quality is quite bad for all the pictures although the original pictures are ok, select an image width for the display data (also called texture data) which is the same size as the monitor or video projector resolution. See Screen Properties.
- If the quality is only inferior for individual, enlarged pictures, you also need to check the size of the original file. In this case you need to consider that enlarged, zoomed display requires a correspondingly larger size. If the size is ok, you should optimize the display data. See Optimizing display data for pictures.

2. If the picture quality is still insufficient, a lower resolution setting was chosen for playback in Preview Mode (less than 100%) than for Presentation Mode. Usually, this only makes sense for multidisplay applications.

   Solutions:

   - For playback at high quality use Presentation Mode, which is started by pressing **F5**. The differences between the different playback modes can be found at Starting and stopping playback.
   - If you do not need to distinguish between Preview and Presentation Mode in the resolution for your project, set the Preview resolution in the Screen Properties to 100%. See also Screen Properties.

3. If the bad quality only refers to videos, display is certainly not based on original files or intermediate video files but on display data only.

Solution: Enable screen display at full quality in the track head and start the presentation by pressing the **F5** key. See Display quality for videos in the screen window.

Jerky playback of videos and images...

If the dissolves of high-resolution images are jerky instead of smooth and fluent, this may be due to the following reasons:

- You are using an unsuitable graphics card with insufficient graphics memory.

- There chosen hardware rendering mode is not appropriate.
- In relation to the available graphics memory the texture file you have chosen is too large.
- Your show is very complex and uses a high number of simultaneously visible pictures and videos, which cannot entirely be accommodated in the graphics memory.

Solutions:

- Optimize the display data (also called textures) to adjust them to their corresponding usage in the timeline. See Optimizing display data for pictures.
- The log file logs the locations in the show where media could not be loaded properly into the graphics memory. See Displaying log information.
- Select a smaller size for the display data, e.g. 1024 pixels width or smaller. This has a negative effect on the resolution but playback should be smooth again. See Screen Properties.
- If you are using two monitors you could change over to single monitor mode. This provides for a higher graphics memory for the texture files.
- If the problem only comes up for more complex sequences, it may suffice to reduce the texture size of individual pictures. See Changing the display data quality for individual pictures.
- Moving image contents are particularly critical. Loading of textures while a picture object is moving on the screen may easily cause the movements to be jerky. This depends on the texture size and the computer performance. If you want to specify a central folder for storing the picture display data &endash; which however, should definitely be on the fasted drive &endash; go to **Options** &endash; **Global Options** - Save.

Error – d3d9_40.dll not found

When Wings Platinum or the EXE presentation does not start up and a message is displayed saying that file **d3d9_40.dll** has not been found, the current DirectX version is not installed on your computer.

Solution: Install the current DirectX version for your Windows operating system, i.e. **Direct X 9.0c of November 2008**. It can be found on the Wings Platinum DVD or on the Microsoft website.

Info If you are using file ***directx_nov2008_redist.exe*** for Direct x installation, please consider the following:

- Create a new folder somewhere on your hard disk and name it ***DX***, for example.
- Double-click file ***directx_nov2008_redist.exe*** and enter the previously created folder **DX** as target for unpacking.
- Following this you will find the file ***DXSETUP.exe*** in folder ***DX*** which you can double-click to start the actual installation.

Mouse wheel does not scroll as expected

If the timeline scrolls in vertical direction instead of along the timeline, it's usually the mouse driver that keeps trying to help those users who do not know how to use a mouse wheel. Wings Platinum itself is able to process the mouse information correctly and properly and does not need any assistance by drivers or other software.

Solution: Solve this problem by telling the mouse driver that Wings Platinum knows what it's doing. For this purpose there is usually a list to deactivate the mouse wheel emulation for individual programs in the (Microsoft) mouse driver. As an alternative you can change the mouse wheel behavior in general, e.g. for Logitech drivers to "MS Office compatible scroll only" and "Scroll in active window only".

Faulty arrangement of windows in dual monitor mode

Wings Platinum is in no way restricted with regard to dual monitor mode and you should not encounter any problems.

However, problems in positioning windows or dialogs may still occur if the graphics card driver (or any other suitable tool) has been set to something like **Always center dialogs**, for example. In this case Wings Platinum places the dialogs correctly, but the graphics card driver (or the corresponding tool) keeps moving the dialog into the centre of the screen. This tends to look like a Wings Platinum error, but it isn't. An indication as to this type of error is that the screen (= window), for example, is always positioned cor-

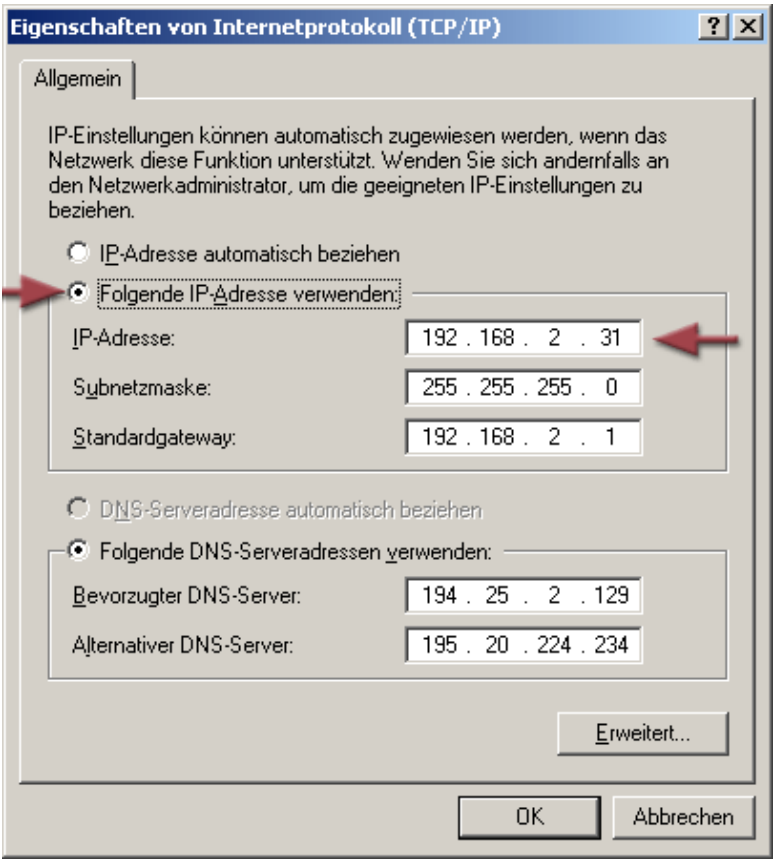
rectly while the audio plugin settings (= dialogs) are always centered when being displayed.

Static IP addresses in the network

Any networked computers – be it for an additional license or for multidisplay operation – should definitely have a static IP address and not an automatically obtained address. Otherwise you constantly need to alter the changing IP addresses in Wings Platinum and may be confronted with malfunctions.

This is how you set a static IP address:

1. Open the **Control Panel** – **Network and Dial-up connections** for the LAN connection icon to be visible.
2. Right-click this LAN connection and select **Properties**.
3. Highlight **Internet protocol (TCP/IP)** and click button **Properties**.
4. In the following dialog select **Use the following address** and enter an IP address. The entry depends on your network configuration. First and foremost you need to ensure that one and the same IP address is not used more than once. For subnet mask you can normally leave the default setting of **255.255.255.0**. The **standard gateway** is only required for communication with an external network. Here you would enter the IP address for your DSL router or server. For optimum Internet communication you may have to enter the **DNS server** of your provider. Turn to your Internet provider to find out about these addresses.



Audio

Playback cannot be started

If playback does not start or the message "The currently used device identification is outside the admissible range for your system" appears this may be due to the following reasons:

1. The computer does not have a functional sound card, or none has been selected for Wings Platinum.

Solutions:

- Install a sound card including driver and select it under **Options** &endash; **Global Options** &endash; Sound cards.
- If you do not need any audio playback, you can use the PC clock for synchronizing or timing. See Timeline properties.
- For sound cards or interfaces with digital inputs, the problem may be due to the fact that no valid audio signal is applied to the digital input. See also Tascam US-224 refuses audio playback.

2. Playback may also fail when Mode **Timecode Synchronization** was chosen for the timeline but no Show Control Module is installed.

   Solution: In the timeline properties choose **Audio** or, in exceptional cases also **PC clock** for synchronization. See Timeline properties.

Playback stops prematurely...

If playback stops prematurely this may be due to the following reasons:

- The show contains a redundant pause, stop or reset marker.

  Solution: Disable all marker tracks and check whether playback continues at the corresponding position. Remove the redundant marker by right-clicking it and selecting **Remove**. See also Marker.

- The location where playback stops contains an erroneously coded MP3 file.

  Solution: Try exporting the MP3 files in wave format (*.***wav**) and use this file instead of the MP3 file. If export is impossible, this MP3 file cannot be used. See Exporting sound objects.

Intermittent sound during playback&ldots;

If sound cannot be played from the timeline without any problems or intermissions, this may be due to the following reasons:

1. The sound card driver may be to slow.

   Solutions:

   - Under **Options** &endash; **Project Options** &endash; **Output** choose a slower mode, e.g. **Very slow**.

- Install the latest driver for your sound card.

2. Loading the display data into the graphics memory or playback of a high-resolution video temporarily overtaxes your computer.

   Solutions:

   - Select a smaller picture width for the display data. See Screen Properties.
   - Create a video using a smaller resolution. See Tips for video rendering.
   - Hide the timeline tracks in group tracks to prevent the program window from using up unnecessary resources during playback. See Grouping tracks.

The audio tracks are disabled and can't be enabled

If all audio tracks are disabled and cannot be re-enabled via the button in the track head, synchronization of the timeline is presumably not set to **Audio**.

Solution:

1. In the Media Pool click category **Timelines**.
2. Right-click the corresponding timeline and select **Properties**.
3. Next to **Synchronization** choose entry **Audio** and close the dialog by clicking on **OK**.

Sound is not played back in sync

This may happen when soundtrack contains erroneously coded MP3 files.

Solution: Try exporting the MP3 files in wave format (*.***wav**) and use this file instead of the MP3 file. If export is impossible, this MP3 file cannot be used. See Exporting sound objects.

No sound when test listening to audio CDs

If test listening does not work when copying from audio CDs, it may be due to the following reasons:

- Wrong "mixer" setting for the sound card . This "mixer" can be found in the Windows Start Menu under **Programs** – **Accessories** – **Multimedia** – **Volume**. The **CD Audio** volume control slider must be at the top, while **Sound off** below must be unchecked.
- No or defective connection between CD/DVD ROM drive and sound card. Check connections and ensure that cable is connected to the correct contacts. Some professional sound cards feature an internal input for a CD/DVD ROM drive. In this case, you may be able to directly connect a headset to the CD/DVD ROM drive.
- Modern notebooks very often do not have the above mentioned connection and can't even be upgraded. In this case the test listening feature cannot be used.

Info The fact that playback via the Windows Media Player works does not indicate that there is a connection between CD drive and sound card or that the sound card setting is correct; Windows Media Player usually grabs audio CDs online and works along a different way.

DVD/CD-ROM drive can't be selected

If you want to copy audio from audio CDs and the corresponding drive cannot at all or not correctly be selected this is usually due to the drives in your computer being reorganized or an ASPI driver in Windows missing.

Solution:

- Refresh the list of available drives. See Options for CD drives.
- If all your attempts are in vain, install an ASPI driver. In such a case, turn to our Support.

This format is not supported ...

...or can't be translated. Use function "Capabilities" to find out about the formats that are supported.

This error message is not issued by Wings Platinum but by Windows and means that your sound card is not able to output the set audio format.

When such a message comes up, the sound card inputs or outputs may have been set incorrectly.

Possible reasons for this error message while playing back:

Some sound cards also feature modem outputs. When such a modem output has been selected, audio playback in Wings Platinum fails.

You wanted to utilize multi-channel output for Wings Platinum and have accidentally chosen the same audio output more than once.

Solution: Go to **Extras – Options – Global Options – Sound cards** and select different outputs.

The sound card or its drivers cause problems. To verify this, make the following test:

4. Open the Timeline Properties and select **Synchronization** with **PC clock**. Audio playback is now virtually off.
5. Save the project and check whether there are still error messages. If no more error message appears you can say that the problem was caused by sound card or driver. Try first to install a new driver for the sound card. If this does not remedy the problem replace the sound card.

Important: Do not forget to change Synchronization in the Timeline Properties back to **Audio**.

Possible reasons for this error message while recording:

You have chosen a wrong input in the Record Dialog.

Solution: In the Record dialog, choose a different input.

In the Record Dialog a digital input was selected which has not received a valid audio signal yet. or the sampling rate does not correspond with that set in the Record dialog.

Solution: Supply a valid audio signal to the digital input of your sound card. In the Record dialog select the sampling rate in accordance with the signal supplied.

Unable to normalize...

This message appears only when the amplification required for normalizing via the Master control cannot be achieved (... only + 6 dB are possible).

Solution: Turn up the volume of all objects via function **Change volume**. Highlight all sound objects, right-click one of them and select **Special Functions** – **Change volume**. Here you can also carry out functions **Peak Search** and **Normalize**. See also Adjusting the volume.

Multi-channel playback is on one stereo output only...

If you do not succeed to play back audio information of a multi-channel project on several channels, this may be due to the following reasons:

- The outputs of your sound cards have not been registered in Wings Platinum.

  Solution: Register your sound card outputs under Options. See Registering sound card outputs.

All sound tracks are routed to the same sound card output.

Solution: Assign the soundtracks to the corresponding sound card output. See Assigning output channels to the sound tracks.

Tascam US-224 refuses audio playback

If you have chosen Tascam US-224 as sound card and playback doesn't start, this may be due to the chosen input or to the missing digital signal.

Solution: In the Settings Dialog (system control/US-224) select the analog input under **Input** or, apply a valid audio signal to the digital input.

Pictures

Pictures cannot be imported...

If certain pictures cannot be imported to the Media Pool their format is probably not supported by Wings Platinum.

Solution: Open the picture in your image editing program and save it as a different format. If the picture has a higher color depth than 24 bits, save it as TIF file.

See also

Supported file formats

No pictures are visible in the objects

Could it be that you opened a project on CD-ROM?

Copy the project onto hard disk before opening it. If, upon opening the project, not all media files are found, enter the corresponding hard disk in the search dialog and not the CD ROM drive. After doings this, the pictures will be displayed in the objects and the program will no longer be slow.

The colors of pictures look different...

... compared to those in the image editing software. Presumably the file has been saved with a different color space than sRGB, the working color space used by Wings Platinum.

Solution:

- Enable usage of embedded color profiles for display data creation. See **Options**- **Project Options** - Color management.
- If you have allocated an ICC color profile to your monitor and it was not considered during presentation (F5 key) you should place a check-mark next to **Always use color profiles of display devices**. See also **Options** - **Project Options** - Color management.

See also

Color management

Tips Scan Software

Transparent image or video areas are not displayed properly

Faulty display of images and videos with alpha channel transparency (distorted, black and white, milky or not transparent) may be due to the following reasons:

6. The images have more than just one alpha channel or a color depth of 16 bits per channel.

Solution: Solution: Open the image file and take the steps described below. Use the method as explained in topic External editing of media files, so that the image display data are updated automatically.

Remove any superfluous alpha channels in the file until there is only one alpha channel. Transparency on the image layer (with the checkered background being visible) is regarded as first alpha channel and no further alpha channel must be present in the channels palette.

Check the image color depth and, if applicable, reduce it to 8 bits per channel.

7. The alpha channel was premultiplied for usage with white or black background. Wings Platinum has an automatic system that should detect and correct this, but there may be cases when this does not lead to the desired result.

   Solution: Switch off the automatic system and try out the various modes for premultiplication. See Picture Properties.

Pictures were not converted into JPG format...

If some pictures of your project were not converted properly using the function **Convert pictures into JPG format**, this may be due to the following reasons:

- The pictures have been provided with a transparency effect or an alpha channel, respectively, which may be the case for PSD, PNG or TIF formats. Unfortunately, JPG format does not support transparency.
- Pictures with a color depth of 48 bits (TIF format) are normally converted, but are reduced to a color depth of 24 bits.

See also

Converting pictures into JPG format

The pictures in the screen window are distorted....

When the pictures displayed in the screen window are distorted, they do not have the same aspect ratio as the screen. The following two things are possible: The picture is distorted to match the screen format or the original aspect ratio of the picture is maintained. In the latter case either black borders are displayed or the picture needs to be enlarged or trimmed.

Solutions:

- If you want to always retain the original aspect ratio, you need to make the corresponding setting in the screen field properties. See Screen field properties. Moreover, you can also define a global section. See Adjusting screen field size and position.
- If you want to avoid distortion of a picture and show an individual section, you can do so quite simply via the Key frame control. See Objects with key frame control.

Pictures suddenly appear rotated on the screen

Wings Platinum 3.50 contained a bug that produced an error during rotation of pictures in the Media Pool. This bug has been fixed as of version 3.60. As a consequence of this bug, images rotated in version 3.50 were not displayed properly in newer versions (rotated incorrectly, distorted).

This is how you can solve the problem:

8. In the main menu, click **Media Pool** - **Update Media File Properties**.
9. Now delete the display data by clicking **Media Pool** in the main menu, followed by clicking on **Delete All Display Data** ▶**Pictures**.
10. In the tool bar below the main menu click on **Create display data**. After creating the new display data, the pictures will be correctly displayed on the screen.

Screen windows are not displayed...

When you click **Display screens** or press the **F10** key, the screen windows are not displayed at all or only some of them.

Solution: Check whether the required number of screens and screen fields have been checked and enabled in the **Media Pool** category **Screens**. Only those screens will be displayed that are provided with a checkmark and have at least one screen field enabled . Please consider that there must only be one screen in fullscreen mode.

There are colored frames displayed in the screen window

If colored frames are suddenly displayed on the screen, you may have accidentally activated the display of frames for screen fields, text fields or multidisplay areas.

Solution: Right-click the screen window and select the entry provided with a tick. Repeat this process for all entries with a tick.

See also

Color code for frames in the screen window

Displaying screen field frames

Bad quality of pictures and videos on the screen

Bad display quality in the screen window may be due to a variety of reasons. Check the following:

1. If the quality of still pictures is still quite bad, this may be due to low-resolution original pictures or the display data.

   Solutions:

   - Check whether the original pictures are at least the same size as the monitor resolution. This can be recognized in the Media Pool List View (change over by clicking button in the top right Media Pool corner) in columns **Width** and **Height**. If the image files are too small, you can scan your pictures again at a higher resolution.

- If the display quality is quite bad for all the pictures although the original pictures are ok, select an image width for the display data (also called texture data) which is the same size as the monitor or video projector resolution. See Screen Properties.
- If the quality is only inferior for individual, enlarged pictures, you also need to check the size of the original file. In this case you need to consider that enlarged, zoomed display requires a correspondingly larger size. If the size is ok, you should optimize the display data. See Optimizing display data for pictures.

2. If the picture quality is still insufficient, a lower resolution setting was chosen for playback in Preview Mode (less than 100%) than for Presentation Mode. Usually, this only makes sense for multidisplay applications.

   Solutions:

   - For playback at high quality use Presentation Mode, which is started by pressing **F5**. The differences between the different playback modes can be found at Starting and stopping playback.
   - If you do not need to distinguish between Preview and Presentation Mode in the resolution for your project, set the Preview resolution in the Screen Properties to 100%. See also Screen Properties.

3. If the bad quality only refers to videos, display is certainly not based on original files or intermediate video files but on display data only.

Solution: Enable screen display at full quality in the track head and start the presentation by pressing the **F5** key. See Display quality for videos in the screen window.

Picture elements are missing for output of single pictures

Output of one single picture at high resolution via function **Create picture sequence** does not produce the desired result as some elements of the image blend are missing in the picture. This is probably due to the fact that the graphics memory could not accommodate all the necessary media or that enabled mix grouping is inappropriate.

Solutions:

- For picture output, reduce the resolution at **Width** and **Height** on the dialog page **Picture sequence**. See Creating picture sequences.
- If you want to use mix groups in your project you need to enable the corresponding mix grouping or enter it in the Timeline Properties. See Presenting with mix groups.

Error – d3d9_40.dll not found

When Wings Platinum or the EXE presentation does not start up and a message is displayed saying that file **d3d9_40.dll** has not been found, the current DirectX version is not installed on your computer.

Solution: Install the current DirectX version for your Windows operating system, i.e. **Direct X 9.0c of November 2008**. It can be found on the Wings Platinum DVD or on the Microsoft website.

Info If you are using file ***directx_nov2008_redist.exe*** for Direct x installation, please consider the following:

- Create a new folder somewhere on your hard disk and name it ***DX***, for example.
- Double-click file ***directx_nov2008_redist.exe*** and enter the previously created folder **DX** as target for unpacking.
- Following this you will find the file ***DXSETUP.exe*** in folder ***DX*** which you can double-click to start the actual installation.

Video

Playback cannot be started

If playback does not start or the message "The currently used device identification is outside the admissible range for your system" appears this may be due to the following reasons:

1. The computer does not have a functional sound card, or none has been selected for Wings Platinum.

   Solutions:

- Install a sound card including driver and select it under **Options** &endash; **Global Options** &endash; Sound cards.
- If you do not need any audio playback, you can use the PC clock for synchronizing or timing. See Timeline properties.
- For sound cards or interfaces with digital inputs, the problem may be due to the fact that no valid audio signal is applied to the digital input. See also Tascam US-224 refuses audio playback.

2. Playback may also fail when Mode **Timecode Synchronization** was chosen for the timeline but no Show Control Module is installed.

   Solution: In the timeline properties choose **Audio** or, in exceptional cases also **PC clock** for synchronization. See Timeline properties.

Video cuts are incorrectly rendered

A number of short video snippets following closely one after the other may cause problems for real time playback based on original data. In this case the cuts are rendered incorrectly. The extent of this effect or the object length to cause this effect depends on the codec used for editing the videos. DV videos show a more favorable behavior, while MPEG-2 and WMV videos behave less favorably due to the higher key frame intervals.

Solutions: Use intermediate video data, which are optimized for output, instead of the original videos. This option can be activated in the video file properties. See Video Properties.

Videos are not displayed at their original quality...

Wings Platinum does not always display videos at their original quality but on the basis of display data. The advantage is that this allows editing of complex projects in real time even for lower-performance computers. the quality is bad during presentation started by pressing the **F5** key check the following:

- This display mode must be selected in the video track head. See also Display quality for videos in the screen window.

Transparent image or video areas are not displayed properly

Faulty display of images and videos with alpha channel transparency (distorted, black and white, milky or not transparent) may be due to the following reasons:

3. The images have more than just one alpha channel or a color depth of 16 bits per channel.

Solution: Solution: Open the image file and take the steps described below. Use the method as explained in topic External editing of media files, so that the image display data are updated automatically.

Remove any superfluous alpha channels in the file until there is only one alpha channel. Transparency on the image layer (with the checkered background being visible) is regarded as first alpha channel and no further alpha channel must be present in the channels palette.

Check the image color depth and, if applicable, reduce it to 8 bits per channel.

4. The alpha channel was premultiplied for usage with white or black background. Wings Platinum has an automatic system that should detect and correct this, but there may be cases when this does not lead to the desired result.

   Solution: Switch off the automatic system and try out the various modes for premultiplication. See Picture Properties.

Wrong colors in WMV video...

When a WMV video is played back at full resolution and the wrong colors appear on the screen the reason may be due to the graphics card driver or the ATI graphics card driver settings.

Solutions:

- Download a new driver from the ATI website and install it.
- If the problem should persist, you should change a setting in the Display Properties Dialog.

1. Right-click a free area on the Windows desktop and select **Properties**.
2. Click on tab **Settings**, select **Advanced**, followed by **Options**. If, however, you are using the **ATI Catalyst Control Center**, the settings for

WMV acceleration are somewhat hidden. You need to scroll to the very bottom in the dialog on the right:

3. Remove the checkmark for **WMV acceleration**. In our experience this does not have any negative effects on the playback performance.
4. Close all dialogs by clicking **OK** and restart the computer.

Following this, all WMV videos should be displayed with their correct colors.

Screen windows are not displayed...

When you click **Display screens** or press the **F10** key, the screen windows are not displayed at all or only some of them.

Solution: Check whether the required number of screens and screen fields have been checked and enabled in the **Media Pool** category **Screens**. Only those screens will be displayed that are provided with a checkmark and have at least one screen field enabled . Please consider that there must only be one screen in fullscreen mode.

There are colored frames displayed in the screen window

If colored frames are suddenly displayed on the screen, you may have accidentally activated the display of frames for screen fields, text fields or multidisplay areas.

Solution: Right-click the screen window and select the entry provided with a tick. Repeat this process for all entries with a tick.

See also

Color code for frames in the screen window

Displaying screen field frames

Live video / TV image is not displayed correctly

Erroneous display of the live video / TV input may be due to the following reasons:

- When no picture shows up, check whether the **ATI Multi Media Center** allows playback. Terminate Wings Platinum before you do so. After terminating the Multi Media Center you can restart Wings Platinum and check whether playback works.
- If no live video / TV image appears on the screen, close the screen and reopen it again.
- If only noise and grain are visible, select a different TV channel. See Selecting a TV channel.
- Check the video source, i.e. the selected trigger input and the connection to the graphics card.

Check MPEG-2 video ...

If you find that an MPEG-2 video looks much shorter in the timeline than the file size suggests, you can have every individual frame checked. Checking every individual frame may also be a solution for timecode synchronization problems and means that index files for the audio and video information of the MPEG file are created.

1. Remove those video objects in the timeline that are linked up with this MPEG 2 file to be checked.
2. In the Media Pool, right-click the video file to be checked and select **Single frame check**...
3. Following this verification it should be possible to display the video in the timeline at its correct length and also allow correct playback via timecode synchronization.

Frayed edges for videos

Probably you are using video material from DV Cams or analog video cameras based on fields. This is why the outline of moved objects shows is frayed as a result of comb filter effects. To eliminate this problem, Wings Platinum features efficient Deinterlacing ... See Activating deinterlacing.

MPEG video creation stops prematurely...

If video rendering for an MPEG 2 video with large video image (HDAV) is terminated prematurely, the minimum data rate setting may be too high.

Solution: Under **Variable bit rate** enter a minimum data rate of **2000 KBits/s**. See Producing an MPEG video.

Video is jerky

If a video cannot be played without being jerky, the computer performance may be too low. The following options are available::

- Do without pitching. Playing videos at varying speed, i.e. when they are compressed or expanded, requires more computer performance as the playback mode has to be changed. See Video Object Properties.
- Create a video using a smaller picture size and/or lower frame rate. See Tips for video rendering.

- Use a codec with lower CPU usage, e.g. **WMV** or **MPEG-2**. See also MPEG-2 or WMV format?
- For playback from a presentation track: Disable **Maximum quality** under **Project Options** – Presentation to save computer processing power.

Contrast for video playback too low

For playback of certain video formats, e.g. DV, WMV or Canopus HQ, contrast is usually reduced by the codec to make it suitable for TV broadcasts (16 = black and 235 = white). This is normally undesirable for playback from PC as it produces dull images.

Solution: Correct the contrast of the video concerned via tone adjustment/tone expansion. See Editing and optimizing the video image.

Video image is completely chopped up during the presentation...

Chopped up pictures displayed during playback of an MPEG 2 video from a presentation track may be caused by the video being produced with an **aspect ratio of 1:1**.

Solutions: Create a new video and choose an aspect ratio of **4 : 3** or **16 : 9**, according to which is closer to the actual aspect ratio. It should also be possible again for the video to be played back in mode **Maximum quality**. See also Output of MPEG video.

Video output freezes or is interrupted prematurely

Problems in video output of a show may be due to various reasons based on the show configuration:

- **If video output keeps freezing at the same location** ...check whether there is enough storage capacity. See also Error during video creation.

If your show contains DV videos only ...the MainConcept DV codec may not be installed This codec considerably improves system performance for DV videos.

Solution: Install the MainConcept DV codec. It is available on the Wings Platinum DVD in folder **Software\ Video Codecs\ MainConcept DV Codec** or via the Internet at *www.mainconcept.de*. Installation of the demo version will suffice. **Notes on the installation**.

During installation of the MainConcept DV codec you will be prompted to enter an enable code. Since the Demo Version will do for playback in Wings Platinum you just click **Ignore** to continue the installation.

The full version is available from MainConcept if you want to use this codec also for DV video creation. The demo version watermarks the video image.

Info Do not mix up the MainConcept **DV codec** with the MainConcept **MPEG2 codec**! MainConcept **DV codec** is not part of Wings Platinum and needs to be **installed separately**.

- **If video output freezes mainly during the transitions or at the end of a video** ... your videos may not be entirely ok; the data may be defective or incomplete.

  Solution: In the function bar, click **Display log file** and take a look whether there are any entries such as "Frame not found". In such a case, open the video file properties in the Media Pool and enter a value between **2** and **5** frames next to **Missing end frames**. Should the problem come up again during rendering, you can increase this value further. See also **Video Properties**.

Missing videos in a newly created video file

If some of the numerous videos used in your show are missing in the newly created video file, i.e. "black holes" appear in the video, the following reasons may be the cause for this problem:

- During the creation process videos cannot be decoded, which may be the case for H.264 videos.

  Solution: Enable usage of Intermediate video data for these videos and have them created. See Optimization through Intermediate Video data. Before recreating the video enable **Allow usage of intermediate video data** in the first dialog box under **Timeline and screen**.

Video is not faded out to complete darkness

If a video is not faded out to complete darkness at the end, no further objects are located behind the last picture objects and the video doesn't have a picture for complete fade-out at the end. The following solutions are possible:

- Use a Track Marker for the timeline area to be calculated. See Marking a portion and define the area in a way which places its end to a location behind the last picture object. Under **Timeline** select Option **Only selected portion of timeline** for video rendering.
- Or place a Position Marker behind the last object. See Markers.

MPEG video is distorted...

If the video picture is not displayed at its correct aspect ratio by the player, the aspect ratio selected in the codec presumably deviates from the actual aspect ratio.

Solutions:

- If your player allows entry of a user defined aspect ratio, enter the video aspect ratio. For the Zoom player, for example, this can be done under **Options** – **Aspect Ratio**.
- If it doesn't, re-render the video and enter an aspect ratio of 1 : 1 under **Video**. See Creating an MPEG video.

The pictures in the screen window are distorted....

When the pictures displayed in the screen window are distorted, they do not have the same aspect ratio as the screen. The following two things are possible: The picture is distorted to match the screen format or the original aspect ratio of the picture is maintained. In the latter case either black borders are displayed or the picture needs to be enlarged or trimmed.

Solutions:

- If you want to always retain the original aspect ratio, you need to make the corresponding setting in the screen field properties. See Screen field properties. Moreover, you can also define a global section. See Adjusting screen field size and position.

- If you want to avoid distortion of a picture and show an individual section, you can do so quite simply via the Key frame control. See Objects with key frame control.

Picture elements are missing for output of single pictures

Output of one single picture at high resolution via function **Create picture sequence** does not produce the desired result as some elements of the image blend are missing in the picture. This is probably due to the fact that the graphics memory could not accommodate all the necessary media or that enabled mix grouping is inappropriate.

Solutions:

- For picture output, reduce the resolution at **Width** and **Height** on the dialog page **Picture sequence**. See Creating picture sequences.
- If you want to use mix groups in your project you need to enable the corresponding mix grouping or enter it in the Timeline Properties. See Presenting with mix groups.

Sequence of pictures

Picture sequence is not complete

If a sequence of pictures is incompletely displayed after adding it to a video track, a picture in the sequence may be missing.

Solution: Check the picture sequence for consecutive numbering. If only one picture should be missing, you can rename a copy of the adjacent picture to make the sequence numerically complete.

See also

Adding a sequence of pictures to a video track

Picture elements are missing for output of single pictures

Output of one single picture at high resolution via function **Create picture sequence** does not produce the desired result as some elements of the image blend are missing in the picture. This is probably due to the fact that the graphics memory could not accommodate all the necessary media or that enabled mix grouping is inappropriate.

Solutions:

- For picture output, reduce the resolution at **Width** and **Height** on the dialog page **Picture sequence**. See Creating picture sequences.
- If you want to use mix groups in your project you need to enable the corresponding mix grouping or enter it in the Timeline Properties. See Presenting with mix groups.

Presentation

Error – d3d9_40.dll not found

When Wings Platinum or the EXE presentation does not start up and a message is displayed saying that file **d3d9_40.dll** has not been found, the current DirectX version is not installed on your computer.

Solution: Install the current DirectX version for your Windows operating system, i.e. **Direct X 9.0c of November 2008**. It can be found on the Wings Platinum DVD or on the Microsoft website.

Info If you are using file ***directx_nov2008_redist.exe*** for Direct x installation, please consider the following:

- Create a new folder somewhere on your hard disk and name it ***DX***, for example.
- Double-click file ***directx_nov2008_redist.exe*** and enter the previously created folder **DX** as target for unpacking.
- Following this you will find the file ***DXSETUP.exe*** in folder ***DX*** which you can double-click to start the actual installation.

EXE presentation does not start - monitor remains dark

This may be mainly due to the following two reasons:

- When the soundtrack can be heard but no image appears, your graphics card does not sufficiently support 3D hardware rendering.

  Solution: Try to play the EXE presentation on a different computer. See also Graphics card.

- If neither an image is displayed nor the sound track is audible, the computer has no sound card or there is no appropriate driver for the sound card installed.

  Solution: Check sound card and its driver and install it, if necessary. Alternatively, try to play the EXE presentation on a different computer.

- If the monitor goes dark for a short time after the start, following which Windows reappears, you project may still contain data objects for screen field control from an earlier Wings Platinum version.

  Solution: Remove all data objects for screen field control from the universal tracks. The links to the screen fields were removed while the show was loaded. But for EXE presentations the timeline must not contain any data objects for screen field control.

Multidisplay

Slave files are not transferred

If the data transfer to the slaves does not work, this may be due to the following reasons:

- The folder specified for the slave files is not cleared for network access. **Solution:** Clear the folder or the drive for network access.
- The presentation network is not configured correctly. **Solutions:**
  - Check the settings under **Options** – **Project Options** – **Network**.
  - The displays have no or no correct IP address. See Configuring the presentation network.

- Automatically obtained IP addressed in particular may causes problems as they can change any time the system is started up again. ...This is how you change your computer to static IP addresses. When you change the network configuration on the slaves you may have to restart Wings Platinum on the master for the altered configuration to be detected.

Wings Platinum does not start correctly

If Wings Platinum does not start properly but no error message appears either, this may be due to the fact that Wings Platinum is searching for the master computer in the network. The time the search takes depends on the network configuration. The waiting period, however, may take several minutes and is often a nuisance for the person who has to wait.

Solutions:

When the computers are linked up with the network...

- Start the master including Wings Platinum and enable the network connection so that the button is depressed or is highlighted in gray.
- Then start the computer with the additional license or the slave computer.

When there is not link between computer and network...

If no network connection can be established for the computer because you are intending to present at a different location using an additional license you should disable the network connection before you start Wings Platinum. This can be done in file **Disable Platinum Network.reg**, which is located in the program folder under **...\My Documents\AV Stumpfl\Tools\Wings Platinum 4 Settings**.

Info Please bear in mind that this procedure does not work with Windows 98/ME.

This is how you proceed:

- Make sure that Wings Platinum has not been started up yet and double-click file ***Disable Platinum Network.reg***.
- Confirm the question whether the information is to be added to the registry in the positive (**Yes**), followed by clicking **OK** in the next dialog.
- Now start up Wings Platinum.

The effect is that Wings Platinum now starts with a disabled network and there will be no search for the master computer. If you want to use this method more frequently you can create a link on the desktop taking you to file ***Disable Platinum Network.reg***.

The network connection could not be established...

In most cases it may be useful to answer this message with **No** and to find out why the connection could not be established.

Possible reasons for the problem and solutions:

The network connection in Wings Platinum is not enabled. **Solution:** Enable the network connection first on the Master and then on Slave by clicking **Enable network**. Only if the buttons on both computers are depressed and displayed in color is the function enabled:

The network connection does not work. **Solutions:**

Check the network configuration in Wings Platinum, under **Options -Global Options** – Network.

Make sure that the Wings Platinum computers have a static IP address. See Static IP addresses in the network.

Make sure that all cable connections and network components, such as hubs, etc. are ok.

Check whether mutual access via Windows Explorer is possible for both computers. If this is not the case, you are faced with general network problems. Consult the Windows Online Help or ask your computer expert for help.

Video DVD

Menu buttons don't work

When a Video DVD menu does not work as planned, check the following:

- In the Media Pool, in category **Screens**, check whether the buttons are linked up with the corresponding video. This can be recognized in column **Projectors / Video / Display PC**. Correct it if necessary, by specifying the correct video in the button properties.
- Check whether buttons touch or extend beyond the screen. To do so, have the buttons displayed as screen field frames (right-click the menu screen) and correct the position of the buttons until they are located entirely on the screen and do not touch. See Adjusting screen field size and position.
- Check whether the menu graphic is in line with the buttons displayed. Problems may come up for pictures or videos controlled via keyframes. In such a case, remove the control tracks by right-clicking the corresponding object and select **Control tracks** ▶ ✓ **Position + Size**.
- When creating the data, make sure that menu video (graphic) and menu screen (buttons) match. With variants, a mix-up may easily happen. See Producing a Video DVD/CD.
- The last possible cause may be incompatibility of the DVD player. Try a different device or the software DVD player in a computer.

Video DVD with an aspect ratio of 16 : 9 is distorted to 4 : 3

If a video DVD with an aspect ratio of 16 : 9 is distorted to 4 : 3 during playback, this may be due to two main reasons:

- You may have forgotten to set the correct aspect ratio of 16 : 9 for MPEG video production.

  Solution: For MPEG video production, select preset **PAL DVD** on page **Video**, followed by selecting entry **16 : 9** for **Aspect ratio**.

- Your DVD player incorrectly interprets the aspect ratio.

Solution: Manually set the aspect ratio in your DVD player menu to 16 : 9.

Video DVD is only played intermittently

If a video DVD can only be played intermittently by a DVD player, although playing on a computer is no problem, this is usually due to the DVD player. Some device just can't handle data rates close to the maximum of 10 Mbits/s.

Solutions:

- Reduce the variable data rate of the DVD preset, e.g. to 6500/5000/2500 and create a new video DVD. This may have a somewhat negative effect on the quality but it may allow your DVD player to play the DVD without intermissions.
- Please note that video CDs are only rarely recognized or played back without any problems by DVD players. So you'd better write the data of a video DVD onto a DVD.

Video DVD is not played back...

Unfortunately, DVD standard is very complex which means that some DVD players are not compatible with all sorts of formats and blank DVDs. We should therefore consider two problem areas:

- The DVD structure is not in order. See Producing a Video DVD/CD.
- DVD format and DVD player are not compatible. See Valuable information about DVD systems.
- Please note that video CDs are only rarely recognized or played back without any problems by DVD players. So you'd better write the data of a video DVD onto a DVD.

Show Control

Devices do not react...

When playing back or editing, devices do not react. If the problem is to do with slide projectors, continue here. For any other devices check your system in accordance with the following checklist:

Check 1

Make sure that the device control system has been enabled. To do so, press key **F8** to highlight button **Enable device ports** in gray**.** In the Media Pool under **Devices** the status of the device ports in column **PC Port/address** must be **activate**. When Stumpfl control units are used, PC LED must be on when communication has been established correctly.

....See also Synchronizing devices.

Check 2

Unless any of the conditions under **Check 1** apply, find out

- ...whether a checkmark is placed in front of the device ports or devices in column **ID**. If necessary click and check them. Otherwise ports or device are deactivated.
- ...whether upon enabling the device control system a message appears in the preview window, saying that the firmware is not up-to-date (this is only possible for Stumpfl SD units or SC Master). If necessary update the firmware. See Firmware versions.

Check 3

If the units still cannot be controlled, check the cable connections and address settings for control units and modules. The address set at the hardware must correspond with the address in column **PC Port/address** in category **Devices** in the Media Pool. Within the SC Net, devices with **master** function must always have address **1**!

....See Configuring the SC Net System.

After performing all checks and necessary alterations, your projectors should be controllable by Wings Platinum. If this is not the case, refer to the Stumpfl Support . They will certainly try to help you.

No device port could be opened

Such a message in the preview window is an indication that opening of the device ports has failed due to a lack of active device ports.

Solutions:

- Check category **Devices** in the Media Pool for checkmarks in column **ID** of your device ports. If there are none, place the corresponding checkmarks.
- If no device port has been specified yet, add one for the device you want to control. See Configuring the device control.

No connection to control units following Autostart…

Thementext hier eingeben

When a project is loaded via Autostart following Windows start-up and activation of the device ports fails or no connection to control units can be established, this may be due to the USB ports of your computer. In a number of hardware/software configurations, connected USB devices may block the serial computer ports during first-time access.

Solutions:

Place a trigger at the beginning of the show which enables the device ports again. Use trigger category Wings Platinum and Action Enable device ports. Following this, drag the trigger into the timeline. As an alternative, you can also execute the trigger via the scheduler (...both functions require the Show Control Module). See also Trigger functions.

Or do without USB devices and use a parallel port dongle..

After Autostart the first commands are not executed in the SC Net

If, after activating the SC Net System, you run an autostart show from the SC Master and the first commands of that particular show are not executed by the SC Net Modules, this may be due to a failure in establishing the SC Net communication.

Solution: Add an SC Net communication check into the autostart show which executes commands only after the communication within the SC Net has

been established or an error message has appeared. Find out about this function in the example Automatic start from CF card.

Multi-channel playback is on one stereo output only...

If you do not succeed to play back audio information of a multi-channel project on several channels, this may be due to the following reasons:

- The outputs of your sound cards have not been registered in Wings Platinum.

  Solution: Register your sound card outputs under Options. See Registering sound card outputs.

All sound tracks are routed to the same sound card output.

Solution: Assign the soundtracks to the corresponding sound card output. See Assigning output channels to the sound tracks.

The audio tracks are disabled and can't be enabled

If all audio tracks are disabled and cannot be re-enabled via the button in the track head, synchronization of the timeline is presumably not set to **Audio**.

Solution:

1. In the Media Pool click category **Timelines**.
2. Right-click the corresponding timeline and select **Properties**.
3. Next to **Synchronization** choose entry **Audio** and close the dialog by clicking on **OK**.

Asynchronous playback with Event Control

If your show becomes asynchronous during the presentation you may have to update the operating software (firmware) of your SD Event Control or Event 2x4. Click here to find out about the appropriate firmware version for your device. The current software version of your device is briefly displayed on the display after switching on. Any update requires the presentation data to be recalculated provided they were produced with Wings Platinum version 1.12b or lower .

See Generating data for the CF Card

Event Control can't find "Show.ini" on the CF Card

If after inserting the CF Card message "No Show.ini File" is displayed on the SD Event Control or SC Master unit, file Show.ini can't be read by these units. In principle, this may have the following reasons:

1. The CF card is empty or Show.ini is not available.
2. **Solution:** Copy the presentation data onto CF Card. . ...This is how it is done.
3. The CF Card was formatted using the FAT32 file system.

   Solution: Format the CF Card using the FAT16 file system. In the Windows Explorer, right-click the CF Card, followed by **Format...** Select file system **FAT** and format the CF Card. Then copy the presentation data onto CF Card. ...This is how it is done.
4. Show.ini is not compatible with the device or the firmware, which may be caused by wrong settings in the SC Net options.

Solutions:

- Update the firmware. Refer to the device documentation.
- Set the number of shows and remote inputs back to **120**. See **Options** - **Project Options** - **SC Net.**

The sound of a CF card show is interrupted

If the sound of the currently running show is interrupted by a further show starting in addition to it (**Add** Mode), both shows presumably use the same stereo output. The following rule applies: The show to be started last takes over the stereo output from the currently running show.

Solutions:

- Always use separate outputs for simultaneously running shows. Using an SC Master 4, both signals can be applied to one stereo output via the internal mixer and a routing of **Multi-channel 4 → 2.**

- With an SC Master 6/16 you also use separate outputs, joining them again via an external mixer.
- For any other cases it may be useful to think of an elegant way to cover up the abort of the music by turning down the volume slowly via a Special Functions marker and turning the volume up again after the new music has started. See Remote-controlling volume and sound.

Incorrect jump to a position marker...

If during playback of a CD card show jumping to a position marker fails and show playback keeps starting from the very beginning...

Reason: Jump markers in CF card shows do not support position markers as jump destinations.

Possible solution: Create a second show and copy and paste the corresponding part of the first show to be played into it. In the first show, instead of the jump marker use a special functions marker with a jump into the second show as the corresponding action. See Special functions marker.

Recording in data or switch objects doesn't work...

If recording of data for switch and data objects does not work, check the following:

- The objects must be linked up with an input control. See Allocating control elements.
- At least one output channel must be assigned to the objects. See Programming analog/DMX devices or Programming switches.
- The objects must be in a Record Mode. See Live control and recording in objects.
- If you have chosen Record Punch In/Out Mode, you need to additionally enable this function for recording. See Record via Punch In/Out.

Variables are not displayed correctly

When variables are incorrectly displayed showing a value of 65000 or are not displayed at all, they have not been initialized. This initialization is absolutely necessary for memory variables E1 to E30.

Solution: Initialize the corresponding variable by setting it to any value. See Setting variables.

Control Panel Fullscreen Mode cannot be terminated&ldots;

When Fullscreen Mode of the Control Panel cannot be terminated, it may be protected against unauthorized editing.

Solutions:

- Press **Shift** + **Esc** and enter the corresponding password.

  or

- Restart Wings Platinum and load a project that is not password protected.

  or

- If automatic loading of the last project was enabled and you have no idea what the password could be you can deactivate loading of the last project prior to starting Wings Platinum by using the following trick:

  - Make sure that Wings Platinum has not been started up yet and double-click file ***Disable Platinum Start Action.reg***. This file can be found in folder **...\My Documents\AV Stumpfl\Tools\Wings Platinum 4 Settings**.
  - Confirm the question whether the information is to be added to the registry in the positive (**Yes**), followed by clicking **OK** in the next dialog.
  - Now start Wings Platinum and the empty program window will appear.

See also

Password protection

What firmware version is my Stumpfl hardware?

Nearly all devices display the firmware version briefly after switching it on, e.g. **Ver: 3.75**.

There are two exceptions:

- The firmware version of the **SC VIDEO PLAYER** can only be checked and updated at the factory.
- The **SC Net Module** firmware version can be determined as follows:

  ➔Connect one or several SC Net Modules to an SC Master and switch on the devices.

  ➔At an SC Net Module, press the setup key for about three seconds for the device name, the SC Net address and finally, the firmware version to be displayed on the SC Master display.

Slide projection

Why is it that the slide projectors do not react?

Wings Platinum features a very efficient and flexible device control system, which, however, also allows a variety of settings. When your projectors don't react, check the project in accordance in four steps. Detailed instructions can be found in the Help topics under **Problems and solutions**.

No device port could be opened

Such a message in the preview window is an indication that opening of the device ports has failed due to a lack of active device ports.

Solutions:

- Check category **Devices** in the Media Pool for checkmarks in column **ID** of your device ports. If there are none, place the corresponding checkmarks.
- If no device port has been specified yet, add one for the device you want to control. See Configuring the device control.

Not enough projectors available for ...

... a correct distribution of slides.

There is one position where you either need to add projectors or change the arrangement of picture objects so that the dissolves can be produced with the available number of projectors. The latter is the faster way.

...This is how you eliminate collisions of dissolves

What firmware version is my Stumpfl hardware?

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Glossary

A

Alpha channel: ..is an additional image level in an image file to save information for transparent areas. Up to 256 transparency levels are available, which means that even semi-transparent and progressions can be displayed.

B

Button: ...can be clicked with the mouse.

C

Codec: .. software which, during video computation, compresses data and therefore reduces the data volume, and decompresses again while playing back.

Ctrl: Short for Control key

D

DAW: ...Digital Audio Workstation

Device port: ...internal, software-based device connection in Wings Platinum. It is defined by protocol or control signal, respectively, by Port ID and computer port.

E

EXE presentation: ...an executable file which runs on virtually every Windows computer without Wings Platinum being installed.

F

Frame drops: ...are video images which are left out during recording or playback. This usually causes a jump in time and the video to jerk.

G

GOP: means "Group of Pictures" and specifies a group of pictures within a compressed video containing all the information required for its complete reconstruction.

H

HDAV: ...is short for "High Definition Audio Vision" and characterizes a digital AV show with high-resolution pictures, videos and animations with a quality exceeding DVD standards by far.

K

Key frames: .....depending on the context this term has different meanings: 1. For controlling size and position of an image this is the point of time for which certain parameters were specified. 2. For video compression these are the images that contain all the information necessary for their reconstruction.

L

Locator: .. a vertical line in the Timeline which marks the time position.

M

Media Pool: ...is used for organizing and managing all media files and devices within a project

Modulo: Modulo is an arithmetic operation. The result is the remainder of a division. If it equals zero the condition is considered to be fulfilled.

MPEG: Motion Picture Expert Group, ... international group that develops and standardizes methods for compression of audio and video files

P

Peak level: ....is the maximum volume level of a sample and relevant for the audio level control. When determining this value, even the tiniest peaks are included so that it has little relevance for evaluating the loudness.

R

Resolution: ... specifies the amount of different brightness and voltage values. A resolution of 16 bit, for instance, permits approx. 65,000, one of 24 bits about 16 million values to be depicted. For picture files, it defines the number of colours that can be displayed, for audio files, the dynamic range.

RMS level: ... is a measure for the highest power in an audio file. This value is a good indicator for the subjective loudness of a sample. For a correct audio level control this RMS level is irrelevant, as its always determined for a period of 50 ms.

S

Sampling rate: ... specifies the number of values per second contained in an audio file. The higher the sampling rate, the higher the highest frequency that can be depicted.

Scaling: ...alteration in picture size caused by rerendering

Screen: ...is the output medium for a presentation, e.g. a projection screen, a monitor or a display.

SmartSync Engine: ...is a technology which synchronizes the graphics card refresh rate with the video frame output for hardware rendering and allows soft video playback without any jerks.

Speaker Support: ... by pressing a button, the presenter can start individual dissolves or prepared sequences synchronized with music for his live presentation.

T

Texture files: .....are picture files for direct processing by a 3D graphics card. For this purpose, texture data are loaded into the graphics memory and are processed up to one thousand times faster than by the main processor.

Timeline: ... .a window displaying a timeline from left to right, which contains tracks for pictures, sound, videos and other objects.

Trigger: ...is a control element that executes a previously defined function in response to a certain event.

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