

3. The Reel Menu Bar

Located on the upper section of the Reel, the Reel Menu Bar provides most file, editing and setup functions, as well as access to the Reels auxiliary windows. Also, all effect clips can be created from the menu. Some of these menus are “tear offs,” which can be used as “floating tool palettes” for fast repetitive access to the menu functions without the need to open a menu each time. (A menu is a “tear off” if it shows a dashed line as the first entry in the menu. If you click on the dashed line, the menu appears as a floating tool palette that can be moved just like an independent window.)

3.1 File

By means of the options located on the Reels File submenu, you can reset, load and save the Reel environment. Remember that the environment contains all clips in the reel as well as their arrangement and parameter settings. By default, Jaleo saves these environment files in the ENVIRONMENTS sub directory of the current project with an .env extension.

3.1.1 File > New

Clears the reel environment and allows you to start freshly.

3.1.2 File > Open

Opens a simple file selector box where you can select an environment file to load.

3.1.3 File > Load

Starts the Jaleo Loader application. The Loader allows you to select environment files or all other Jaleo file types and to place your selection in the reel using drag&drop.

3.1.4 File > Save

Saves the current Reel environment to a disk file.

3.1.5 File > Save As

Saves the current Reel environment. A file selector box appears, giving you the opportunity to enter another name for the saved file. By default, environment files are saved to the ENVIRONMENT directory of the current project.

3.1.6 File > Save Selection

This option is only selectable when a either an image clip, effect or group is selected in the Reel. It allows you to save specific instances of these clip types with all their parameters. A file selector box appears for you to enter a filename. The selection will be saved in the directory corresponding to the selected clip type, i.e. clips go to the current projects CLIPIMAGE directory, effects to EFFECTS and groups to GROUP.

3.1.7 File > Quit

Closes the active Reel.

3.2 Edit

3.2.1 Edit > Undo

Allows you to undo an unlimited number of Reel operations. Undo steps may sometimes be smaller than the actual edit operations, and it may take more than one UNDO to reach exactly the same state as before an operation.

Undo can be used with an edit argument entered in the argument field. The value entered is taken as the number of steps to undo. If no value is present in the argument field, or if the value is 0, a single UNDO step is performed.

Note: Time Editor parameter changes are also affected by the UNDO command.

3.2.2 Edit > Redo

Allows you to redo reel operations previously undone using the UNDO command.

Redo can be used with an edit argument entered in the argument field. The value entered is taken as the number of steps to redo. If no value is present in the argument field, or if the value is 0, a single redo step is performed.

Note: Time Editor parameter changes are also affected by the redo command.

3.2.3 Edit > Cut

Deletes the currently selected clip(s) and places them on the clipboard, ready to be pasted using a subsequent paste edit.

3.2.4 Edit > Copy

Copies the currently selected clip(s) to the clipboard, ready to be pasted using a subsequent paste edit.

3.2.5 Edit > Paste

Pastes the clipboard contents at the current position of the Reel cursor.

3.2.6 Edit > Insert

The insert function inserts material from one layer into a layer below. To accomplish this:

- The material in the target layer is split
- The part to the right of the split point is moved to the right to produce enough space to accommodate the insert.

- The new material is inserted by moving it down a layer.

To insert material in a layer, place the material in a layer above the target layer, and position it so that the left edge of the clip to be inserted is positioned properly.

Now, select the part of the target clip you want to be affected by the command. (To quickly select all the target layer, use the appropriate function from the Select menu, page 63). Then, select the material to be inserted. Finally, select the menu command.

Insert also works with more than two layers: In this case the stack is processed top down. First the uppermost layer is inserted in the layer below it. The result of this is then inserted in the layer below, and so forth.

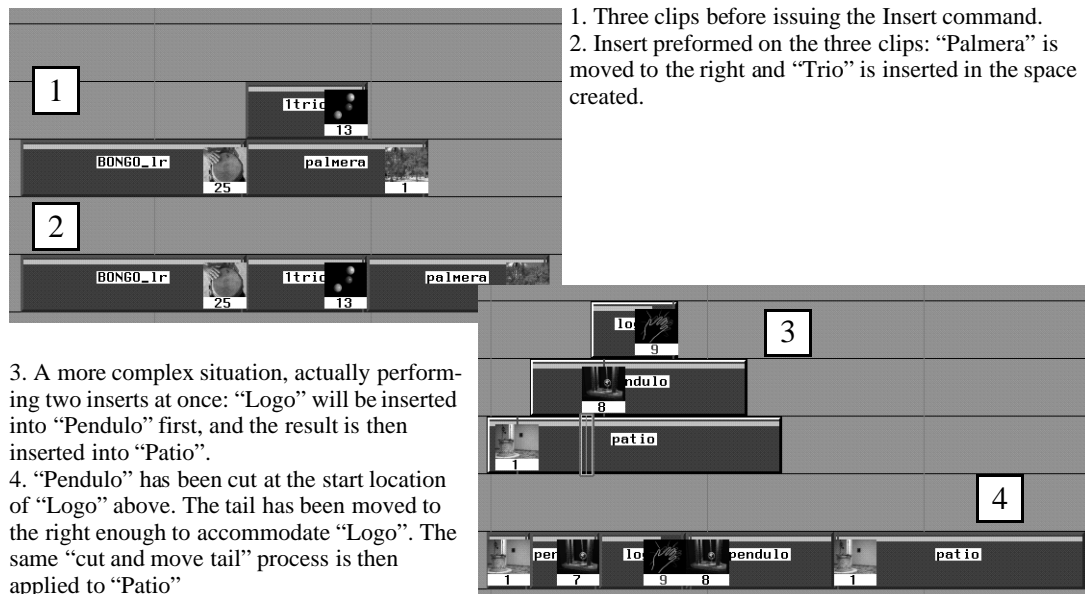


FIGURE 18. Insert Edit

Finally, it is possible to place multiple inserts at multiple insert positions. Any number of inserts, be they stacked vertically or distributed over time, can be processed using one insert command.

3.2.7 Edit > Clone

Copies the selected clips and places the copies in the same layer directly over the clip copied. If you enter a positive number into the argument area prior to selecting Clone, an appropriate number of copies will be made. Note that after the Clone operation only the uppermost copy is selected. If you subsequently reselect all copies using a selection rectangle, you can place all the copies one after another using the Pack command.

3.2.8 Edit > Delete

Deletes the currently selected clips.

3.2.9 Edit > Force Size

Adjust the length of the selected clips. You must enter a length in the argument bar prior to selecting this function.

Changing the length is equivalent to a trim operation on the tail of the selected clips, or to drag the length with right and left mouse buttons pressed. If, for an image clip, the new length is greater than the number of available frames, the last frame actually present will be repeated as a still frame. See “Edit > Trim” on page 59 for more information.

3.2.10 Edit > Shift

A shifting operation leaves the clip in the reel just where it is and “slips” the source material under it. To explain the idea, imagine the source material is a long vertical strip and each clip instance is showing a particular window of it.

If moving a clip instance is moving both source material and clip relative to the reel, trimming resembles resizing the window without moving neither clip nor source material. Shifting then is moving the source material relative to the window without changing the clips position and length.

Consider for example a clip instance at 00:00:10:00 with a length of 25 frames and a head value of 10 and a tail value of 35. Head and tail are the distance of the clip instances first and last frame from the first frame of the source material, or, to stay in the window example, position of window start and end relative to the source material. If you apply a shift of 2 frames to it, the head will be 12 and the tail 37. Neither length nor position of the clip will change, but the position of frames within the clip instance relative to the Reel changes.

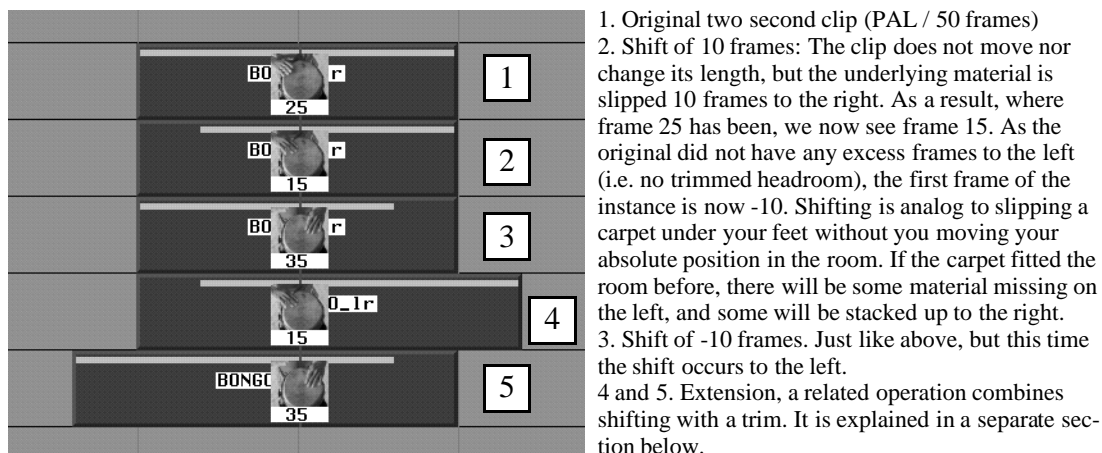


FIGURE 19. Shifting Clips

3.2.11 Edit > Split

Cuts the selected clip instance at the position of the clip preview cursor. Two independent clip instances will result from this. *Splitting is only possible for image and sound clips.*

3.2.12 Edit > Join

Takes two clip instances of the same original clip and joins them into a single clip. To join two clip instances, both must be selected and there must be no space between them (they must be packed together seamlessly.)

If the two original clips are in packed sequence, they appear as if you had added a clip at the end of another clip. If the clips overlap, the lower clip is cut at the overlap position and the visible remainder is appended to the fully visible clip.

3.2.13 Edit > Move

Moves the selected clips controlled numerically. Before invoking any of the movement options explained below, enter a movement amount or target position into the argument area. Sometimes it can be very convenient to copy position values from the position window (see “The Position Window” on page 112).

Edit > Move > Frame

Moves the selected clips as many frames as are indicated in the argument area. Before invoking this function, enter a target position in the argument area. The movement will be towards the right if the argument is positive; and towards the left when the argument is negative.

Edit > Move > Position

Moves the selected clips to a new position. Before invoking this function, enter a target position in the argument area. Sometimes it can be very convenient to drag position values from the position window (see “The Position Window” on page 112) to the argument line.

Edit > Move > Mark In

The selected clips will move to the edit In mark, so that the beginning of the selected clips will coincide with the position of the editing mark.

Edit > Move > Mark Out

The selected clips will move to the Edit Out mark so that the beginning of the selected clips will coincide with the Edit Out mark.

3.2.14 Edit > Trim

A trim operation on a clip instance alters the section of the source material actually used by the clip instance. By doing so, i.e. by using more or less source material for this particular instance, the length of the clip instance in the reel is changed. However, the position of individual frames relative to the instance’s original position in the reel do not change.

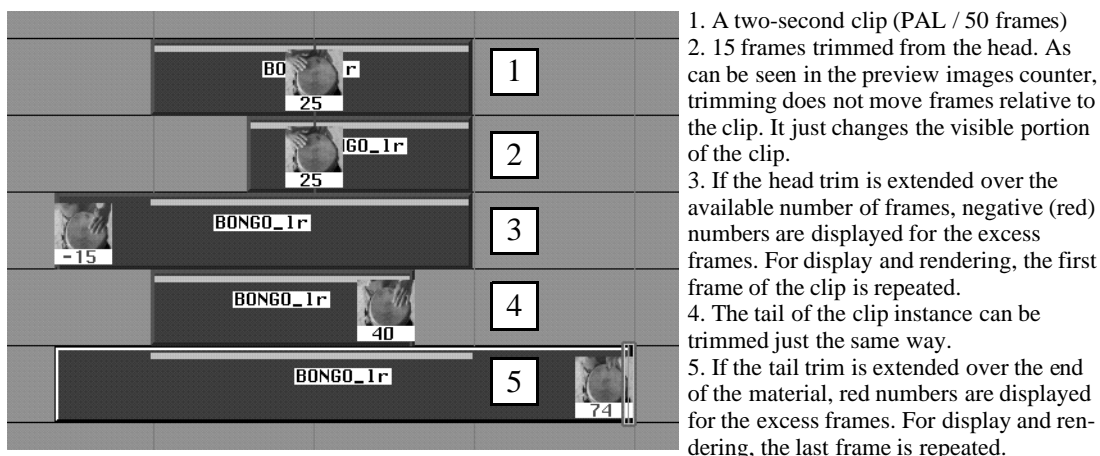


FIGURE 20. Trimming

Aside from using the menu functions, trimming can be achieved using the mouse. To do so, drag the preview cursor of the clip bar using the right mouse button to either end of the clip and then press the left mouse button without letting go of the right button. You can now drag the end of the clip, in effect trimming it.

Note that here, as always with trimming, no frames of the clip are repositioned with respect to the Reel. Trimming just orders the computer to use more or less material of the clip without actually touching the remaining frames. Using the mouse or menu functions, any number of selected clips can be trimmed at once.

(For more information on trimming, see “Trimming” on page 31, “Clips and Image Data” on page 37)

Edit > Trim > Head

This operation changes the clip’s head value so that:

- If a positive value is entered, the clip will be shortened from its beginning, i.e. less material of the source is going to be used.
- If a negative value is entered, the clip will be extended from its beginning, i.e. more material of the source is used. *As this function uses the current value of the argument field, you should enter the desired amount of trim first, unless you want to reuse the currently displayed value.*

Edit > Trim > Tail

As this function uses the current value of the argument area, you should enter the desired amount of trim first, unless you want to reuse the currently displayed value. This operation changes the clips tail value so that:

- If a positive value is entered, the clip will be shortened from its end;

- If a negative value is entered, the clip will stretch from its end.

Edit > Trim > Mark In

Changes the head value in a way that the new beginning of the clip is positioned at the Edit In mark. Note that the Edit Marks (see “Cursors and Markers” on page 43) are used for trimming, *not* the clip markers (see “Clip > Mark” on page 66).

Edit > Trim > Mark Out

Changes the tail value in a way that the new end of the clip is positioned at the Edit Out mark. Note that the Edit Marks (see “Cursors and Markers” on page 43) are used for trimming, *not* the clip markers (see “Clip > Mark” on page 66).

Edit > Trim > Both Marks

Changes both head and tail values to position new beginning and new end of the clip at the respective mark positions. Note that the Edit Marks (see “Cursors and Markers” on page 43) are used for trimming, *not* the clip markers (see “Clip > Mark” on page 66).

3.2.15 Edit > Pack

Removes empty space between two or more clip instances. If clips from more than one layer are selected, the pack operation is performed on a layer-by-layer basis. *Note: Packing two or more clips is equivalent to a butt or tag edit on a linear editing system.*

Edit > Pack > Left

Given a selection of two or more clips, it removes any space between them, repositioning each clip to follow immediately after the leftmost clip that maintains its original position.

Edit > Pack > Right

Given a selection of two or more clips, it removes any space between them, repositioning each clip to follow immediately before the rightmost clip that maintains its original position.

3.2.16 Edit > Align

Aligns the selected clips to a position or to an editing mark.

Edit > Align > Position

Aligns the selected clips to an absolute Reel position that must be entered in the argument field before invoking the option. Sometimes it can be very convenient to drag position values from the position window (see “The Position Window” on page 112) to the argument line.

Edit > Align > Mark In

Aligns the selected clips first frame with the Edit In mark.

Edit > Align > Mark Out

Aligns the selected clips last frame with the Edit Out mark.

3.2.17 Edit > Extend

Clip extension is a combination of trimming and shifting. The clip's length is modified like in a trim, but unlike the trim, frames do not maintain their position relative to the Reel window.

Using extend, the first frame of a clip instance maintains its position relative to the clip instance. That is, the frame that was the first (last) frame of the clip instance before the extend operation, will still be the first (last) frame after the extend operation.

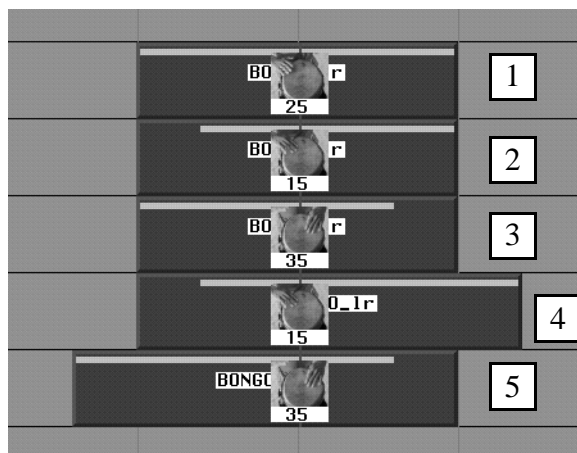


FIGURE 21. Extending a clip

1. Original two second clip (PAL / 50 frames)
- 2 & 3. Shift operations, as described above, slip source material under the clip without moving it.
4. Extend tail 10 frames. An extension, just like a trim, shortens or lengthens a clip instance. In contrast to a trim that leaves at their relative position to the reel, Extends leaves them at their relative position to the clip. By doing an extension of the tail, the frame that was the last frame of the instance before the operation, will also be the last frame after the extension. In example 4, the last frame of the clip is still frame 49, just like in example 1. An extension is equivalent to a trim (changing the length) followed by a shift (making sure that the frames are moved relative to the reel). One could call it a "sticky trim" because the frames at the ends stick to their respective clip edges.
5. Just the opposite: Frame one is still at the beginning, even if the clip has been stretched to the left.

Edit > Extend > Head

As this function uses the current value of the argument line, you should enter the desired amount of trim first, unless you want to reuse the currently displayed value. The operation affects the clip's head such that:

- If a positive value is typed in, the clip will be shortened from its head (positive trimming) and then be shifted to the right the same amount, repositioning the original starting frame to the new beginning.
- If a negative value is typed in, the clip will be extended from its head (negative trimming) and then be shifted to the left the same amount, repositioning the original starting frame to the new beginning.

Edit > Extend > Tail

As this function uses the current value of the argument line, you should enter the desired amount of trim before, unless you want to reuse the currently displayed value. This action affects the clip's tail, such that:

- If a positive value is typed in, the clip will be shortened from its tail (positive trimming) and then be shifted to the left the same amount, repositioning the original end frame to the new end.

- If a negative value is typed in, the clip will be extended from its tail (negative trimming) and then be shifted to the right the same amount, repositioning the original starting frame to the new beginning.

Edit > Extend > Mark In

Works like the extend head functions, but uses the relative position of the Edit In mark instead of a argument field value.

Edit > Extend > Mark Out

Works like the extend tail functions, but uses the relative position of the Edit In mark instead of a argument field value.

Edit > Extend > Both Marks

Extends the clip in head and tail by trimming both ends to the respective Edit mark and then shifting by the sum of the shifts requested by the relative Edit mark positions. If the Edit In mark is 10 frames before the clip start and the Edit Out mark is 5 frames after the clip end, the head is trimmed -10 frames, the tail -5 frames. The resulting shift is 5 frames to the left.

3.3 Select

The select menu allows you to select quickly parts or all of your reel content. Many typical edits can be achieved easily by using a selection function and then moving the selected clips by either mouse or keyboard commands. Most selection commands are relative to the current reel cursor position.

Furthermore, “goto” functions and movement for the edit and play marks are included in this menu.

3.3.1 Select > All

Selects all clips within the Reel

3.3.2 Select > Invert

Inverts the present selection. In other words, it deselects all of the previously selected clips and selects those that were not selected before.

3.3.3 Select > Line

Selects all clips within the same layer as the current Reel cursor position.

3.3.4 Select > Above

Selects all clips above the current Reel cursor position.

3.3.5 Select > Below

Selects all clips below the current Reel cursor position.

3.3.6 Select > Left

Selects all clips to the left the current Reel cursor position.

3.3.7 Select > Right

Selects all clips to the right the current Reel cursor position.

3.3.8 Select > Play

Selects all clips between the Play marks.

3.3.9 Select > Edit Marks

Selects all clips between the Editing marks.

3.3.10 Select > Goto

Select > Goto > Position

Positions the Reel at the position value entered in the argument field prior to invoking this command. (It can be convenient sometimes to drag position values from the position window to the argument field.)

Select > Goto > Previous clip

Positions the Reel to the clip previous to the current selection.

Select > Goto > Next clip

Positions the Reel at the position of the clip following the current selection.

Select > Goto > Play In

Positions the Reel at the Play In mark.

Select > Goto > Play Out

Positions the Reel at the Play Out mark.

Select > Goto > Mark In

Positions the Reel at the Edit In mark.

Select > Goto > Mark Out

Positions the Reel at the Edit Out mark.

3.3.11 Select > Bring

Repositions the edit and play marks.

Select > Bring > Play In

Moves the Play In mark to the current Reel cursor position.

Select > Bring > Play Out

Moves the Play Out mark to the current Reel cursor position.

Select > Bring > Mark In

Moves the Edit In mark to the current Reel cursor position.

Select > Bring > Mark Out

Moves the Edit Out mark to the current Reel cursor position.

3.4 Clip

3.4.1 Clip > Lock

Temporarily locks a clip or group, hence preventing involuntary manipulations. A thumb tack will appear in the reel display of the clip, indicating its locked state.

3.4.2 Clip > Unlock

Unlocks a previously locked clip or group. The thumb tack indicating that the clip has been locked will disappear.

3.4.3 Clip > Hide

Temporarily hides a clip from the monitor and render evaluation, making it invisible to the processing engine. Its hidden state will be denoted by “camouflaging” it in the Reel, i.e. drawing it in almost the same color as the reel background.

3.4.4 Clip > Reveal

Makes a hidden clip visible again.

3.4.5 Clip > Cache

The cache mechanism, applicable to effect and group clips, allows Jaleo to store and reuse preview rendering results in memory or on raw disk devices, thus making repetitive evaluation of a particular sequence much quicker and smoother. Caching renders the preview resolution images. A full resolution preview is accomplished using the Render function.

Caching is done on a clip by clip basis, i.e. for each clip, the user can activate clipping when it is necessary, and can deactivate the clip whenever its contents should be invalidated (or caching is not required any more.) As caching can use up large amounts of memory (or disk space) one should use caching with care.

SGI Note: If memory caching leads to swapping activities (i.e. if it forces the UNIX operating system to move memory pages to hard disk due to lack of free memory), performance will drop dramatically, as the swapping mechanism of UNIX is rather slow. In short, whenever possible assign a sufficiently large raw disk partition for swapping.

The use of cache memory in a clip is indicated by a dark brown bar that will fill up with a lighter color as the images are evaluated. It is not necessary to do an explicit rendering - whenever a frame of a cached clip is evaluated, it will be placed in the cache if it has not been evaluated before. While working on a clip with a cache freshly activated, dragging the cursor around (or playing back using the shuttle) may be slow at first, but will gradually speed up as more and more frames are already present in the cache. This filling of the cache can be seen in the cache indicator that increases as new frames come into the cache.

Note that caching can be applied at any level of a composite - sometimes it makes more sense to cache clips at lower layer while working on upper level parameters.

The cache must be disabled explicitly if any underlying content changes.

Clip > Cache > On

Turns on caching for the selected clips.

Clip > Cache > Off

Turns off caching for the selected clips. Cache content, if any, will be lost.

3.4.6 Clip > Mark

Each clip bar in the Reel can have a number of markers added to it. The markers are denoted by blue lines with a white number attached to it. For each clip, markers are numbered incrementally. Markers can help the user to remember important frames in their clips or to denote sync points. Markers are just for reference and do not affect clip behaviour in any way. In particular, markers are *not* used for any of the edit commands from the edit menu. “Marks”, in the context of editing always refer to the edit marks (see Edit, page 56 and Cursors and Markers, page 43).

Clip > Mark > Add

Creates a mark in a clip instance. Position the clip preview cursor of the selected clip to the desired frame position before you activate the function.

Clip > Mark > Delete

Deletes a mark from a clip. Move the clip preview cursor of the selected clip to the marker you intend to delete before you activate the function.

3.4.7 Clip > Flip

Inverts the selected clip. Only image and effect clips can be inverted, using the following semantics:

- Image clips: inverts the frame sequence
- Effect clips: inverts the effect time curves

3.4.8 Clip > Group

Groups together the selected clips. You can group together as many clips as you want, distributed over any number of layers. As a result of the grouping, the original clip bars of the selected clips are removed from the work area; instead, a group clip is placed in the lowest layer containing any member of the group, having a length sufficient to capture all clips selected for the group.

Typically, either a single image, a composite effect, or a sequence of clips are grouped. (When you group a single image clip, you are marking the image for time stretching.)

If you group an effect clip or a layering containing an effect clip, make sure that all its inputs are also selected for grouping. If you omit that, the inputs outside of the group will be ignored in further evaluations of the group, as effect scopes can not extend beyond group boundaries. A group always should be a self-sufficient complete entity as far as effect inputs are concerned.

Group playback can be controlled by a playback curve, in effect allowing you to control playback speed and direction of the group content by creating a continuous mapping curve between a frame of the group and the frames of the group's content. Modifying this mapping (that by default is 1:1, i.e. one frame number of the group plays back the same frame number of the group's content) gives a very flexible approach to timestretching. If timestretching or squeezing is applied to a group, Jaleo will apply proper image interpolation where necessary.

Whenever a group is stretched or squeezed using the Force Size command or by dragging it to a different length using the left and right mouse button, a linear timestretching is applied. By modifying the timestretch curve in the time editor, non linear timestretch effects can be applied - by creating for example a bellshaped curve, or a sine with multiple phases, back and forth motions with arbitrary speed-up/slow-motion are easily possible.

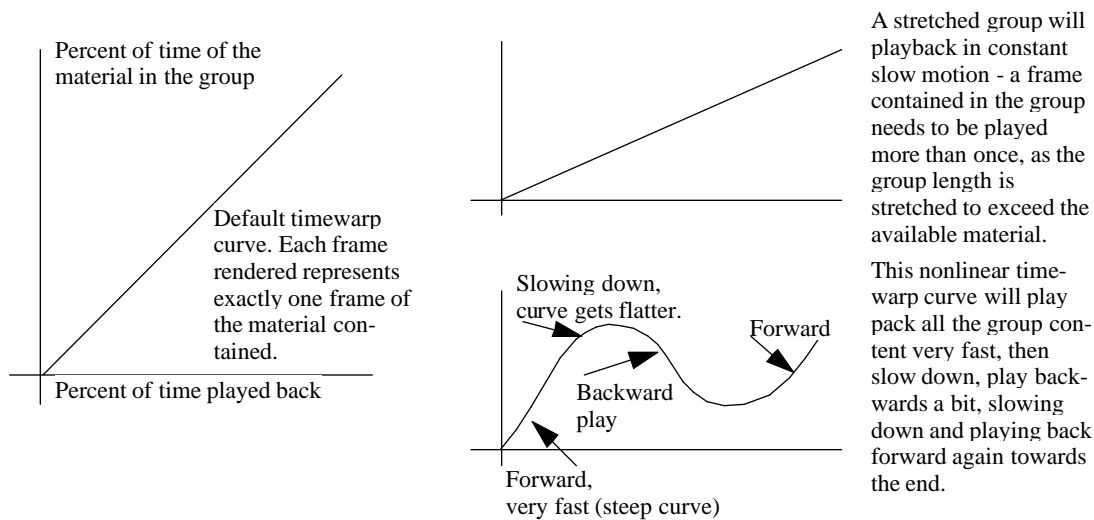


FIGURE 22. Timewarp curves

Because of the groups' timewarping capabilities, it can also make sense to create a group from a single image clip.

3.4.9 Clip > Ungroup

Ungroups the selected group. The lowest layer of the group content is placed on the same layer where the group was, and the other layers contained in the group are stacked above. Normally, ungrouping does not insert new layers - if there is not enough space on the layers above the group to accommodate its contents, the clips from the group are placed over the previous layer content. *You can activate the option Setup>AutoExpand in the Setup menu to prevent this from happening: In AutoExpand mode, new layers are inserted to accommodate the group content.*

3.4.10 Clip > Navigate and Group Navigation Monitoring

Allows you to navigate in and out of group clips. Navigating in a clip replaces the reel content with a reel view only showing the group content. Here, it is very easy and comfortable to modify the group's inner workings. And, if a group contains other groups, one can further navigate into these and so on. While working on a group, one can add or remove layers, clips or other elements and one can edit effect parameters just as usual. The navigate view shows the original length of the group with a colored (light green) bar at the bottom of the window. Using the Navigate mechanism, it is fairly easy to create template effects.

A group can be saved to disk with all its effect settings and can be reloaded easily. By using group navigation you can edit the effect template very quickly by inserting or replacing material, or setting new effects, etc.

Previewing Inside Groups

When you navigate inside a group, the preview monitors created in the main reel stay on the main reel level. That is, to preview the group content you will have to open a new monitor window. This holds true for all levels you care to navigate in. Whenever you move to a higher level, the monitor cursors of all monitors on lower levels are not visible anymore. The monitor windows themselves are still visible and fully operational. As it is often desirable to move a monitor on a lower level of navigation to see a section of an effect in context, Jaleo provides a way to shuttle lower level preview monitors while in navigation mode.

To shuttle a monitor window whose monitor cursor has been created on a lower navigation level than the current one, move the mouse cursor over the monitor window and use the left and right arrow keys to shuttle backwards and forward.

If you open the overview window while navigating, you will see a visual representation of the level currently being monitored. In fact, using the overview window you can see an overview representation of all levels in the current navigation path (i.e. all levels from the current navigation level of the reel downwards to the main level 0). See “The Overview Window During Group Navigation” on page 110 for more information.

Clip > Navigate > In

Puts an “inside view” of the selected group clip into the work area.

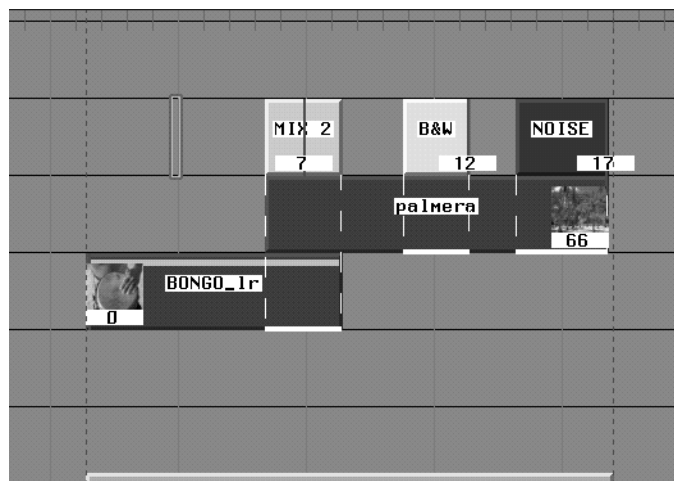


FIGURE 23. Navigate Inside a Group

This diagram shows the length reference display bar in the lower part of the Reel which indicates the length of the group currently being edited at a higher level of hierarchy. Clips can be edited at any navigate level. Also, changes made at any navigation level are immediately reflected in all monitors on the same or on higher levels.

Clip > Navigate > Out

Returns from group editing to the next higher level. As it is possible to navigate into groups within groups, by navigating out one does not return to the highest level automatically, but just to the next higher level. If you have changed the length of the any group member in a

way that the overall length of the group changes, the system will ask you how the group should be modified:

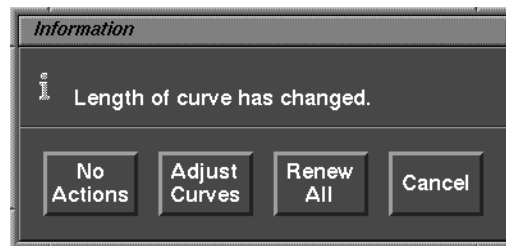


FIGURE 24. Navigate Out Dialogue

In most cases, especially when you have not defined any timewarp curve for the group, Renew All will be the appropriate choice.

•No Actions:

- The length of the group clip after exiting the group will not change.
- If you extended the length of the group content, the group content will stay aligned at the left side of the group. Material that at the right side extends over the length of the group will be clipped away, i.e. it will not be accessible outside of the group.
- If you shortened the length of the group content, the group will behave as if padded with black frames. That is, whenever you try to render a frame outside of the range of the shortened material, it will be black. For example, if you shortened the 100 material frames contained in a group of 100 frames length to 50 frames and you would then, after navigating out with No Action, render frames 50 to 99, the frames would appear black.
- The group timecurve does not change.

•Adjust Curve:

- The length of the group clip after exiting the group will not change.
- If you extended the length of the group content, the group content will stay aligned at the left side of the group. Material that at the right side extends over the length of the group will not be clipped away, so it can be used by adapting the timewarp curve of the group. The group timecurve does not change, but its possible value range for the group material will expand to allow you access to the new material. Note that by adjusting the timecurve you may introduce a timestretch to the group content, unless you also stretch the group length.
- If you shortened the length of the group content, the group timecurve will be clipped wherever it exceeds over the number of frames available inside of the group. Note that this does not move any control points of the curve - if you later add more material to the group, you will be able to return to the original curve. Curve clipping prevents you from accessing any frame that is not there inside of the group. Wherever the group is clipped, the last available frame is played back as a still.
In contrast to No Action, actually simulating the existence of black frames inside the group for the timewarp mechanism, Adjust Curves deals with “missing” material inside the group by clipping the timewarp curve.

- Renew All:**

- The group length is changed to match the length of the changed group content.
- The timewarp curve is replaced by a default timewarp curve playing back the content material linearly.

- Cancel:** cancels the Navigate Out operation, and allows for further modifications.

3.4.11 Clip > Render Group

Render Group is a command used to initiate a render process for a single selected group of the Reel. In contrast to the normal render function (see “The Render Tool” on page 114 and “Rendering” on page 140) that renders a full scene, Render Group can either be used as an editing tool, providing fast background material creation, or as an incremental rendering tool.

In contrast to caching, Render Group not only creates preview images, but renders full resolution images as well, while at the same time producing a clipfile of the render that can be used in any further arrangement (see “Clip > Cache” on page 65, “Clip Rendering and Playback to the Monitor” on page 78, and “Preview Caching And Group Render” on page 24).

When rendering a group, Jaleo prompts you for a file name to be used. After specifying the name, Jaleo will start rendering frames of that group while displaying a “percent completed” dial (You can interrupt rendering any time). After finishing the render, the reel will display a new image clip that has the name you specified. This clip acts like a cache, but it contains full resolution images and can be used for chroma keying and other effects.

The Render Group function allows sections of a program to be rendered with the full resolution images. If the Render Group function is used throughout a production the final rendering to DDR will be substantially faster.

Group Rendering, or committing, sections of the Reel does not mean that independent access to all the layers is lost. All the clip instances and their effects are still available for changes.

Finally, as the Group Renders are far more persistent than caches, they will speed up rendering of a production subset even when the machine had been switched off in between, or if work needs to be finished on another machine.

Note that you always should activate field rendering if any of the group content clips has been captured in field (interlace) mode.

3.5 Effects: Mix, Key, DVE, FX

The Mix, Key, DVE and Fx menus correspond to the four effects categories of Jaleo. The effect categories and the effects included within are explained in detail in separate chapters.

- Mix effects are used to mix together input layers using animateable mix levels (see “Mix Effects Menu” on page 149)
- Key effects are used to generate key information and to composite layers with key information onto a background layer (see “Key Effects Menu” on page 157)
- DVE effects create wipes and motion effects, as well as motion tracking effects. Motion effects include special functions to composite multilayer effects onto a background layer (see “DVE Effects Menu” on page 189)
- The FX menu includes a collection of functions for color correction, image processing or synthetic texture/pattern generation, as well as various effect utilities (see “The FX Menu” on page 207)

3.6 Tools and EDL

The Tools and EDL menu contains a set of commands that open auxiliary windows. As each of them has a rather large amount of functionality, there are separate chapters explaining their capabilities and functions. In the Tools menu, you’ll find

- The Monitor command to open preview monitor windows (see “The Monitor” on page 77).
- The Time Editor command opens the Time Editor where all effect parameters and parameter animations are controlled. Also, the Time Editor opens more advanced editors for 3D effects and colors (see “The Time Editor” on page 85).
- The Pick Editor has two different jobs: It is used to pick color ranges for chroma keying, and it is used to pick an image area for motion tracking (see “The Pick Editor” on page 101).
- The Attribute Window displays parameters of a currently selected image or sound clip. Current clip trimming values and source relationships can be reviewed here (see “The Attribute Window” on page 105).
- The Overview Window is a fast navigation tool, especially useful in large reels (see “The Overview Window” on page 110).
- The Position Tool displays current mark and cursor positions (see “The Position Window” on page 112).
- The Render Tool is used to create render files that later can be rendered using the IO module (see “The Render Tool” on page 114).
- The EDL Render Tool creates an EDL printout of a reel section. Due to the restrictions of current EDL formats, it can not be used for complex multilayering setups (see “The EDL Render Tool” on page 116).

3.7 Setup

The functions included in the Set Up menu allow you to adapt presentation and operation of the reel.

3.7.1 SetUp > Reel

Reel presentation and setup functions.

Set Up > Reel > Auto Save

Activates automatic saving of reel content. The auto save time interval is controlled by a variable setting in the .jaleorc setup file (see the installation and setup manual for more information)

Set Up > Reel > Show Grid

Toggles the display of a time division grid in the reel. Switching off the grid increases playback rates, as the computer redraws the screen less frequently.

If “Show Grid” is switched on, there will also be a time code ruler displayed at the upper border of the work area.

Set Up > Reel > Fast Draw

If this option is switched on, the reel will not be redrawn during playback or scrolling. To force a redraw, click in the work area of the reel window. Fast draw mode increases playback frame rates of the computer images, as the CPU does not need to process window redraws.

Set Up > Reel > Time Code

The time code option toggles the frame counter displays in the colored clip bars from frame numbers to time code. Only the seconds/frames portion of the timecode will be displayed.

Set Up > Reel > Monitors

This option deactivates image evaluation in all open monitor windows. It will allow you to quickly arrange the clips and effects whenever you do not need to see immediate results - scrolling and dragging of monitor cursors will be considerably faster if the system is not forced to recompute the monitor display while repositioning.

Set Up > Reel > Double TE

Defines if effect, sound or group parameters will be shown in the time editor immediately upon a simple selection of the effect, or if a double click on the clip is required. By default, simple selection is set. Depending on working style, either method may be considered faster.

Set Up > Reel > Monitors

Activates or deactivates monitor update while moving the monitor cursors. If deactivated, moving the monitor cursors is of course much faster, as the material under the cursor does not need to be evaluated. *This can also be achieved temporarily by pressing <SHIFT> while dragging the monitor cursor.*

Set Up > Reel > Flow Monitor

Activates the flow monitor display for all monitors currently in operation. The flow monitor is displayed on the right side of the monitor cursor, overlaid over the reel window, and provides a graphic representation of the process flow in any given layering.

Set Up > Reel > Raise Monitors

Pops up monitor windows hidden by other windows.

3.7.2 Edit

Set Up > Edit > X Constraint

Restricts all clip movement in the time dimension. If active, clips or effects can only be moved vertically. *This can also be achieved temporarily by pressing <CTRL> while dragging.*

Set Up > Edit > Y Constraint

Restricts all clip movement in the layer dimension. If active, clips or effects can only be moved in time, but not between layers. *This can also be achieved temporarily by pressing <ALT> while dragging.*

Set Up > Edit > Auto Expand

If this option is turned on, whenever a group is ungrouped, the reel is expanded, inserting as many layers as necessary to accommodate the group's contents.

Set Up > Edit > Edit Marks

If this option is turned on, the yellow editing marks will appear in the Reel. Using these marks, you can set a Mark In and Mark Out position in the reel, used by some editing commands from the Edit menu.

Note: By default, the edit marks appear at the position of the reel cursor, i.e. the last position where you clicked in the reel. If you have scrolled your reel to another point in time, you may not see the marks immediately. Use Select>Bring to reposition the marks to your current editing position.

3.7.3 Shuttle

Controls the different options related to Reel playback.

Set Up > Shuttle > Show Shuttle

Using this option, the shuttle control button display can be toggled. If activated, the shuttle controls appear just below the File menu, replacing the Jaleo logo. The shuttle controls are used to control reel playback for previewing in all open monitor windows.

Setup > Shuttle > Skip Frame Playback

The drop frame playback option forces Jaleo to maintain the playback target frame rate defined in the Jaleo setup files (see the installation and setup manual for more information) by dropping frames wherever processing speed or IO capacity is not sufficient to provide real time playback otherwise. Movement may appear less smooth, but the overall timing of the playback will be correct.

If you use complex effects that require long rendering times, you should consider using caching to prevent too many dropped frames. Also, Jaleo Composite systems should be configured to use a raw device for caching (Again, see the installation and setup manual for more information).

Drop frame playback is currently not recommended for sound playback.

Set Up > Shuttle > Play Marks

If this option is turned on, the purple play marks will appear in the Reel. Using these marks, you can set a Play In and Play Out position in the reel, limiting your reel playback to the area between the play marks. Without the play marks active, playback will proceed until all monitors have reached the end of all reel content. There are further setup options to control playback modes.

Note: By default, the edit marks appear at the position of the reel cursor, i.e. the last position where you clicked in the reel. If you have scrolled your reel to another point in time, you may not see the marks immediately. Use Select>Bring to reposition the marks to your current position.

Set Up > Shuttle > Single

In this mode, playback between the play marks will stop when the play out mark is reached.

Set Up > Shuttle > Swing

In this mode, when a play mark is reached during playback, playback will proceed in the opposite play direction.

Set Up > Shuttle > Loop

When in this mode, when the play out mark is reached during playback, the system will jump back to the play in mark and proceed playing back.

Note: There is a series of keyboard keys in order to control shuttle. See keyboard hot keys.

