

Drawing Envelopes for Effects and Effect Morphing in Wavelab 6

1. Effect Morphing

Effect Morphing can gradually mix two audio ranges that have different effects/processing applied to them. This allows you to smoothly “morph” from one effect to another, or from an unprocessed audio segment to a processed audio segment.

2. Basic Operation

Effect Morphing always involves two audio ranges. Normally, this is in fact two versions of the same audio range, of which one is processed and the other unprocessed.

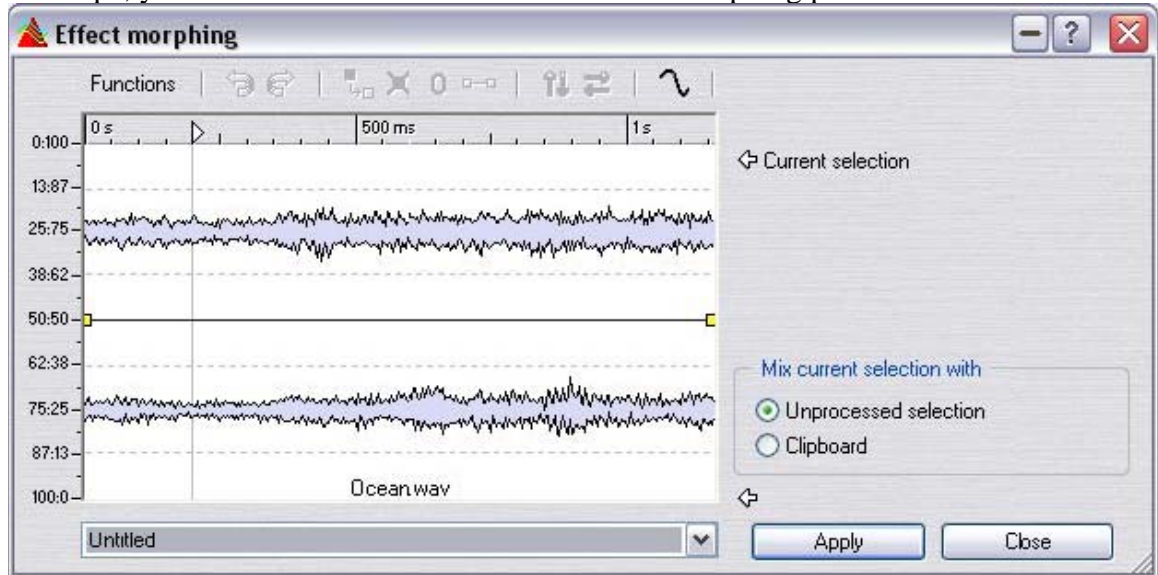
You set it up as follows:

1. Start by making a selection range over the time you wish the effect morphing to take place.
2. Now process this range using any Master Section effect(s), or use some other off-line processing.

You cannot use processing/effects that alter the length of the selection, e.g. time stretching.

3. Open the Effect Morphing dialog from the Edit menu.

The dialog consists of a waveform display (that shows the current selection) with an envelope curve (currently a straight line) in the middle. By adding points to the envelope, you can create a curve that is used for the morphing process.



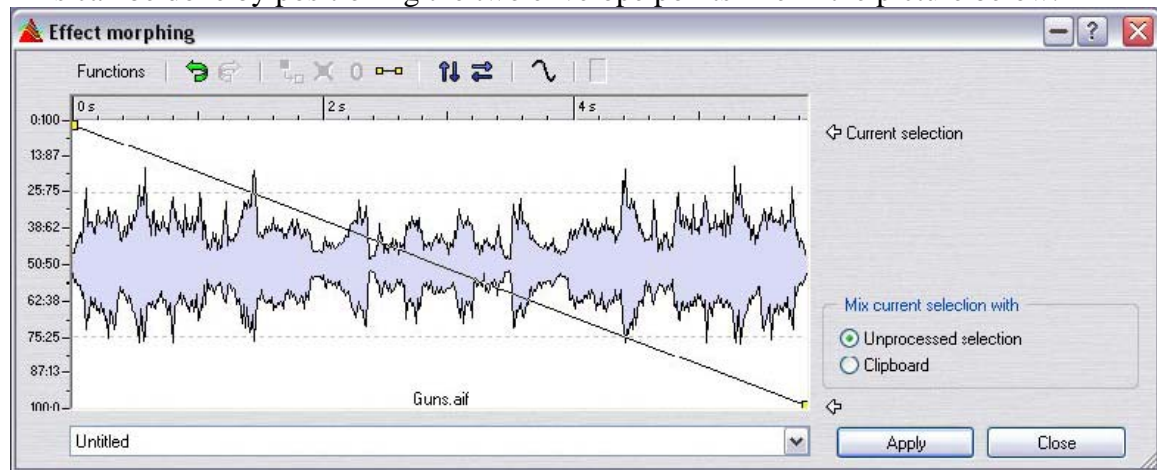
4. Make sure that “Unprocessed selection” is selected in the dialog. The current processed selection can now be mixed with an unprocessed version of the same selection. This is done by utilizing Wavelab’s Undo memory.

- The last Undo memory is read by Wavelab and this is used as the “second” audio range involved in the morphing process.

- The vertical ruler to the left shows as a percentage ratio between the two audio segments (processed/unprocessed), ranging from 0:100 (100% processed) to 100:0 (100% unprocessed).

As an example, let's say you would like to start with the selection 100% processed, and then gradually fade in the unprocessed range so that when the selection ends the audio will be 100% unprocessed.

This can be done by positioning the two envelope points like in the picture below.



- If you now click “Apply”, the processing will create a perfectly linear transition between the processed and unprocessed audio.

It will start out 100% processed, gradually fading in the unprocessed audio (simultaneously fading out the processed audio at the same time) so that at the middle of the selection the ratio between the processed/unprocessed audio will be 50:50, and at the end it will be 100% unprocessed!

This transition is determined by the curve, which in this case was a simple linear curve from maximum to minimum values. You can create more complex curves by adding points which is described below.

In fact, you can use Effect Morphing as “effect automation” across the range of a whole file if you like. By deciding where you wish the effect to be applied, you can draw a corresponding curve where you also have full control over the effect/dry balance and the fade-in and fade-out length!

Mix current selection with clipboard

Morphing can also take place between two differently processed audio segments. In this case you would proceed as follows:

1. Process the selection.
2. Use [Ctrl] + [C] to copy the result onto the clipboard.
3. Undo the processing.
4. Process the selection again, this time with a different effect.

5. Open the Effect Morphing dialog and make sure that “Clipboard” is selected in the “Mix current selection with” section.

6. Apply the desired morphing curve.

Now the curve will enable you to morph between two different processing methods!

- The clipboard could also be a copy from another wave file, but the clipboard size and the selection size must match.

Setting the Envelope

By adding points to the envelope curve you can create an envelope curve that governs how the two audio ranges are mixed over the time line.

1. Double click on the envelope curve to add a point.

A point will be added where you click.

2. If you click on the point it will be selected (red color) and by click-dragging you can move it in any direction.

The curve changes accordingly in the waveform display.

- When you point the mouse in the display (or move a point), the current position and level change is shown continuously in the field above the display.

3. You can keep adding as many points as you like to the curve.

You cannot move a point past another point in the horizontal direction.

4. You can select several points using [Shift] and move them together.

By clicking on the envelope curve itself (not on a point) you can move the whole curve up or down.

Envelope functions in the dialog

The functions are selectable in three ways (the same options in all cases):

- From the Functions menu.
- By clicking the icons above the display.
- By right-clicking in the display.

The following options are available in the dialog:

Option	Description
Deselect all points	This will deselect all selected points.
Delete selected points	Deletes all selected points.
Reset selected points	Resets all selected points.
Reset whole envelope	This removes all added points.
Flip vertical	This will flip the current envelope vertically (in the level axis).
Flip horizontal	This will flip the current envelope horizontally (in the time axis).
Smooth envelope	This allows you to create sp-line curves, for smoother transitions.

Using effect envelopes (clip effects only)

It is possible to automate the effect send level for split mode clip effects by using effect envelope curves. Proceed as follows:

1. Open the clip speed menu for a clip that has a split mode effect active.

2. Select “Show envelope” from the clip speed menu.

The clip’s split mode effects are now selectable from the “Show envelope” submenu.

3. Select the effect to which you want to add an effect envelope.

The effect envelope appears in the clip.

4. Editing the effect envelope is done using the same methods as for volume envelopes.