

Regions

Regions are the basic elements of editing and composing in Ardour. Each region represents a single, contiguous section of one or more audio files. Regions are defined by a fixed set of attributes:

- the source audio file(s) they represent
- a starting point in the audio file(s)
- a length

When placed into a playlist, they gain additional attributes:

- a position along the timeline
- a layer

There are *other attributes* as well, but they do not define the region. Things you should know about regions:

Regions are Cheap

By themselves, regions consume very little of your computer's resources. Each region requires a small amount of memory, and represents a rather small amount of CPU work if placed into an active track. So, don't worry about creating regions whenever you need to.

Regions are not audio files

Although a region can represent an entire audio file, they are never equivalent to an audio file. Most regions represent just parts of an audio file(s) on disk, and removing a region from a track has nothing to do with removing the audio file(s) from the disk ((the *Destroy* operation, one of Ardour's few destructive operations, can affect this)). Changing the length of a region has no effect on the audio file(s) on disk. Splitting and copying regions does not alter the audio file in anyway, nor does it create new audio files ((the *Export*, *Bounce* and *Reverse* operations do create new audio files)).

NOTE

In a traditional recording studio, a "region" might be equivalent to a raw piece of tape lying on the floor, ready to be spliced into the project.

Region Naming

Regions are initially named using either:

- the name of the playlist for which they were recorded
- the name of the track for which they were recorded
- the name of the embedded/imported audio file they represent

Whole File Region Names

These are not audio files, but regions that represent the full extent of an audio file. Every time a new recording is done, or a new file is embedded/imported, a new region is created that represents the entire audio file(s). This region will have the name of the track/playlist/original file, followed by a "-" and then a number plus a dot and then a number.

For recorded regions, the number will increase each time a new recording is made. So, for example, if there is a playlist called "Didgeridoo", the first recorded whole file region for that playlist will be called "Didgeridoo-1". The next one will be "Didgeridoo-2" and so on.

For imported/embedded files, the region name will be based on the file name, but with any final suffix (e.g. ".wav" or ".aiff") removed.

Normally, whole file regions are not inserted into tracks/playlists, but regions derived from them are. The whole-file versions live in the editor region list where they act as an organizing mechanism for regions that are derived from them.

Normal Region Names

When a region is inserted into a track/playlist, its initial name will end in a version number, such as ".1" or ".103". For a recorded region, if the whole file region was "Hang drum-1", then the region in the track will appear with the name "Hang drum-1.1". For an imported/embedded region, if the whole file region was "Bach:Invention3", then the region in the track will appear with the name "Bach:Invention3.1".

Copied Region Names

If the region is a copy of another region, it will begin life with the same name as the original. When an operation is carried out that modifies one of the copies, that particular copy will be renamed by incrementing the version number.

Renaming Regions

You can rename a region at any time. Use the *region context menu* to popup the rename dialog. The new name does not need to have a version number in it (in fact, it probably should not). The region will retain its name until it is modified after being copied.

Selecting Regions

In general, operations on regions apply to whichever regions are currently *selected*. Most operations on regions are done with the [object tool](#)¹.

To select a single region, click on it using **Button1**.

To add an unselected region to the currently selected regions, click on it using **Ctrl+Button1**.

To remove a selected region from the currently selected regions, click on it using **Ctrl+Button1** .

Removing Regions

Select the region(s) to be removed. Then press the "Delete" key or use the standard key binding for "Cut" (**Ctrl+X** by default).

Note that "removing" a region is a non-destructive operation. It has no effect on the audio file(s) stored on disk. If you really want to destructively remove the region, use the context menu for the region which has a "Destroy" item. This is not guaranteed to remove the audio file from your disk storage, but it generally will.

Moving Regions

To move a region, make sure you are in *object* mouse mode. Move the mouse pointer into the waveform display part of the region, press **Button1** and drag. The region will follow the mouse pointer as you move it around. By default, the region can move freely along the timeline.

To move a region from one track to another, simply start a move as described above, but move the mouse pointer into the desired track. The region will follow the mouse pointer. Note that if you have other kinds of "tracks" visible, the region will remain where it is as the mouse pointer moves across them, and will then jump to the new track. This serves as a visual reminder that you cannot drag an audio region into an automation track or a bus, for example.

1. <http://vm-nice.stackingdwarves.net:8888/ardour-en/8-ARDOUR/22-ARDOUR/141-ARDOUR/37-ARDOUR/38-ARDOUR.html> (Object Tool)

Moving more than one region

To move multiple regions, select them before moving. Then click+drag on one of the selected regions. All the regions will move, keeping their positions relative to each other.

Fixed-time motion

Sometimes, you want to move a region to another track, but keeping its position along the timeline exactly the same. To do this, use **Button2** rather than **Button1**.

Copying Regions

To copy a region, make sure you are in *object* mouse mode. Move the mouse pointer into the waveform press the **Ctrl** key, keep it down while pressing **Button1** and drag. A new region is created and will follow the mouse pointer as it moves. See "moving Regions" for more details on moving the copied region around.

Copying more than one region

To copy multiple regions, select them before copying. Then click+drag on one of the selected regions. All the regions will be copied and as they move, they will keep their positions relative to each other.

Fixed-time copying

If you want to copy region(s) to other track(s) but keep the copies at the exact position on the timeline as the originals, simply use **Ctrl+Button2** instead of **Ctrl+Button1**.

Splitting Regions

Splitting regions is a very common task, and ardur makes it very simple. By pressing **s** the currently selected regions will be split at the [edit point](#)². You can undo a split operation immediately with **Ctrl-z**, or by removing one of the two newly created regions and dragging the start (or end) point until the region has its original size.

WARNING

Splitting works only with the [object tool](#)³ and the [range tool](#)⁴.

Trimming Regions

Auditioning Regions

Region Gain Envelopes

If you **Left-Click** on the region while using the [region gain tool](#)⁵ this will make the gain curve visible and create a new automation point. You can move the point around by **Left-Click** and dragging it, or remove it by holding **Shift** and clicking on it with **Right-Click**. Whenever you move an automation point, ardur will display its value directly below the cursor.

2. <http://vm-nice.stackingdwarves.net:8888/ardour-en/8-ARDOUR/22-ARDOUR/142-ARDOUR/90-ARDOUR.html> (Edit Point)

3. <http://vm-nice.stackingdwarves.net:8888/ardour-en/8-ARDOUR/22-ARDOUR/141-ARDOUR/37-ARDOUR/38-ARDOUR.html> (Object Tool)

4. <http://vm-nice.stackingdwarves.net:8888/ardour-en/8-ARDOUR/22-ARDOUR/141-ARDOUR/37-ARDOUR/39-ARDOUR.html> (Range Tool)

5. <http://vm-nice.stackingdwarves.net:8888/ardour-en/8-ARDOUR/22-ARDOUR/141-ARDOUR/37-ARDOUR/41-ARDOUR.html> (Region Gain Tool)

If you want finer control, try to increase the height of the track.

Region Context Menu

If you click **Right-Click** on a region, a popup menu will appear. At or near the top of that menu is a list of all regions that exist in the clicked-upon track under the mouse pointer. Each region entry (shown by name) points to a submenu that contains region-specific operations:

Region Context Menu

Rename	Will rename the region.
Popup region editor	Creates and displays the editor for this region, allowing manual control of start, length, etc.
Raise to top layer	Moves the region to the top layer of this track (works only in "Most recently added/moved/trimmed regions are higher" <i>layer mode</i>)
Lower to bottom layer	Moves the region to the bottom layer of this track (works only in "Most recently added/moved/trimmed regions are higher" <i>layer mode</i>)
Define sync point	If the edit point is within this region, the region sync point is set to the edit cursor location.
Remove sync point	Reverts the Sync point to the beginning of this region
Audition	Plays this region via the auditioner
Export	Exports this region to a new audio file, via the export dialog (thus allowing resampling, dithering, format specification etc.)
Bounce	Re-records this region (with any plugins/inserts applied) to a new audio file, and updates the track's playlist to point to the new file. A new file will be exported with the actual region's settings and automatically included in the Regions List. The name of the new file in the region list will be <i>[track name].1-0-bounce-[number of bounce]</i>
Spectral Analysis	Opens the spectral analysis (FFT) window, displaying the spectrum of the audio region.
Lock	Prevents the region from being moved, trimmed, or modified in almost any way.
Glue to Bars&Beat	Turn this on so that the region start point is associated with the "musical time" rather than the sample offset in the session
Mute	Make the region silent during playback.
Opaque	When an opaque region overlaps another region, no crossfade is created and the opaque region is played in its entirety
Original Position	If the region was recorded (and Broadcast WAVE was the native file format) moves the region to its original capture position
Reset Envelope	Resets the gain envelope to unity gain throughout the region.
Envelope visible	Shows/hides the region gain envelope ⁶
Envelope active	Turns the region gain envelope on/off (the line is gray when the envelope is off, green when it is on)

Normalize	alters the gain processing of the region so that the loudest sample is at 0dBFS
DeNormalize	(only visible when the loudest sample is at 0dBFS) ... reverts any normalization gain to unity.
Reverse	Writes the region to a new audio file with the contents reversed, and replaces the region with one referring to the new file
Add single Range	Creates a Range with start and end points matching the start and end of this region
Add range Markers	???
Set Range Selection	Invokes the Range tool and sets the current range selection to encompass the selected region
Nudge->fwd	Moves the region forward by the amount shown in the nudge clock
Nudge->bwd	Moves the region backward by the amount shown in the nudge clock
Nudge->fwd by capture offset	Moves the region forward by the same offset that it might have been (incorrectly) adjusted by when captured
Nudge->bwd by capture offset	Moves the region backwards by the same offset that it might have been (incorrectly) adjusted by when captured
Trim -> Start to edit point	Adjusts the start of the region to the current position of the edit point (if possible)
Trim -> Edit point to end	Adjusts the end of the region to the current position of the edit cursor (if possible)
Trim->To Loop	Trims the region to begin and end on the Loop start/end points
Trim->To Punch	Trims the region to begin and end on the Punch in/out points
Split	If the edit point is within the region, splits the region at the editor point location
Make mono regions	If the region is a multi-channel one, creates new regions corresponding to each channel. The new regions are added to the editor's region list, not the track.
Duplicate	The region will be copied 1 or more times. The copy is placed directly after the original or previous copy.
Multiduplicate	Pops up a dialog allowing the region to be copied 1 or more times. Each copy is placed directly after the original or previous copy.
Fill Track	Copies the region as many times as necessary to fill the track to the current session end mark. Each copy is placed directly after the original or previous copy.
Remove	Remove the region from the track (non-destructive)