



REASON

What's New

propellerhead

What's New manual by Ludvig Carlson

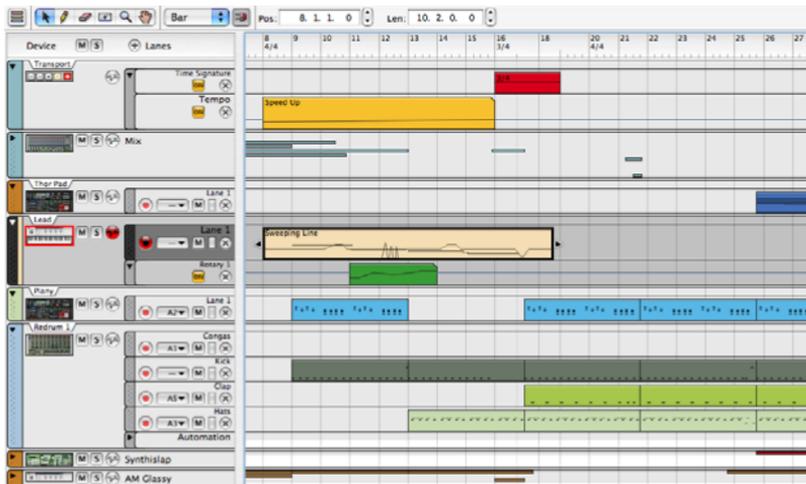
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Welcome!

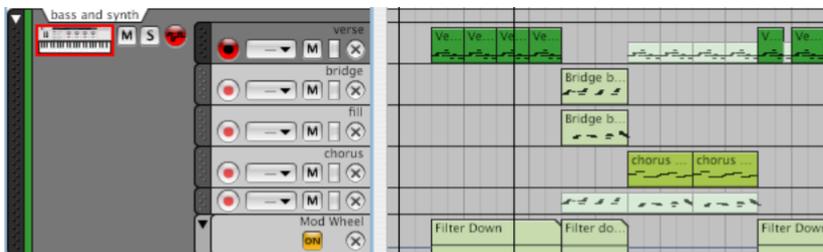
This document introduces the new features in Reason 4. For detailed descriptions, please refer to the Operation Manual. If you are a new Reason user, be sure to check the Getting Started manual, as this contains setup instructions and tutorials to help you get going.

New Sequencer



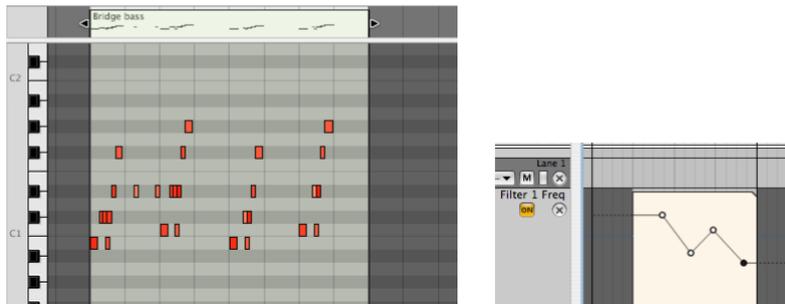
Tracks, lanes and clips

In Reason 4, a rack device can have one sequencer track only (or no track at all). However, each track can have a number of lanes - note lanes (if the device supports notes), parameter automation lanes (one for each parameter) and a pattern lane (Redrum and Matrix only). For instrument devices, you can add note lanes freely for alternative takes, etc.



All notes and automation data live in containers called clips. Clips are created automatically when you record, or manually by drawing in Arrange mode. You build and arrange your songs by moving, copying, deleting or masking (resizing) clips.

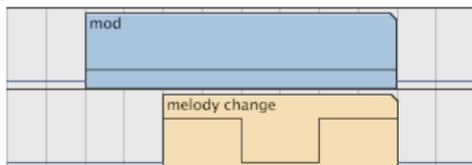
To view and edit the data in a clip, you need to open it - double click the clip, or select it and press Return.



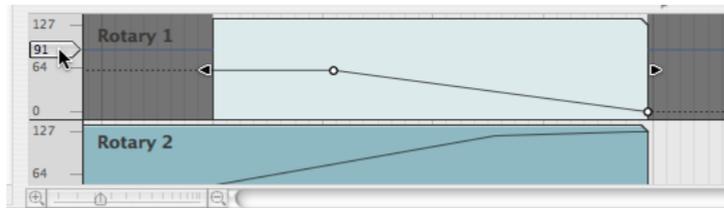
An open note clip (left) and an open automation clip (right). Automation clips can be opened for editing directly in Arrange mode, for quick adjustments.

Automation

Automation is now vector-based - it is stored as automation points connected by linear segments. You edit automation by drawing, moving and deleting points, in Edit mode or Arrange mode. Each automated parameter has a static value - this is the value of the parameter wherever there is no automation clip.

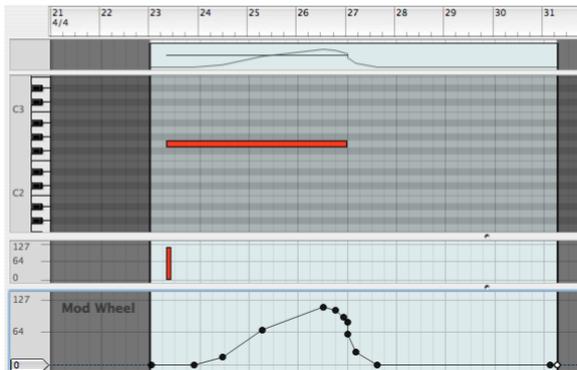


The static value is indicated by the thin line on either side of the clip.



In Edit mode, you can view and edit the static value to the left of the automation lane.

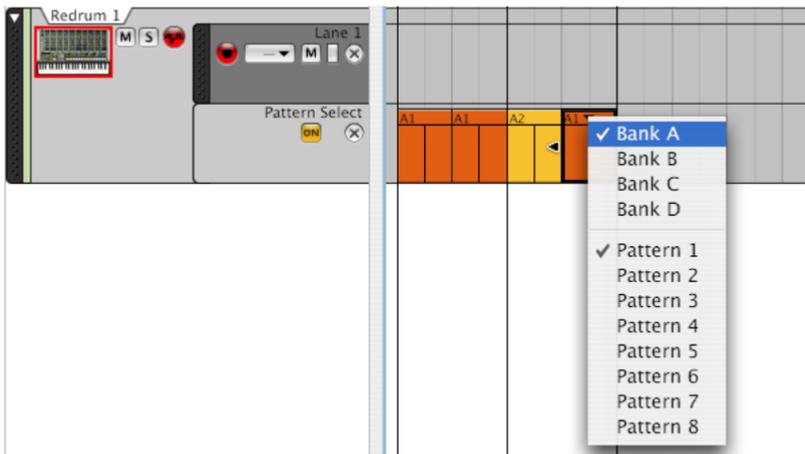
Performance controllers are automation that is recorded together with the notes, inside the note clip. This way you can move and edit your note clips and always include the performance data.



A performance controller lane in an open note clip.

By default, this is how mod wheel, pitch bend or aftertouch data are stored, but you can choose to record or draw any type of automation as performance controllers.

You're no longer required to enter Edit mode to draw or edit pattern automation (for Redrum or Matrix). Pattern automation is done by drawing pattern clips in Arrange mode. To change which pattern is played by a clip, just click on it and select a pattern from a pop-up menu. Where there are no pattern clips, the automated pattern device won't play anything.



Tempo and Time Signature Automation



Tempo and time signature changes can now be automated, by using the Transport track at the top of the track list. Tempo automation works just like other automation, with tempo clips and automation points that can be drawn or recorded. Time signature automation works much like pattern automation.

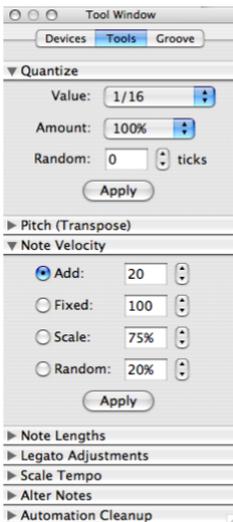
New tools and functions



The Razor tool allows you to split clips or cut out ranges across several tracks. There are also functions for joining, muting, cropping, coloring and naming clips.

The right part of the toolbar now contains the Inspector. This shows the properties of selected clips, notes etc. as numerical values. You can e.g. edit the note velocity or clip length numerically.

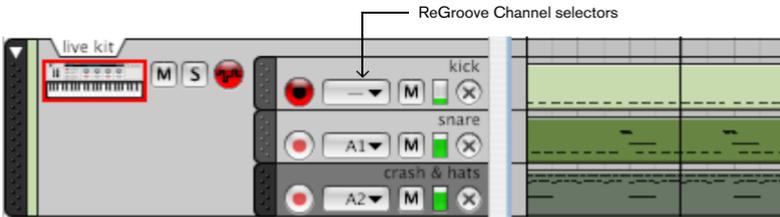
The new Tool window contains a number of functions for editing and manipulating notes. Apart from Quantize (now with a Random setting), there are new or updated transpose, velocity, length and legato functions. These functions affect selected notes, or all notes inside selected clips, for quick editing in Arrange mode.



ReGroove Mixer



The ReGroove Mixer lets you shuffle, slide and apply grooves to your sequencer notes, changing the timing, velocity and note lengths in real time. What's more, you can apply different grooves to different note lanes, with up to 32 groove channels available at the same time.



Different lanes on a drum track, using different grooves. This way you can really fine-tune the feel and groove of your beats.

The Factory Sound Bank contains a number of useful ReGroove patches, but you can also easily extract grooves from recorded note clips or REX files and save your own ReGroove patches.

Thor Polysonic Synthesizer



Thor is an advanced semimodular synthesizer capable of producing virtually any synth sound you want, ranging from huge, warm, analog-sounding leads and pads to sharp FM or Wavetable-based textures. The Factory Sound Bank is analog-full of Thor patches, including hundreds of "Signature Patches", created by renowned artists and sound designers.

Here's a brief description of what makes Thor thunder:

- There are three oscillator slots, in which you can insert any of six different oscillator types.



- There are also three filter slots (one of which is global and affects all voices). Choose between four different filters with a variety of options.



- Four envelopes, a Shaper and two LFOs are available for modulation. Two of the envelopes can be looped, serving as extra LFOs - and the LFO speeds can be taken into audio range, for use as extra oscillators!
- A built-in chorus and delay provide some extra sonic tricks. And all parameters can be modulated.
- While the basic signal path is "pre-patched" in Thor, you can do wild signal routings and modulations using the Modulation routing section. Use audio to modulate a CV signal or vice versa - Thor's modulation capabilities are virtually limitless.



- A built-in step sequencer can be used for playing notes or as an extra modulation source.



- Plenty of audio and CV connections let you use Thor's filters, envelopes and effects. to process the sound, or use external sources to modulate Thor parameters.

RPG-8 Monophonic Arpeggiator



The RPG-8 Arpeggiator generates rhythmic note patterns (arpeggios) from notes or chords, in a variety of modes, in sync with the song tempo or free-running. It connects to instrument devices using CV and Gate (much like the Matrix) and is monophonic, controlling one voice in the instrument device.

In addition to standard arpeggiator features, the RPG-8 is equipped with a 16 step pattern editor for creating rhythmic variations. It also has a number of CV connections, allowing for modulation of arpeggiator functions from other devices.

When the arpeggio function is turned off, the RPG-8 works as a MIDI to CV converter, allowing you to modulate any parameter with e.g. note velocity or pitch.

You can render arpeggio notes to track, for further editing and manipulation.

The Device palette



The Device tab in the floating Tool window provides a new way to create devices in the rack. Drag device icons to the desired position in the rack or double click an icon to insert it below the currently selected device.



Other additions and changes

Transport functions



Precount

The Pre switch in the Click section on the Transport panel gives you one bar of count-in when you record. This setting is independent from the Click on/off setting.

Position displays

Positions are now shown with higher accuracy, as bars-beats-1/16ths-ticks. There are 240 ticks per 1/16th note (960 ppp). However, the internal resolution is much higher - an indicator shows if a position or length value contains fractions of ticks with an option to round down to nearest tick.

The song position is also shown in time format (hours, minutes, seconds and ms). Just like the regular song position, the time position display is editable.

Recording and transport functions

The “New Overdub” and “New Alternative Take” functions are used during recording. They add a new note lane for recording, with or without muting the previous lane.

Pressing Record now starts recording immediately. Pressing Stop several times will move the song position to the previous playback start position, and then to the start of the song.

Combinator changes

You can now transpose instrument devices inside Combi freely. The Combi programmer also contains news such as free source selection, performance controllers as sources and individual device filters for mod wheel, pitch bend, etc.

NN-XT changes

When the Group Mono function is activated for a group, zones in the same group will be mutually exclusive - except when playing the same note. Useful for having a polyphonic open hihat sample that will still be cut off by the closed hihat.

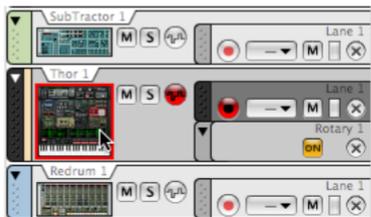
Other changes affect how you work with the NN-XT: you can edit sample settings for multiple zones at the same time, and perform chromatic auto-mapping of samples (useful e.g. when creating drum kits).

Other devices

- All instrument devices have CV inputs for mod wheel and pitch bend (used by the RPG-8).
- The Hardware Interface has an updated, cleaner design.

Usability Changes

- Reason is now localized to German, French and Japanese. Under Windows, you change language settings in the Preferences dialog; under Mac OS X, the language follows the setting in the operating system. Furthermore, text fields such as tape strips or patch name displays now use local fonts, and can show any character set.
- By default, the last selected track will always have Master Keyboard Input (indicated by a keyboard icon and a frame around the device icon in the track list).



However, you can select "Separated Mode" in the preferences if you like - then MKI is independent of the track selection as in Reason 3.

- When you're routing cables using pop-up menus, there is now an indication of which jacks are already in use. Also, devices inside Combis are shown on submenus, making routing clearer and easier.
- Numerical value fields such as the position displays on the transport bar (or inspector) now use a single control (spinner) to the right. To change the value of a segment (e.g. the "beats" position only), click that segment to select it and then use the spinner. You can also click and drag, or double click and type.
- Reason now has support for unmodified key commands (e.g. "M" for Mute Selected Clips, the "QWERTY" keys for direct selection of tools or "S" for toggling Snap on/off). There has also been an overhaul of the entire key commands list, to make them more useful and logical.
- Reason now comes on a DVD, including the program installation and all sound banks and demo material.