

#### v4.0alpha29 - January 15 2010

- + Project bay: dropdown for quick switching between saved bays
- + Project bay: various load/save/merge actions for working with multiple bays
- + Project bay: support for dragging a time selection from the media explorer (both the source media and a trimmed/tempomatched/pitch-adjusted media item are added to the bay)
- + Docker tabs: better positioning preview
- + Customized menus/toolbars: import by dragging .ReaperMenu and .ReaperMenuSet files into REAPER
- + Updated default theme (continued work in progress based on feedback and passion)

#### v4.0alpha28 - January 13 2011

- + Item properties: take envelopes button
- + Project bay: various media preview options
- + Project bay: user-creatable folders
- + MIDI editor: separate options for moving cursor when clicking notes or empty piano roll space
- + Docker: visual preview when moving tabs
- + Folder tracks: optional faint waveform peaks to represent child track contents
- + Multichannel sends: fixed bug / potential memory corruption
- + OS X: better VoiceOver support (preliminary)

#### v4.0alpha27b - January 9 2011

- + (27b) Project bay: preview plays through selected track if there is one
- + (27b) Project bay: update stored media items whenever take envelopes or take FX are adjusted
- + (27a) Project bay: fixed preview
- + MIDI: never create a MIDI pool when splitting a media item
- + MIDI: always preserve existing MIDI pools when splitting a media item
- + MIDI: preference to trim MIDI on split does not apply to existing MIDI pools
- + MIDI editor: insert at mouse cursor via action checks mouse against visible window area
- + Take pitch envelopes: fixed timing with start offset/rate adjustment
- + Project bay: preview source media or media items
- + Project bay: option to automatically retain media items on removing from the project
- + Places that use the bullet character now use UTF-8 version when possible
- + Toolbars: properly update toolbar buttons that are assigned to show/hide various dockable windows
- + Mouse modifiers: deselect items when clicking (not dragging) in label area when shown above items
- + Project rate envelope: better sound with PDC/anticipative FX and editing envelope

#### v4.0alpha26 - January 6 2011

- + Envelopes: per-take pitch shift envelopes
- + MIDI: always un-pool MIDI when splitting
- + MIDI editor: if only CC events selected in piano roll view, event properties dialog edits them
- + MIDI editor: CC lane context menu can be customized
- + MIDI editor: filter dialog now draws correctly with nonstandard font sizes
- + Media explorer: fixed pitch shift reset on double-clicking the knob
- + Screensets: OSX stability fixes
- + Project bay: context menu actions to select/unselect all, retain/unretain all, delete all
- + Project bay: narrower configuration
- + AIFF: read support for 32-bit integer sample format

#### v4.0alpha25 - January 6 2011

- + Mouse modifiers: simplified preference settings for media item move and copy behaviors
- + MIDI: pooled MIDI behavior on mouse-copy and pencil draw is controlled by mouse modifier settings
- + MIDI: pooled MIDI behavior on paste/split is still controlled by preference option (disabled by default)
- + MIDI: pooled MIDI auto-color is more automatic
- + MIDI editor: fixed some option checkmarks not appearing properly in menus
- + MIDI editor: fixed paste preserving position in measure
- + Media explorer: pitch shift preview knob
- + Screensets: re-fixed MIDIEditor\_GetActive()
- + Screensets: video window repositioning fix
- + Screensets: other misc fixes
- + Screensets: improved maximized main window support (including multiple monitors)
- + Improved docker/splash behavior when loading project on startup
- + FX add window left pane size is preserved in screensets, during resizes
- + VST: calling getOutputLatency() on resume until first audio block processed now produces more sane results

#### v4.0alpha24 - January 4 2011

- + MIDI: item icon for pooled MIDI source data (icon lights when any item in the pool is selected)
- + MIDI: action to un-pool MIDI items
- + MIDI: if option enabled to trim MIDI when splitting items, also un-pool MIDI when splitting
- + MIDI: stability fixes
- + Screenset fixes: undo window, API functions that depend on finding the active midi editor

#### v4.0alpha23c - January 4 2011

- + (23c) more screenset fixes
- + (23b) fixed media explorer issue on resize
- + MIDI: media item copy/duplicate/paste creates pooled (ghosted) in-project MIDI source data by default
- + MIDI: editing any pooled MIDI media item affects all media items that share the same pooled data
- + MIDI: added option to enable/disable creating pooled MIDI on copy/duplicate/paste
- + MIDI: added action to paste as pooled MIDI regardless of the preference setting
- + MIDI: un-pool shared MIDI by gluing the media item or via MIDI source properties dialog
- + MIDI: added option to automatically color media items that share pooled MIDI source data
- + MIDI: behavior of media items with MIDI file reference source data should be unchanged
- + MIDI overdub recording: fixed noteoffs on 0 tick length notes
- + Actions: render stems pre-fader now preserve pan law and pan mode
- + Actions: move media items down now properly creates tracks when starting with a single track
- + Project bay: media items are properly saved outside of the project

- + Project bay: support for in-project MIDI items
- + Preliminary floating master mixer window option
- + Screensets: big overhaul - old screensets are no longer valid in 4.x. Many fixes and improvements.
- + Menu item enabling: fixed issues with locking
- + Removed mixer pan-on-top option: added layouts to classic themes for "pan on top"
- + Media item take selection: fixed mouse selection when track is short and labels shown above items
- + Mouse modifiers: select/deselect items when clicking edges or fades and not dragging
- + Mouse modifiers: added TCP/MCP double-click behaviors to toggle or add selection for all track items

v4.0alpha22 - December 30 2010

- + Project bay: new tab for media items (as distinguished from source media)  
note: due to format change, project bays saved with earlier alpha versions will not load correctly
- + Editing: editing media item edges does not affect items on hidden tracks
- + MIDI editor: new MIDI items inherit view/timebase settings from existing MIDI items on the same track
- + MIDI editor: fixed relative note snapping
- + Floating toolbar: improved layout logic (better use of space)
- + Floating toolbar: can now be docked in docker
- + Media item appearance: item labels are now drawn above items by default for new users
- + Transport: can be docked in docker
- + Theme: new default 4.0 theme build - thank you WT and the theme team! :)

v4.0alpha21 - December 29 2010

- + Auto fades: fixed quick-fades created on splits (xfade on split worked, but normal fades did not)
- + Docked transport: better positioning, size calculation for side dockers
- + Transport: ability to dock at 4 places in main window, actions for setting these
- + Transport: action for toggle transport docking
- + Item lanes: fixed overflow bug with large numbers of overlapping items

v4.0alpha20 - December 28 2010

- + Docker: more screenset fixes
- + Media explorer: adjustable preview peaks height
- + MIDI editor: fixed grid type not being recalled properly on OSX
- + Time selection: extending the time selection never moves both edges of the time selection
- + Live FX multiprocessing: lower CPU use on empty or simple tracks
- + Input FX: improved logic for optimizations when using input FX to convert between audio/MIDI

v4.0alpha19a - December 27 2010

- + API: readded support for plugins that use DockWindowAdd() (i.e. sws)
- + Docker: screenset loading fixes, improved OSX appearance
- + Media explorer tweaks (removed larger peaks display sizing, will need to make this user adjustable)

v4.0alpha19 - December 27 2010

- + Soundtouch: fixed crash from 1.5.0 merge
- + Media item properties: when docked, allow larger sizes
- + Media item properties: proper updating after applying changes
- + Media explorer: better resize behavior
- + Undocked mixer shows menu button, no longer has Windows menu
- + Docker: big overhaul
- + Docker: show tabs vertically when resized in certain ways
- + Docker: multiple docker support, can drag and drop docker tabs to move
- + Docker: can reorder tabs in docker via drag and drop
- + Project tabs: can reorder with drag and drop
- + MIDI editor: fixed event list source length bug
- + MIDI editor: option to always snap notes to the left
- + MIDI editor: added actions to auto-scroll during playback, open MIDI editor mouse modifier preferences

v4.0alpha18a - December 23 2010

- + OSX: fixed crash on closing projects with certain sends
- + Track template menu fixes

v4.0alpha18 - December 23 2010

- + Mouse modifiers: separate click vs drag contexts for media item, track, ruler, MIDI ruler  
Assign any action to modified click, any behavior to modified drag, the action will trigger only if no drag
- Media item labels drawn above media items are handled exactly like track space, except the item is selected
- + MIDI editor: move cursor to exact edge of note when clicking near the edge
- + MIDI editor: event list remembers if the user modifies column widths
- + OSX: fixed wonky in-place MIDI event list editing
- + VST/AU: linking FX preset to MIDI program change can switch to either a user preset or factory default
- + Soundtouch: merged changes from 1.5.0 in. Will happily give our mods (multichannel support, etc) to the SoundTouch devs.
- + Dynamic menu population fix for project templates
- + Dynamic menu population optimizations

v4.0alpha17 - December 20 2010

- + Mouse modifiers: never set edit cursor on mouse down
- + MIDI editor: note deselect always happens on mouseup rather than mousedown
- + MIDI editor: when mouse modifier is set to insert note, select the note so it can be moved immediately
- + MIDI editor: active/highlighted pitch follows all note edits
- + MIDI editor: fixed double-click delete note behavior, fixed erase note behavior
- + MIDI editor: don't show note paint cursor when inserting/painting is set as the default behavior
- + MIDI editor: don't show context menu after even a tiny right-click hand scroll
- + MIDI editor: fixed moving edit cursor when clicking piano roll or (with option) note
- + MIDI editor: editing time selection obeys preference to move edit cursor on time selection change
- + MIDI editor: when snap is on, don't force existing short notes to get longer when editing edges
- + MIDI editor: preserve quantize settings after manually entering values

- + OSX: note tracking for hardware MIDI inputs during count-in and buffering (to match windows behavior)
- + Track manager: properly update routing after mute/solo changes
- + Track manager: set undo state after modifications
- + MIDI: internal optimizations to reduce heap thrash (including FX midi merge mode)
- + Undo: set undo state when unlocking track controls
- + ReaSurround: fixed potential threading/memory error when changing speaker count (thanks, nitpicker)
- + Media item properties: shift+enter applies without closing
- + Media item properties: no longer reset contents on apply

#### v4.0alpha16 - December 19 2010

- + Sends: fixed routing matrix tooltips for multichannel sends
- + Media properties: fixed editing multiple items when some but not all are loopable clones
- + Mouse modifiers: fixed autoseek behavior when left-click is set to marquee select
- + Mouse modifiers: item deselect always happens on mouseup rather than mousedown
- + Mouse modifiers: shift+click to expand time selection works when pref is to move cursor on time selection change
- + Mouse modifiers: added right-click hand-scroll behavior in arrange view and MIDI editor
- + Mouse modifiers: preferences page marks behaviors that the user has changed from the factory default setting
- + MIDI editor: note painting improvements, added mouse modifier to paint a row of notes of the same pitch
- + MIDI editor: removed single-click-insert-delete option (this can now be done with mouse modifiers)
- + MIDI editor: added mouse modifier for right-click to erase notes immediately and suppress context menu
- + OSX: fixed right-click emulation in MIDI editor
- + Layouts: fixed layout support for some old themes that use mcp\_altmeterpos
- + Automatic width control showing: do not show width control if layout defines logic for width
- + Better mixer updating (faster, less focus issues) on theme/layout, mixer flag, project tab, track visibility changes
- + ReaVerb: fixed potential bad memory accesses in ZL mode (thanks, nitpicker)

#### v4.0alpha15 - December 16 2010

- + Envelopes: fixed single envelope point editing in per-take envelopes
- + OSX: better behavior when hidden mouse is modifying knobs/faders/etc
- + Media Explorer: when selecting an area of a REX items and inserting as a single item, create a loopable clone
- + Mouse modifiers: added double-click behaviors for TCP, mixer control panel, envelope control panel
- + Mouse modifiers: actions and custom actions can be assigned to item or track single-click
- + Mouse modifiers: fixed reversed marquee toggle and add selection behaviors
- + Project Bay: delete key removes items from the bay even if they are not in the project
- + Project Bay: confirmation dialog before removing items from the project
- + Track Manager: possible fix for track manager sometimes showing empty on first open
- + Actions: fixed action to toggle default fades on/off
- + ReaControlMIDI: fixed manual text entry of pitch and pan values
- + Faders now turn into knobs when their sizes are small enough (via layouts etc)

#### v4.0alpha14 - December 15 2010

- + MIDI editor: fixed OSX crash on reopening the editor
- + Media explorer: control+alt+drag to render time selection (and tempo adjustment if any) to new file
- + Media explorer: control+alt+drag to export selection/tempo match to samplers or other applications
- + Pan: fixed setting pan modes to project default
- + Sends: fixed MIDI-only sends
- + Sends: sending from invalid source audio channels now still sends MIDI (might cherry-pick to 3.x)
- + MIDI editor: fixed crazy menu checkmarks

#### v4.0alpha13 - December 15 2010

- + Crossfades: default crossfade action always creates symmetrical crossfades
- + Crossfades: default crossfade action creates fade-in/out if there is not enough underlying material
- + Crossfades: default crossfade action uses user preference for crossfade shape
- + Project Bay: easier to create new bays and switch between saved bays
- + Project Bay: usage list for each media/FX in project, to select the item or open the FX
- + Envelopes: single envelope point moves are constrained by the surrounding points
- + Media explorer: dragging a time selection from media explorer creates a loopable clone
- + MIDI editor: avoid scroll jump when zooming after returning cursor to start of item
- + MIDI editor: when customized, left-click erases notes immediately
- + MIDI editor: when customized, right-click does not erase notes immediately (so context menus still appear)
- + Mouse modifiers: fixed behavior when moving item and time selection together
- + Sine pan: fixed issue when using tapers other than 3/6dB
- + Sends/hardware outputs: multichannel (4-64) send support
- + Actions: show/hide tracks in TCP, mixer, or both

#### v4.0alpha12b - December 13 2010

- + (12b) MIDI editor: fixed grid in "source beats" timebase
- + (12b) MIDI editor: return focus to piano roll after changing grid or note length dropdown
- + (12b) OSX: fixed some GUI glitches
- + (12a) MIDI editor: restored note color dropdown
- + (12a) Media explorer: fixed crash when inserting REX files
- + (12a) Toolbar: fixed wrong placement of floating toolbar when "always show project tabs" enabled
- + Options: default item move behavior ignores time selection
- + Options: default envelope point selection does not follow time selection
- + MIDI editor: added mouse modifier support for left-click marquee, time selection
- + MIDI editor: toolbar area can be resized to fit 2 rows of buttons
- + MIDI editor: negative swing strength support
- + Mouse modifiers: fixed incorrect cursor move on right-click
- + Media explorer: selecting a portion of the source media inserts a loopable clone
- + Media explorer: fixed inserting selected portion of media with tempo match enabled
- + Toolbar: floating toolbar can be docked either above timeline or on top of main toolbar
- + Toolbar: floating toolbar loses tabs when docked, instead has "+" button to switch toolbars
- + Sine pan modes: fixed zipper noises

- + Pan modes: name update, added remove for modes that will be removed (they are still in for testing purposes)
- + Project pan mode, tracks can use project default

v4.0alpha11 - December 12 2010

- + Batch converter: more "Open output folder" fixes
- + Toolbar: floating toolbar docks across the width of the arrange view
- + Mouse modifiers: don't clear item selection on right-click
- + Mouse modifiers: when track default click behavior is customized, clear item selection on click below tracks
- + Mouse modifiers: when track default behavior is set to marquee, still obey auto-peek prefs
- + Render: set focus to render target path when opening render dialog
- + Panning: new sine taper modes for balance and stereo pan modes (probably only useful at 3dB and 6dB, but configurable)
- + Stereo pan mode: when enabled for track, track will try to always show width control along with pan
- + Pan window: checkbox for compensated gain, to help avoid confusion on positive gain values
- + New pan/balance modes: fixed compensated gain mode
- + Width control: fixed (probably) incorrect attenuation at lesser widths

v4.0alpha10a - December 10 2010

- + (10a) ReaSurround: fixed possible crash when changing speaker count
- + (10a) ReaSurround: optimizations
- + Toolbar: main toolbar can be resized to fit 3 rows of buttons (enable "don't scale above 1:1" or it looks bad)
- + ReaSurround: assign meters/faders to any block of 16 inputs or speakers
- + ReaSurround: customizable speaker influence areas
- + Mouse modifiers: select items and move cursor (according to pref) at start of marquee selection
- + Mouse modifiers: move edit cursor (according to pref) at start of time selection
- + Mouse modifiers: don't do shift-extend time selection over track space if user has remapped shift
- + Track manager: automatically re-sort when track attributes change
- + Track manager: option to indent or not indent tracks in folders
- + Batch converter: fixed "Open output folder" with paths containing unicode characters

v4.0alpha9a - December 9 2010

- + (9a) Media explorer: fixed inserting time selection when preview is tempo mapped
- + (9a) Track manager: allow show/hide tracks even when auto-hide is enabled
- + (9a) Track manager: sweep actions obey preference to link TCP/mixer visibility
- + (9a) Track manager: fixed auto-close-on-enter on OSX
- + (9a) ReaSurround: fixed edit action names in the dropdown lists
- + Mouse modifiers: added "copy item vertically"
- + Mouse modifiers: start marquee sooner over empty track space
- + Mouse modifiers: show marquee cursor over empty track space if appropriate
- + Mouse modifiers: added "move item contents ignoring selection/grouping"
- + Color theme: themeable colors for TCP/mixer FX knob text
- + OSX: show media item properties window at the proper size on the first startup
- + ReaSurround: individual channel/speaker gain faders
- + Track manager: click and sweep to set track visibility and other parameters en masse
- + Track manager: option to auto-close on enter
- + Track manager: gets very skinny
- + Meters: preliminary multichannel metering support (enabled per track via record settings menu, always enabled on master)

v4.0alpha8 - December 8 2010

- + Media Item Properties: focus take name field on open, close floating window on enter in take name field
- + Media Item Properties: allow mass rename of multiple selected takes
- + Media Item Properties: added action to toggle properties open/closed
- + Mouse modifiers: added "move media item vertically"
- + Mouse modifiers: show arrange\_timeitemsel or arrange\_marquee cursor when appropriate
- + Mouse modifiers: respect user preference to clear time selection on arrange view click
- + Mouse modifiers: if no action set for item edge or fade double-click, use item double-click action
- + ReaSurround: double-click channel or speaker names to rename
- + ReaSurround: fixed center trim adjustment
- + ReaSurround: separate speaker placement setups for ITU-R
- + ReaSurround: note that existing projects may load oddly
- + Take lanes: fixed some bugs when deleting takes
- + Track Manager: option to auto-mirror track selection
- + Track Manager: option to auto-hide filtered-out tracks in TCP or mixer

v4.0alpha7a - December 6 2010

- + (7a) Mouse modifiers: fixed marquee/time selection in track context
- + Glue: if all selected items are within the time selection, the new item fits the time selection
- + Media Item Properties: enter key applies changes and returns focus to the arrange view
- + Project Bay: fixed updating project and undo support when deleting media from the project
- + Project Bay: space bar previews media by default (can be disabled in context menu)
- + Mouse modifiers: fixed marquee selection over the bottom half of media items
- + Mouse modifiers: single click always selects item or take regardless of mappings
- + Takes: deleting a take that is aligned with surrounding media items creates an empty take lane
- + Takes: deleting the last take in a lane collapses all contiguous items (please test)
- + Batch converter: added "Open output folder" button
- + ReaSurround: use standard surround speaker placements

v4.0alpha6 - December 6 2010

- + ReaSurround: automatically connect output pins when increasing speaker count
- + VST: properly label REAPER vs VST style presets in the FX preset dropdown
- + MIDI editor: fixed stray CC events when moving CC with notes
- + Takes: fixed undo/project load bug that could create empty take lanes
- + Takes: do not draw take number on empty take lanes
- + Takes: remove item when removing the last non-empty take lane

- + Project bay: support for removing or renaming media/FX in the project
- + Mouse modifiers: explicit support for left-click marquee over empty track space or media items
- + Batch converter: can now process media items from timeline

#### v4.0alpha5 - December 5 2010

- + Takes: do not align recorded takes with existing takes when trimming behind recorded items
- + Takes: draw empty take lanes semi-transparent
- + Mouse modifiers: separate "arrange left mouse" and "arrange right mouse" contexts
- + Mouse modifiers: added behaviors to open media item or source properties when double-clicking items
- + Mouse modifiers: added behaviors to show take list or show take comp list when double-clicking items
- + MIDI editor: show eraser cursor when erasing notes via right-click
- + ReaSurround: user can specify number of input channels
- + VST: immediately update the plugin I/O button when the plugin changes its I/O count
- + Installer: fix to avoid false positive on certain virus scanners
- + WINE: disabled pin-to-top buttons
- + FX browser: fixed support for win98/2000/WINE

#### v4.0alpha4 - December 3 2010

- + Insert virtual instrument: fixed MIDI input setup
- + MIDI editor: mouse modifier action "paint notes" starts painting on the first click
- + MIDI editor: paint notes action will not create a note immediately above or below an existing note (note: "paint notes" fills in the grid with notes, "draw notes" lets the user draw the note length)
- + MIDI editor: renamed marquee mouse modifier context to "MIDI right mouse" (note: MIDI right mouse can be assigned to erase notes or create time selection)
- + MIDI editor: fixed rounding for manually entered time positions in event list view
- + MIDI editor: various improvements to CC event capture when moving notes
- + Theme loading: more fixes to default 3.0/default theme selection
- + Record input: force mono with midi source (input FX) crash fix
- + Mouse modifiers: reworded the actions that change default mouse modifiers, for easier searching
- + ReaSurround: fixed automation reading, fixed uninitialized variable causing high CPU use
- + Takes: do not insert empty take lanes in FIPM tracks

#### v4.0alpha3 - December 2 2010

- + Envelopes: allow editing envelope within time selection if the envelope has no points
- + Envelopes: fixed edge point creation when editing envelope within time selection
- + Mouse modifiers: added actions to select both time and items in ruler, track, and media item contexts
- + Mouse modifiers: added explicit time selection actions in track and media item contexts
- + Mouse modifiers: fixed double-click actions for track space, item edges and fades
- + Mouse modifier preferences: show checkmark for currently selected action, mark factory default action
- + Media explorer: fixed potential crash
- + MIDI: track and send faders that send MIDI volume/pan show tooltips and display in MIDI units
- + Meters: fixed output metering when using MIDI input recording
- + OSX: fixed "show track MIDI controls" continuing to add controls instead of toggling
- + Added TCP layout for 3.x themes: no meters when not record armed
- + Track templates: fixed menu subdirectories not being cleared
- + Automute: properly automute tracks that are currently recording input but overloading due to track FX
- + Automute: never automute during render, never automute tracks that are recording output (since it is destructive)
- + Automute: prevent upstream tracks from automuting at the exact same time as the downstream track
- + Item editing: fixed item snap to grid when snap to other items is disabled
- + Item editing: fixed runaway time selection when moving items and time together
- + Item editing: snap slip edits ("contents not edges") to sample rate grid
- + Item editing: snap "contents not edges" edits to item start, "edges not contents" edits to source start
- + Theme loading: fixed bug where after setting v3 theme, v4 theme would be used on next startup
- + Installer/Win32: clicking the "Portable install" checkbox will modify the installation path accordingly
- + ReaSurround: better threading and parameter smoothing, automation and high channel counts still broken though
- + ReaSurround: rotate diffusion field when input channels rotate
- + OSX: floating toolbar resize fix

#### v4.0alpha2 - December 1 2010

- + OSX: fixed project bay reordering randomly when changing a values in the current sort-by column
- + OSX: fixed mouse context menu issues on intel builds
- + Windows: fixed icon alpha channel
- + Pan law window: more descriptive pan modes
- + Mixer: fixed fader moves not updating track controls

#### v4.0alpha1 - December 1 2010

#### Big updates:

- + Theme layout support (WALTER)
  - Per-track TCP/MCP layout support
  - Screensets support saving/restoring layouts
  - Old themes use default layouts available in Data/default\_layouts.txt
  - New themes can define their own layouts
  - See: <http://www-dev.reaper.fm/sdk/walter/walter.php>
- + Take lanes remain aligned by recording pass, creating empty lanes as needed
  - Each recording pass gets its own take lane, even when recording overlaps existing items
  - Recording no longer splits existing media items into different numbers of take lanes
- + Take comping
  - Save/load named comps (sets of takes from multiple media items)
  - A/B or cycle through saved comps to audition/compare
- + Project Bay
  - Manage, search, replace project source media, media items, and FX
  - Save/load project bay contents to create working sets of source media/FX for different purposes
  - Media and FX+preset combinations can be stored, inserted, and switched in the project

- Store sets of edited media items (including fades, stretch, pitch shift, etc) to use in any projects
- + Media Explorer preview time selection
  - Select a portion of a media file to insert into a project
  - Optionally loop and/or stretch the selected portion to fit the destination area
  - Pan and zoom the media peaks preview
  - Control+alt drag the time selection to render a new cropped file to REAPER, the desktop, or a folder
  - Control+alt drag the time selection to sampler plugins or other applications that support drag/drop
- + Modeless Media Item Properties dialog
  - Item/Take Properties dialog stays open while you work elsewhere, follows changes in selected items
  - Pitch adjust and playrate fields accept values (such as "1.004") or simple operations (such as "x2")
- + Mouse modifier customization
  - Customize mouse behavior when using keyboard modifiers in over 30 different contexts
  - In many contexts, mouse click and mouse drag can be customized separately
  - Assign different behaviors to the mouse when over the top or bottom half of a media item
  - Assign any action (including custom actions) to mouse click or double-click in most contexts
  - Existing mouse modifier preferences are preserved, but changes to mousemap settings will override
  - Actions to reassign default mouse action for any context
  - Lots of customizable choices of behavior, for example:
    - Move/copy just the selected area of media items, or all selected media items
    - Edit edges/fades for all selected items, or just those whose edges line up
    - Adjust media item volume or pitch
    - Move envelope points or MIDI notes/CC just horizontally or vertically
    - Assign marquee selection to left-click
    - Assign hand-drag-scroll to right-click
    - Many other customizable behaviors (over 40 behaviors just for media items)
- + Item editing
  - Default copy/cut actions respect time selection if there is one (including leading/trailing space)
  - Using mouse modifiers, default move/copy operations can act only on the selected area of selected items
- + Envelope editing
  - Option for envelope point selection to always follow time selection, enabled by default
  - Support for copying envelope points with the mouse
  - When dragging within the time selection, the entire time selection is moved or copied
  - Groups of selected points act like contiguous items when moving or copying
  - Default copy/cut actions respect time selection if there is one (including leading/trailing space)
  - Shift+control+drag on envelope segment (customizable) edits the envelope level within the time selection
  - Lots of customizable mouse modifiers for moving, copying, snapping, locking moves in one direction
- + MIDI editing
  - Default copy/duplicate/paste actions create pooled (ghosted) in-project MIDI source data by default
  - Editing any pooled MIDI media item affects all media items that share the same pooled data
  - Un-pool shared MIDI by gluing the media item or via MIDI source properties dialog
  - Default copy/cut actions respect time selection if there is one (including leading/trailing space)
  - Project time selection can be edited in the MIDI editor ruler or CC lane divider
  - Customizable mouse behavior in most contexts
- + Track input FX chain support
  - FX in the input FX chain only run when record armed, and only affect signal coming in
  - Input MIDI or audio, and set recording to be MIDI or audio independent of the input format
- + Multichannel track monitoring/input recording
  - Allow choosing greater than 2 channels of input (inputs must be sequential, though)
- + Track stereo width controls + envelopes
- + Configurable track pan modes (balance/old, balance/new, stereo pan)
- + ReaSurround: multi-channel surround panner with support for any number of input channels and speakers
  - Freely position input sources and speakers in 3D space
  - Configurable per-channel diffusion (treat input source audio as a shaped area rather than a point)
  - Drag track IO to ReaSurround to add new input sources
- + Support for multiple dockers, freely dockable in main window or floatable

#### Medium updates:

- + FX: combined REAPER presets and VST patches/AU presets in a single dropdown
- + FX: user can save a preset as default, to be automatically set when inserting the FX
- + FX browser: option to display/change default preset without opening the FX
- + Project sample rate snap (enable in the snap settings dialog)
- + SRC: Improved sub-sample accuracy when used with project sample rate snap
- + Negative media item start offset support
  - Drag the left edge of unlooped media to pad the start of the item with silence
- + Track Manager: basic report-style dialog to manage track visibility and selection
- + Video playback performance improvements and fixes
- + Project time selection is visible in MIDI editor (separate from loop points)
  - New theme color and blend mode for MIDI editor time selection
- + Edit cursor can now be included in undo state (via option in Prefs/General)
- + Live FX multiprocessing now works more effectively when tracks are in folders
- + Multichannel item improvements: allow choosing any mono/stereo pair from multichannel items
- + Multichannel routing improvements: can send track channels to higher master/parent track channels
- + Multichannel routing: can send more than 2 channels at a time from track to track
- + Multichannel support: multichannel metering
- + Most windows have an always-on-top (pin) button on the title bar
- + Support for up to 62/64 MIDI inputs/outputs
- + Floating toolbar can be docked over the main toolbar
- + Separate default settings for crossfade shapes and autocrossfade-on-split length
- + Track and send faders can be linked to MIDI volume/pan
- + Automute safety feature is a global setting (rather than per-project), enabled by default
- + Automute safety feature can be applied to all tracks
- + MIDI editor: options to display time positions as bars.beats.hundredths or bars.beats.MIDI\_ticks
- + Media item selection sets can be named/saved/loaded using the screensets dialog
- + Configurable transition time for automatically created envelope edge points
  - Allows adjusting the ramp time when editing envelope segments

- + Draggable FX sidechains
- Drag track IO button to a plugin window to add destination track channels 3+4 and create a send

#### Small updates:

- + Splash screen now displays when unloading projects, useful to get status
- + Splash screen runs in separate thread on Windows, allowing more useful status display during loads
- + When loading projects, much of UI is dimmed to reflect its inactive state
- + Media item: fade fill now drawn with more accuracy at edges
- + Media item: options to prevent editing fade-in/fade-out when the media item is small
- + Track recording input: can be set to "no input"
- + Track VU meters: can be disabled, or set to show peaks from all track channels (not just 1+2)
- + Installer (Windows): added "portable install" checkbox and more command line options.
- "Portable install" will install REAPER with no icons, registry keys, or uninstaller
- User preferences and settings for portable installs are kept separate
- + Basic time and beat grid in Media Explorer
- + Actions to choose take or choose take comp for media item under mouse
- + Actions to fit items to time selection, either looping or padding with silence as needed
- + Actions to change or cycle through fade shapes for fade-ins, fade-outs, and crossfades
- + Action to interactively adjust crossfade time for any touching or overlapping media items
- + Action to toggle "run FX when stopped" (temporarily stop audio processing while adjusting a buggy plugin)
- + REX: action to explode imported REX container into slices
- + MIDI editor: event position and note length can be edited directly in event list view
- + MIDI editor: event list view does not display events that occur outside the visible part of the media item
- + MIDI editor: option to display time positions in MIDI ticks (PPQ) or decimal beats
- + API: added SnapToGrid function
- + API: added CountTCPFXParm, GetTCPFXParm functions (to access FX knobs the user has placed on the TCP)
- + More windows obey "cascade all floating windows" action (Preferences, MIDI filter and others)
- + Tab-to-transient/dynamic split: actions to set and adjust transient detection sensitivity
- + Tab-to-transient/dynamic split: option to always use zero crossings (avoids clicks but less precise)
- + Track IO, ENV buttons open dialogs to the right of the track panel rather than at the button
- the second click closes the dialog rather than refocusing it
- + Menu items throughout REAPER will be grayed out when the action is not possible in the current context
- + OSX: support for (usually older) MIDI hardware that sends running status messages
- + Track names: preserve numbers at the end of track names when the track is narrow
- + Mouse click below the last track in the arrange view can optionally clear the media item selection

#### Changes to default behavior (most can be changed via preferences):

- + Take lanes are aligned by recording pass
- + Shift+alt drag adjusts media item pitch (Preferences/Editing Behavior/Mouse Modifiers)
- + Attaching track envelopes to media items creates envelope edge points (right-click toolbar envelope button)
- + Control+C and control+X are mapped to new actions to cut/copy within time selection if there is one
- + Envelope point selection follows time selection
- + In time signatures other than x/4, project grid is interpreted as note length rather than number of beats

v3.0-v3.xx - May 2009 - ???

v2.0-v2.5x - October 2007 - October 2008

v1.0-v1.888 - August 2006 - August 2007

v0.2-v0.999 - December 2005 - July 2006

For full log see: <http://www.reaper.fm/whatsnew.txt>