2017 SONAR to REAPER Quickstart

A Transition Guide for Cross-Graders

by Geoffrey Francis

December 2017, Edition 2.00

From SONAR to REAPER

Introduction and Preamble

This booklet has been produced as an aid to experienced users of SONAR who are trying out REAPER, or who have already decided either to make the switch or to add REAPER to their software collection.

It is an introductory guide and no more. Each chapter presents a table devoted to one main aspect of using a DAW. Within each table you will find a number of key tasks identified, together with a summary of how that task is approached in SONAR and how the same (or most closely equivalent) task is approached in REAPER. Where I have been unable to identify a Sonar feature equivalent to a particular REAPER feature I have written "SONAR does not appear to support this." Please do let me know if I am wrong here. Just PM nicholas on the REAPER forum. The versions used are SONAR Professional (October 2017) and REAPER 5.60 with SWS Extensions 2.9.7. The SWS Extensions can be downloaded from: http://www.sws-extension.org

The layout has been designed so as to make it easy for you to print any page you wish as a summary information card. You will find more explanations in the REAPER columns of the tables than the SONAR ones. That is simply because I have assumed that as an experienced SONAR user you are already reasonably familiar with how SONAR handles the various tasks. The last page consists of a summary table of the default keyboard shortcuts (where they exist) for REAPER's main menu commands. This information is provided as a reference point only, not to teach you how to use SONAR.

This document is far from being 100% comprehensive, nor is it intended to be, nor (probably) could it ever be. I have had to take some fairly arbitrary decisions about how this documentation approaches these at times, including what to include and what to miss out. I didn't want to end up with another 400+ page manual! Its aim is to help you adjust to REAPER's way of working, not to teach you everything you could, possibly want to know about REAPER. Be prepared in most cases to consult the REAPER User Guide, the SWS Extension Guide and Kenny's videos for more information on most topics.

Finally, to state the obvious, SONAR isn't REAPER and REAPER isn't SONAR. I've considered questions like whether it would be a good idea to create pseudo-SONAR menus that you can use with REAPER, or pseudo-SONAR keymaps. After consulting with other ex-SONAR users I have decided against doing this. Apart from the extraordinary amount of time this would take, there are more philosophical reasons. These are:

- The two programs operate in many cases quite differently and according to different design paradigms. Trying to "Sonarize" the REAPER menu would be at best a fudge. Some commands would need to be included which are not strictly equivalent, others would be dropped off the menu all together.
- Changing REAPER's keyboard shortcuts to more closely align with SONAR's key bindings would mean re-allocating keys currently assigned some other function (and often an important function) in REAPER. In some of these cases, SONAR has no equivalent command.
- In the end, the only way you will ever successfully be able to learn and use REAPER is … to use it as REAPER, not as a sort of quasi-SONAR (or anything else). This might make the learning curve a little steeper at first, but in the longer term this should save you time and deliver you benefits.

If you find any significant errors or omissions, or would like to suggest improvements, please PM nicholas on the REAPER forum.

Finally, here's one more point to consider …

One criticism sometimes leveled at REAPER is that it is "complicated" or "difficult" to use because of its many hundreds of extra actions, many of which lie hidden below the surface. In my opinion, nothing could be further from the truth. REAPER's standard interface contains all of the commands, functions and features needed to run it as a standard DAW. For the most part, the extra actions are there to help you if you want to tailor the program to work more precisely in line with your own needs (for example, to improve your productivity and workflow). You don't need to do this if you don't wish to! Enjoy!

> – Geoffrey Francis, August 2010, updated December 2017

Table of Contents

From SONAR to REAPER

1. Fundamental Design Differences

On the surface, SONAR and REAPER look quite similar. They are both Digital Audio Workstations. Both allow you to record audio and MIDI items. Both provide you with facilities for editing these items. Both offer a number of useful features (such as VST plug-ins and automation envelopes) to help you to bring your projects to a final mix. And so on ….

That's on the surface. Once you start looking below the surface you will discover four very important things:

- There are some tasks common to both SONAR and REAPER which are accomplished in a similar fashion in both programs. However, these tasks are relatively few in number and relatively basic. They include such standard Windows activities as saving files, opening files, closing files, deleting clips and items.
- There are some features which are common to both SONAR and REAPER but which are accomplished by different means in the two programs. For example, the default methods of zooming in and out of, and navigating thru, a project are significantly different in both programs.
- There are some features which though broadly comparable in SONAR and REAPER vary significantly in their implementation and their functionality. For example, SONAR's Audio Snap and REAPER's stretch markers and transient guides both exist to serve similar purposes. Both, however, work differently from each other. Likewise, both programs make automation available to you, thru the use of envelopes and (in the case of REAPER) parameter modulation, a feature that is not supported in SONAR. Most people who have used both programs for automation would say that REAPER is superior in this regard.
- Both programs possess features that the other simply does not have.

You will find the transition from SONAR to REAPER easier if from the outset you develop at least a general sense of the differences in the design paradigms of the two different programs. The table below aims to explain some of the most important differences. It comes with the usual disclaimer that its statements are generalizations and perhaps at times over-simplifications. Nevertheless, it should help to get you thinking along the right track.

SONAR	REAPER
- Audio and MIDI items are called "clips". In this document I'll use the REAPER term "media items" when referring to SONAR clips.. - Makes extensive use of Main Level Menus. - Includes a large number general and specialist of toolbars, makes extensive use of tools. User can create custom toolbars. - Makes some use of right-click context menus. - Limited keybinding capability. - No extra actions other than what appears on menus. No user macros. - Some scripting capability thru CAL. - Limited ability to customize program settings and options.	- Audio and MIDI clips are called "media items". - Makes extensive use of Main Level Menus. These can be customized to meet the user's own requirements. - Default toolbar is minimal. By default, REAPER makes little use of tools, but users can customize the main toolbar. You can also create your own tools and your own custom toolbars. - Makes extensive use of right-click context menus. Most of these can be customized. - Extensive keybinding capability. - Literally hundreds of extra actions that can be combined with each other and with REAPER commands into user-defined macros. - Supports scripting using LUA, EEL (if you insist) Python. - Very many aspects of program behavior can be customized.

Some of these issues will be discussed further in the section **Customization.**

From SONAR to REAPER

2. Setting Up and Getting Started

Section Overview

Any DAW requires a certain amount of time to set up. These tasks include, for example, selecting your audio drivers and specifying the location of your VST plug-ins. In addition, you will find that REAPER has many more pages of preferences settings – and many more options within those pages – than does SONAR. Don't be intimidated by this. Part of the REAPER design philosophy is that wherever possible individual users should be able to customize program behavior if they wish to suit the way they want it to work. We'll get to many of these later, but for the most part you'll most probably find that you can work perfectly well just leaving many preferences options at their default settings.

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
The Install Process	Run the setup file, either downloaded or from DVD	Download the latest version from https://www.reaper.fm/download.php (updates with bug fixes, performance enhancements and new features are usually released every month or so). You'll notice straightaway that REAPER installs quickly (a couple of minutes at most) and leaves a small footprint. Most of the elements listed in the Choose Components screen are self-explanatory. Check the Additional Functionality options for such features as x64 VST Bridging, Control Surface Support, CD Ripping/Burning, and Rewire. By default, most of these options are enabled. You should also install ReaRoute ASIO drivers if you want to run REAPER linked to another program such as SONAR.

Setting up Audio	You are prompted during the install process.
	
	After this:
	
	Edit → Preferences → Audio → Devices
		Options → Preferences → Audio
		
		Options → Preferences → Audio → Device (or click once on right end of main menu bar)
		
		Note the following:
		    REAPER's Solo in Front is equivalent to SONAR's Dim Solo
		    REAPER's Channel Name Aliasing is similar to SONAR's Friendly Names
		    REAPER prefers ASIO drivers.

Setting up MIDI	Edit → Preferences → MIDI → Devices	Options → Preferences → Audio → MIDI Devices Double-click on any input or output device to configure settings.
Portable Install to hard drive or USB drive	SONAR does not appear to support this.	Tick the Portable Install box during the install process.

| Task/Activity	In SONAR you did this …	In REAPER you do this …
Setting up Control Devices	Edit → Preferences → MIDI → Control Surfaces	Use Options → Preferences → Control/OSC/Web for any device operating in any of these modes: Behringer BCF2000 HUI (partial) OSC (open sound control) Frontier Alphatrack Mackie Control Extender Presonus Faderport Frontier Tranzport Mackie Control Universal YAMAHA 01X There is also a Web browser interface option which lets you set up your mobile phone or tablet as a control device. For BCR2000 users, please note that a plug-in has been developed by REAPER forum member ajaym that allows you to install the BCR2000 as a control surface. See REAPER web site. For other devices , use Options → MIDI Devices. Configure device to Input (Control Only) and output disabled.
System Info and File Locations	SONAR stores much of its system information in the Windows Registry. You can use Edit → Preferences → File → Folder Locations and Edit → Preferences → File → Audio Data to specify the locations of various file types.	REAPER does not use the Windows Registry. Most system information (FX Chains, Color Themes, Key Maps, Menu Sets, JS Effects etc) are stored in the App Data directory, accessed from REAPER's Options → Show REAPER Resource Path … command. Native ReaPlugs (ReaEQ, ReaComp, etc.) are stored within the REAPER program directory. Global default location for media files is specified under Options → Preferences ->Audio → Recording. This can be overwritten for any project when saving the project file by selecting the Create Subdirectory and Move All Media Items to Project Directory options. You can also set this in the File → Project Settings dialog box.
Setting up VST and DX Plug-ins	Edit → Preferences → File → VST Settings	Options → Preferences → Plug-ins → VST Options → Preferences → Plug-ins → Rewire/DX Some DX plug-ins may not be automatically be recognized by REAPER. If this is the case, go to your \Application Data\REAPER folder and edit the text file reaper-dxplugins.ini. You will need to change the line Load=0 to Load=1 for those plug-ns that have not been recognized.

REAPER Keyboard Shortcuts, Tips and Techniques:

File → Project Settings   Alt + Enter
Options → Preferences   Ctrl + P
Navigate Preferences pages either with mouse or keyboard (press first letter off page name (e.g. type C to jump to Control Surfaces page).
Use **Find** text box (bottom left corner of Preferences window) to search – see image on right.
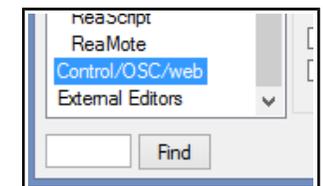
From SONAR to REAPER

3. First Look
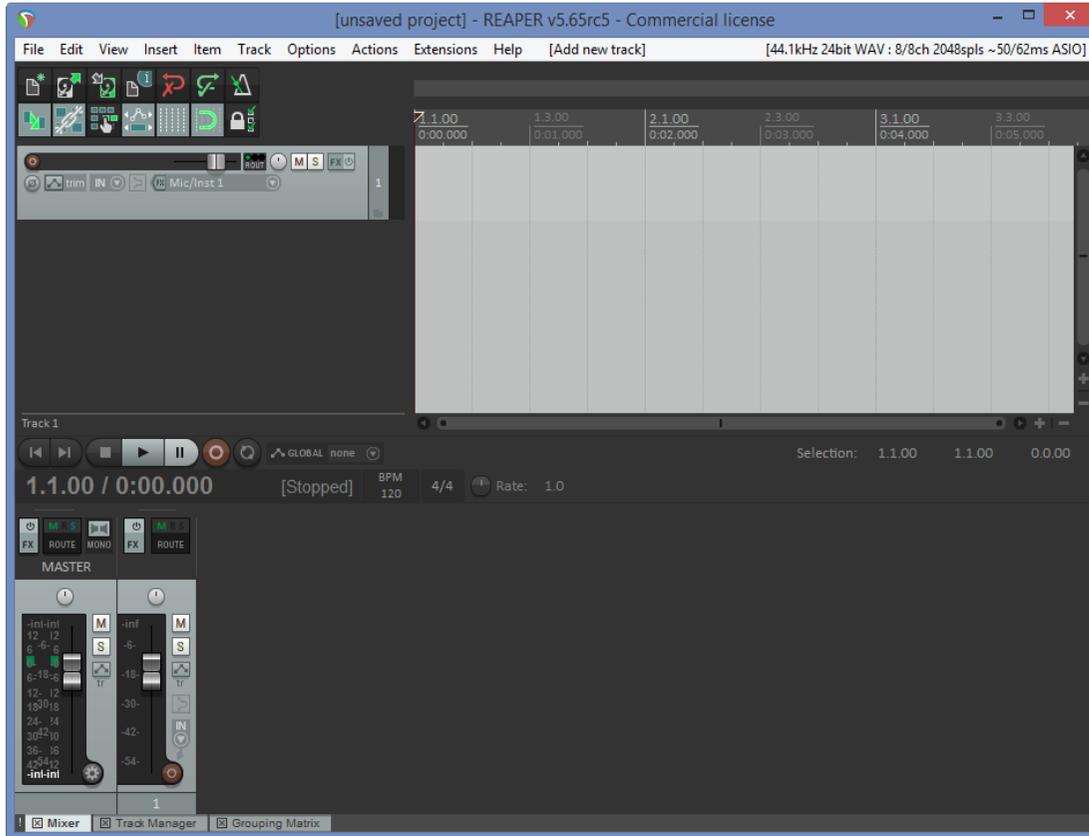
A first look at the REAPER screen reveals very little -

- ◆ A menu across the top.
- ◆ Below that, a toolbar (left) and a ruler (right).
- ◆ Below these, a dark track panel area (left) and a lighter arrange area (right).
- ◆ Below this, a transport bar.
- ◆ Below this, a mixer area.

In the illustration (left) we have added a single track (by double-clicking in the track panel area).

The track panel contains a number of track controls. These are fairly standard and broadly similar to Sonar – volume, pan, mute, solo, etc. You can hover your mouse over any control for a tooltip.

You can use your mouse to tweak this layout as you wish. In each case, hover it on the border of whatever you want to change, so that the mouse cursor changes to a double-headed arrow, then click and drag as required:

- ◆ Between the track panel and arrange areas, drag left/right to assign more room to the arrange or track panel area. Dragging left might cause some track controls to be hidden. These can be restored by dragging back.
- ◆ Over the lower boundary of a track: drag up/down to make the track's panel smaller or bigger. Dragging up may cause some track controls to be hidden. These can be restored by dragging back.
- ◆ Between the transport bar and the mixer: drag up/down to make the mixer area larger/smaller.

"Out of the box", REAPER does not include a track inspector, something that for many users plays an important part in Sonar.

However, it's not all bad news. One core aspect of REAPER is the extent to which it can be customized to meet your personal requirements. This is not the place or time to go into this in detail, but keep in mind that when you become a little more familiar with REAPER there are options which can give you a track inspector:

- ◆ Create your own basic track inspector using a combination of screensets and docking. Once you know how to use these features, it's neither difficult nor time consuming, *or*
- ◆ Use scripting to create a more sophisticated track inspector. REAPER's user base makes available a whole library of scripts that you can download and install. This includes one that will give you a track inspector.

4. Recording Essentials

Section Overview

For the most part SONAR and REAPER handle creating tracks and recording in ways that are quite similar. One of the biggest and most important differences can be found in how the two products handle MIDI recording. SONAR uses different track types for audio and MIDI, as well as having Instrument tracks, whereas REAPER uses one common track type for both audio and MIDI. In fact, with REAPER you can record both audio and MIDI items on the same track if you wish. REAPER's basic track controls do not by default include the many controls that are included in SONAR's MIDI tracks. You can add these via the command Show Track MIDI Controls in the main Track menu or the track context menu. Another major difference is that REAPER does not include a separate Synth Rack View. REAPER does, however, include the following features:

◆ A Virtual Keyboard that you can use for MIDI input. Using either your mouse or your PC keyboard.

◆ It allows you to use as many different synths (and/or different instances of the same synth) as you wish within a single track, either in serial or in parallel.

◆ You can play back MIDI events from different channels thru different synths within a single track.

These features go beyond the scope of this "quick start" guide: for more information, consult the REAPER User Guide and/or REAPER Power!

Task/Activity	In SONAR you did this …	In REAPER you do this …
Create Audio Track(s)	Insert → Audio Track Insert → Track Template … Insert → Multiple Tracks	Track → Insert *or* Double-click in track panel area. Track → Insert Track from Template Insert → Multiple Tracks
Create MIDI Tracks(s)	Insert → MIDI Track Insert → Track from Track Template Insert → Soft Synths	Track → Insert New Track *then* Track → Show Track MIDI Controls Track → Insert Track from Template *or* Insert → Track from Template Insert → Virtual Instrument on New Track
	Note: REAPER makes no distinction between a MIDI track and audio track. You can have both media types on the same track if you wish.	
Arm/Disarm Audio Track For Recording	Use the track's Record On/Off toggle button.	Use the Record Arm/Disarm Toggle button in the track control panel. Default setting is to record track input.
Select Option to Record Track Audio Output (rather than input)	Available for output of soft synth tarcks.	Available for any track. Right click on track Record Arm button, follow menu to Record: Output, then select your preference from sub-menu..
Assign Track Inputs	Use Inputs drop down list in track controls or track inspector.	Right click on track Record Arm button, follow menu to Mono Input, Stereo Input, or MIDI input.
Assign Track Outputs	Use Outputs drop down list in track controls or track inspector. By default, all audio track output automatically goes to the Master.	Click on track I/O button to open the track's routing window. By default, output of all top level tracks goes directly to the Master. Output of all child tracks (contained within folders) goes to the folder and from there to the Master.

From SONAR to REAPER

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Enable/Disable Input Monitor	Use the track's Input Echo button on track inspector.	Use the track's Record Monitoring button, or right click on Record Arm button, follow menu to either Monitor Input or Monitor Input (Tape Auto Style). Optionally, you may also enable Monitor Track Media When Recording.
Input Quantize (MIDI)	Use the track's Input Quantize button on track inspector.	Right click on track Record Arm button, then choose Track Recording Settings.
Select Record Mode Normal	Right-click on Record button on Transport Bar to open Record Preferences. Make sure Auto Punch is *not* enabled.	Options → Record Mode: Normal
Select Record Mode Auto Punch	Right-click on Record button on Transport Bar to open Record Preferences. Make sure Auto Punch is enabled.	Options → Record Mode Time Selection Autopunch *or* Options → Record Mode Autopunch Selected Items
Enable/Disable Multiple Takes	Right-click on Record button on Transport Bar to open Record Preferences. Select Sound on Sound or Overwrite.	REAPER's default behavior is similar to SONAR's Sound on Sound mode. Ctrl +L toggles display of multiple takes in lanes. To use its equivalent of Overwrite mode, choose (from the Options menu) Trim Existing Items Behind New Recording. REAPER also supports Free Item Positioning Mode (on track context menu).
Show/Hide Virtual MIDI Keyboard	SONAR does not appear to support this.	View → Virtual MIDI Keyboard.
Show/Use Metronome	Edit → Preferences → Project → Metronome	Options → Metronome and Pre-Roll Settings, *or* Insert → Click Source (on selected existing empty track)
Start Recording	Use Record button on Transport Bar	Click Record button on Transport Bar (or press Control + R).
Stop Recording	Use Stop button on Transport Bar.	Click Stop button on Transport Bar (or press Space).
Other Transport Bar Functions	Core functions (Play, Stop, Pause, etc.) are similar. See SONAR and REAPER documentation for other features and differences.	

REAPER Keyboard Shortcuts, Tips and Techniques:

Insert → New Track	Ctrl + T	Show Multiple Takes in Lanes (toggle)	Ctrl + L
Options → Preferences	Ctrl + P	View → Big Clock (toggle)	Alt +C
Start Recording	Ctrl + R	View → Docker (toggle)	Alt + D
Stop Recording	Spacebar		

See also Options → Preferences → Audio → Recording for various options and settings.

5. Tracks and Track Management Essentials

Section Overview

In many respects, REAPER's and SONAR's track management features are quite similar, and are available in the Arrange (Track) view and Mixer (Console) view . However, there are some important differences, as explained in the table below. Not every option or feature is listed, only the most common ones. One key area of difference is in routing. REAPER makes no pre-distinction between tracks and busses. Any track can be used as a bus and any bus can be a track.

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Input Gain for Track or Bus	Use gain fader in the track inspector.	No real input trim. Use Volume (Pre FX) envelope or a JS Volume plug-in in FX chain.
Adjust Volume	Click and drag track volume fader.	Click and drag volume fader. Use Ctrl key for fine tuning adjustments *or* Scroll mousewheel over volume fader (this can be disabled in Preferences, Editing Behavior, Mouse) *or* Right click over volume fader and enter a value.
Adjust Pan	Click and drag track pan fader.	Click and drag pan fader. Use Ctrl key for fine tuning adjustments *or* Scroll mousewheel over pan fader (this can be disabled in Preferences, Editing Behavior, Mouse) *or* Right click over pan fader to over-write default pan law.
Mute Track (toggle)	Click on track mute button.	Click on track mute button, or right click for various mute options.
Solo Track (toggle)	Click on track solo button.	Click on track solo button, or right click for various solo options.
Dim Solo/Solo in Front	Use Dim Solo button on mix module.	Options → Solo in Front. Use Audio, Mute/Solo page of Options → Preferences to configure.
Freeze/Unfreeze Track	Click on Freeze button.	Right click on track panel, choose Render/freeze tracks.
Set Automation Mode	Click on Read or Write button.	Right-click on Envelope button, choose one of Trim/Read, Read, Write, Latch or Touch.
Add FX to Track	Right click over track FX bin.	Click on FX button.
Save Track(s) as Track Template	Right-click, then Save as Track Template.	Select track(s), right-click, then Save Tracks as Track Template.
Group Parameters	Right click over parameter, then select a group or choose Group Manager.	Right click on track panel and choose Track Grouping Parameters (or use Grouping Matrix View).
Hide/Show Track	Right click and choose Hide Track, *or* Press M to display track manager	View → Track Manager (or Control + Shift + M). Toggle track visibility on/off in TCP column.
Archive Track	Use track's Archive button.	REAPER does not support this feature. However, by default tracks that are muted and hidden will use no resources.

From SONAR to REAPER

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Change Track Order	Drag and drop - be careful!	Drag and drop (on track number) – be careful!
Use Console/Mixer View	Views → Console.	View → Mixer (or Control + M). Use right click menu (over background area) to customize.
Create a Send to a Bus (In REAPER a bus is a normal track receives sends from other tracks)	Create the bus (Insert → Stereo Bus), then right-click in track panel, Insert Send then choose bus.	Create an empty track to be used as a bus, then …. Drag and drop from the track I/O button to the bus I/O button, or Click on the track I/O button and add send, or Use the Routing Matrix View.
Create a Send to any other Track	Limited functionality using aux tracks and patch points.	Drag and drop from the source track I/O button to the destination track I/O button, or Click on the track I/O button and add send, or Use the Routing Matrix View.
Create Submixes	Create a bus. In the track panel for each track to be included in the submix, select the bus from the output drop down list.	Several methods are available. The easiest is to insert a new empty track above the first track in the group. Click on that track's track folder icon (located below the track number) once to make it a folder. Click twice on the track folder icon for the last track in the group to make it the last track in the folder.. *Note that REAPER's folders are different from Sonar's. In REAPER a folder is a submix.*
Lock Track Controls (toggle)	SONAR does not appear to support this.	Right click over track number, choose Lock Track Controls.
Show Bus/Track Peak Markers	Use Meter Options drop-down list on toolbar.	REAPER does not support this feature.
Bus Waveform Preview (toggle)	Use the bus Waveform Preview button.	REAPER does not support this feature.

Mouse and Keyboard Shortcuts, Tips and Techniques:

REAPER has numerous shortcuts and actions that can be used to control track display and visibility. Listed here are those most commonly used:

Track Display and Navigation Shortcuts

Drag between tracks with mouse	Adjust individual track height	W or Home	Go to start of project
PageUp	Increase all track heights (zoom in vertical)	End	Go to end of project
PageDown	Decrease all track heights (zoom out vertical)	Ctrl + Alt + Up	Go to previous track
` key	Toggle all tracks normal/minimized	Ctrl + Alt + Down	Go to next track
~ key	Toggle maximize track	Toggle View → Mixer	Ctrl + M
Double-click vertical scroll bar	Toggle minimize/normal/maximize	Ctrl + Alt + M	Show/Hide Master in Arrange View
+	Zoom out horizontal	Mousewheel	Zoom in/out horizontal
-	Zoom out horizontal	Ctrl + Mousewheel	Zoom in/out vertical
Ctrl + PageDown	Zoom to project length		

6. Media Item Management Basics

Section Overview

REAPER and SONAR superficially have quite similar approaches to managing and editing media items: however, the deeper you dig, the greater the differences. Some points to note:

- Fade-ins, fade-outs and slip edits are handled similarly by both programs.
- Basic techniques for copying, moving and deleting items are quite similar. REAPER also has many nudge options, including a Nudge window (right-click, Nudge Items).

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Insert Media Item	File → Import.	Insert → Media File *or* press Insert *or* use Media Explorer (View → Media Explorer).
Modify Clip/Item Properties	Right click for context menu.	Right-click, choose Item Properties (*or* press F2).
Display Media Item Icons	FX button will be displayed if FX have been added to the media item. Other icons used include mute clip and lock clip.	Options → Preferences (or Control + P), then Appearance, Media. Enable/disable as you wish. Media item buttons ☑ Locked ☑ Muted ☑ Per-take FX ☑ Automation envelopes ☑ Notes ☐ Not locked ☑ Not muted ☐ No FX ☐ No active envelopes ☐ No notes ☐ Item Properties ☑ Pooled MIDI ☑ Grouped items ☑ Item Properties only if resampled media
Open MIDI Item with MIDI Editor (Piano Roll View)	Double-click on item.	Double-click on item. At a glance, the two MIDI Editors appear quite similar, but there are important differences. For example, SONAR makes extensive use of tools, REAPER of actions.
Open Audio Items with External Audio Editor		Right-click on item, then Open Items in Editor → Open Items with editor as previously specified in Options → Preferences then External Editors.
Snap to Grid (settings and enable)	Use Snap to Grid button on toolbar.	Options → Snap/Grid → Snap/Grid Settings, *or* use Grid button on main toolbar.
Ripple Editing	Use Track View Options menu.	Options → Ripple edit per track or Options → Ripple edit all tracks (toggle).
Add FX to Clip/Media Item	Right-click, Insert Effect	Click on item FX button, *or* Right-click, Take → Show FX Chain for Active Take, *or* Shift + E
Toggle Display of Takes in Lanes	Use track's Track Lanes Buttons	Options → Show All Takes in Lanes *or* Ctrl+ L
Use Navigator View	Views → Navigator.	View → Navigator (ot Control + Alt + V).
Adjust Take Volume	Closest equivalent is the track Trim Fader.	Click and drag down from top edge of of item to lower: Shift click and drag up from top edge of item to increase.
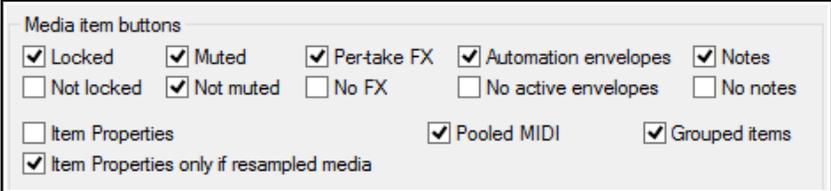
From SONAR to REAPER

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Show Clip/Media Item Envelopes	Set Edit Filter to Cledite ips. Choose Clip Automation from drop-down menu.	Right click, Take, then Take Volume Envelope, or Take Pan Envelope, or Take Mute Envelope.
Split Clip/Media Item	Select item, position cursor, press S	Select item, position cursor, press S.
Create Loop From Item	Right-click, View → Loop Construction	By default REAPER's media items are loop enabled. To toggle this status off/on, right click, Item Settings → Loop Item Source.
Mute Part of Media Item	Use Mute smart tool.	Create a custom action to split and mute, or use track or take Mute envelope.
Mute Clip/Media Item (toggle)	Right-click, Clip Mute/Unmute	Right-click, Item Settings → Mute *or* Use item mute button.
Lock Clip/Media Item (toggle)	Right-click, Clip Lock	Right-click, Item Settings → Lock Item *or* Use item lock button.
Render Clip/Media Item	Right-click, Bounce to Clip(s)	Right-click then select one of the Apply Track FX or Render Items options.
Group Selected Clips/Media Items	Right-click on any selected item, Create selection group from selected clips.	Right click on any selected item, Group → Group Items.
Manage Grouped Media Items Status	SONAR has no real equivalent.	Select items, right click Group, then choose from menu.
Nudge Items	Process → Nudge from main menu, or use keyboard shortcuts.	Use keyboard shortcuts (see below), or right-click then choose Nudge Items ... for Nudge dialog box.

Keyboard Shortcuts, Tips and Techniques:

View/Edit Item Properties	F2	Split Item(s) at Cursor	S
View Source Media Properties	Ctrl + F2	Split Item(s) at Time Selection	Shift + S
Cut Selected Area of Item	Ctrl + Delete	Nudge item(s) up/left/right/down	Num Lock 2/4/6/8
Copy Selected Area of Items	Ctrl + Shift + C	Nudge contents of item left/right	Num Lock 1/3
Copy Loop of Selected Area of Items	Ctrl + Alt + L	Grow/Shrink left edge of item	Ctrl + Num Lock 4/6
Time stretch (warp) item	Alt click and drag from start or end	Grow/Shrink right edge of item	Alt + Nim Lock 6/4
Show FX Chain for Active Take	Shift + E	Move cursor to left/right edge of item	Ctrl + [/ Ctrl +]

7. Managing and Editing MIDI Items

The way in which MIDI items are managed and edited in REAPER is very significantly different from SONAR. This really is an area where you may need to take some time to adjust to the differences. The following table contains some useful pointers.

Task/Activity	In SONAR you did this …	In REAPER you do this …
Create MIDI Items	Record, or use Piano Roll View.	Record, or select track and make time selection, then Insert → New MIDI Item. Double-click on this to open MIDI Editor.
Loop Enable MIDI Clip/Item	Select clip. Ctrl + L toggles looping on and off, or right-click over clip and choose Groove – Clip Looping from menu.	By default, all media items (including MIDI) are loop enabled. This can be changed for individual items (or selections of items) using the Item Settings → Loop Item Source toggle command from the right-click context menu. To change the default behavior for new items, disable Loop source for new MIDI items in Project → Defaults.
Assign MIDI Items to a Synth.	Use a separate Instrument Track.	Insert Synth in track FX chain.
Assign Different Channels from the Same MIDI Item to Different Synths.	SONAR does not appear to support this.	Use a separate send (track i/o button) for each channel that requires a separate instrument.
Edit MIDI Items or Clips	Use in-line Piano Roll or right-click on clip and choose View, then Piano Roll View, Event List or Staff View.	Double click to open in standard MIDI Editor or right-click and choose Open Items in Editor → Open in Inline Editor. Use View → Mode: event list in the standard MIDI editor for CCs and other events. Use Piano roll, Named notes or Musical notation view to edit nptes.
Manage Clips/Items in Sequence on a Single Track	All MIDI notes on the same track are essentially treated as a single clip (item). For example, all are accessible when you open the Piano Roll or Event List View. You may also Bounce to Clip to join a selection of shorter items.	Each item is separate and can be opened in its own MIDI Editor Window or together with other MIDI items, depending on your MIDI Editor preferences settings. By default, the dimensions of that MIDI Editor window will be constrained by the dimensions of the MIDI item. This issue simply does not arise in SONAR. If in REAPER you think you are likely to need to add notes (or other events) before an item, after an item, or between existing items then it would be wise to prepare for this *before* opening the MIDI Editor. To do this, you should disable the Loop Item Source option (right-click, then Item Settings, then disable the Loop Item Source toggle option), then stretch its edges outwards (slip edit style), *or* Join the items together, by selecting them, then right clicking and choose Glue Items from the context menu. See screen shots below table. This enables you to open them all together in the MIDI Editor and add notes in between the original items. You can also drag the edge of a loop disabled item in the MIDI Editor in order to extend it. Also, if within the MIDI Editor you insert a note that goes beyond the end of the item then that item will automatically be extended.

From SONAR to REAPER

Task/Activity	In SONAR you did this …	In REAPER you do this …
Read Cakewalk.ins or Other Instrument Definition File for Bank/Patch Names.	Edit → Preferences → MIDI→ Instruments , then click on Define, then Import. Select file, click on Open.	Right-click on track name or number and choose MIDI Track Controls then Show MIDI Track Control Panel. This opens ReaControl MIDI in the track FX chain. Display this, enable Bank/Program Select, click on Load File, select file, then click on Open. ReaControl MIDI can also be used with individual MIDI items, via their FX chains.
Use Various MIDI Track Controls	Use widgets in track control panel.	Use the various ReaControl MIDI controls. Also, many JS MIDI plug-ins are available. Type "MIDI" in the Add FX dialog filter for a list.
Handling System Exclusive Data	Use Sysx View.	Drag and drop a .syx file directly on to the track to load directly into a track, *or* Use ReaControl MIDI: click on Sysex Edit button and paste data in. F0 and F7 are added automatically at the start and end respectively.
Export MIDI Data as MIDI File	File → Save As. For individual clips, File → Export→ MIDI Groove Clip	File → Export Project MIDI. For individual items, open in MIDI editor, then File→ Export to new MIDI File.
Add Lyrics to Project	Views → Lyrics.	REAPER has no separate lyrics view as such, but the MIDI Editor's Musical Notation View allows you to add lyrics to a music score. Double-click on a MIDI item to open it in the MIDI Editor, then View → Mode: musical notation. Right-click at required location, choose Lyrics… from context menu.

Joining MIDI Items in REAPER

Before … two separate discrete MIDI items on a track.

After selecting both items and choosing **Glue Items** from the context menu.

8. Plug-in and FX Management

Section Overview

Most SONAR users who come to REAPER find that at first they miss being able to manage a track's plug-ins directly from a bin in the track control panel (although these can be accessed directly in the Mixer view). However, you will soon discover that REAPER's FX Window includes an impressive selection of other features which should more than make up for this.

Task/Activity	In SONAR you did this …	In REAPER you do this …
Add FX to a Track	Right-click over FX bin, then follow menu.	Click Add button on track FX window. Double-click on required FX or drag and drop.
Change Order of Track FX	Drag and drop.	Drag and drop.
Delete FX from Track	Right-click on FX, choose Delete.	Select FX in track FX chain, press Delete.
Replace one FX with anoher		Right-click on FX in FX chain, choose Replace FX… from menu.
Bypass FX (toggle)	Use FX Bypass toggle in track FX bin.	Use FX Bypass toggle in track FX Chain window or FX window.
Rename and Reorganize Plugins	Utilities → Cakewalk Plug-In Manager.	View → FX Browser (or Shift + F).
Create FX Chain	Right-click in FX Rack, Save FX Rack as FX Chain Preset.	Right-click on track FX chain then Save FX Chain *or* Save Selected FX as Chain.
Create Track Default FX Chain		Right-click on track FX chain then Save Chain as Default for New Tracks.
Add FX Chain to a Track	Right-click in FX Rack, Insert FX Chain Preset.	In FX Chain Window choose FX → Add FX Chain from top menu.
Rename Individual FX Instance	SONAR does not appear to support this.	Select the FX, then press F2 *or* right-click, then Rename FX Instance.
Adjust FX Wet/Dry Mix	SONAR does not appear to support this.	Use Wet/Dry rotary control next to bypass checkbox in FX window.
Use in Track Parallel FX Processing	SONAR does not appear to support this.	Click on pin connector (labeled 4 in 2 out or similar) to assign FX inputs and outputs to specific channels. Use a JS mixer plug-in to mix different parallel FX streams.
Add Parameter Controls to Track Control Panel and Mixer Control Panel	Up to four controls per track can be displayed at any one time in Console View only.	Touch parameter control with mouse, then click on Param button in FX chain window. Choose Show in Track Controls.
Manage Plug-in Preferences/Settings	Edit → Preferences → VST Settings.	Options → Preferences (or Control + P) then Plug-ins, VST, and ReWire/DX pages.

From SONAR to REAPER

9. Automation

Section Overview

Both SONAR and REAPER use envelopes to automate track and FX parameter data, but their respective feature sets are significantly different. This table should help steer you thru these. Probably the most significant difference between the two is that SONAR does not appear to support Parameter Modulation.

Task/Activity	In SONAR you did this …	In REAPER you do this …
Create Track Control Envelope	Enable Write button in Track Inspector. Play song, adjust control (e.g. Pan)	Click on track Env button to display envelopes window for track, then check boxes for envelopes required, *or* use keyboard shortcuts (V for Volume, P for Pan).
Create Track FX Parameter Envelope	Right click on FX, use Write Enable Parameters to select parameters (e.g. Compressor Ratio). Play song, adjusting parameter.	Click on track Env button to display envelopes window for track, then check boxes for FX parameter for envelopes required, *or* In FX window, touch parameter with mouse then click on Param button, then Show Track Envelope.
Create Clip/Media Item Control Envelope	Right-click on clip, Envelopes → Create Clip Envelope then select parameter.	Right-click on media item, then Take, then select Volume, Mute or Pan envelope from submenu.
Create Clip/Media Item FX Parameter Envelope	Open clip FX chain, then open the FX. Use ACT.	Select item, press Shift + E to open Add FX to Item dialog. Select FX, then OK. In FX window, click on parameter control, then Param button then choose Show media item take envelope.
Setting Automation Mode	Use Track Controls – Read or Write only.	Right-click on Env button, select one of Trim/Read, Read, Write, Touch, or Latch.
Global Automation Override	SONAR does not appear to support this.	Right-click Global Automation Override button on Transport Bar.
Add/Manage Envelope Points	Use mouse.	Options → Preferences → Editing Behavior → Envelopes sets mouse behavior (click, shift-click, double-click, etc.) for adding, editing and resetting points, adjusting segments, etc.
Curve Shape and Other Options	Right-click on envelope.	Right-click on envelope.
Show Envelope in Separate Lane	SONAR does not appear to support this.	Right-click on envelope, choose Show Envelope in Lane (toggle).
Draw Envelope Curves with Mouse	Select Draw Freehand tool, click and drag.	Depending on preferences, Ctrl-click and drag.
Automation Bypass Mode (toggle).	Disable Read button in Track Inspector.	Right-click on envelope, then Bypass Envelope.
Parameter Modulation	SONAR does not appear to support this.	Parameter Modulation is a very big topic. To cover it in detail would go beyond the scope of this document. In short,it lets you use any audio stream or FX parameter from any track to control the behavior of any FX parameter on itself or any other track.

10. Loops, Markers and Regions

Section Overview

Both SONAR and REAPER use loops and markers to help you manage your projects. With the addition of the SWS Extensions, REAPER offers you several extra features. The information in this table assumes that the SWS Extensions have been installed. REAPER also uses regions, something that SONAR does not recognize.

Task/Activity	In SONAR you did this …	In REAPER you do this …
Create Loop Selection	Click and drag along timeline, then Shift + L..	Click and drag along timeline.
Create Time Selection	Click and drag along timeline.	Click and drag in background area in Arrange View.
Link Loop Points to Time Selection	SONAR does not use this concept.	Options → Loop Points Linked to Time Selection (toggle).
Create Marker	Right-click on timeline, then Insert → Marker *or* (on the fly) press F11	Insert → Marker *or* (on the fly) press M or Shift+M.
Display Marker View	Views → Markers	View → Region/Marker Manager (or Control + Shift + Alt + R).
Reorder/Renumber Markers	SONAR does this automatically.	Right-click in Region/Marker Manager window, then Renumber in Timeline Order.
Go to Marker	Use Transport Bar or Markers window.	Type number or use Region/Marker Manager window.
Delete Marker	Select in Markers window, press Delete.	Alt click on marker in timeline, or right-click and choose Remove Marker.
Create Smart (Command) Markers	SONAR does not appear to support this.	Begin marker name with ! Followed by command ID or IDs.
Export/Import Markers between projects	SONAR does not appear to support this.	To export to .CSV file, right-click in Region/Marker Manager window, then Export Regions/Markers … To import, choose Import Markers/Regions (merge) or Import Markers/Regions (replace) from same menu.
Create a Region	SONAR does not appear to support REAPER type regions.	Define time selection, then either right-click on timeline, Create Region from Selection or press Shift+R.
Move/Copy Region	SONAR does not appear to support REAPER type regions.	Move: Click and drag along timeline. Copy: Ctrl click and drag along timeline.

From SONAR to REAPER

11. Project Rendering and Related Topics

Section Overview

With both SONAR and REAPER you can mix down and render your projects for export, for example, as internet ready MP3 or CD ready WAV files, or for export to other programs. The topics listed here fall loosely into this category. There are some interesting differences between the two feature sets.

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Export as OMF File	File → Export → OMF	REAPER does not support this feature.
Export as EDL or EDL Text File	SONAR does not appear to support this.	File → Save Project As (or Control + Alt + S), then select file type.
Export Mix as Stereo MP3 File	File → Export → Audio. SONAR also includes Pyro Web Publisher.	File → Render (or Control + Alt + R). Select Stereo from Channels drop down list and MP3 as output format. Select Render Master Mix.
Export Mix as Stereo 16 bit WAV File (for audio CD)	File → Export → Audio. SONAR also includes Pyro CD Burner.	File → Render. Select Stereo from Channels drop down list and WAV as output format. Select Render Master Mix. Select Bit Depth 16, Sample rate 44100.
Export Individual Tracks as Separate Files	Various options and permutations available from Source Category drop-down list.	Include with your settings and specifications Render Stems (Selected Tracks).
Export in Multichannel Format	Requires Multichannel Format to have been specified in Surround tab of Project Options. Choose Multichannel from Channel Format drop-down list.	Along with your other settings, select the required number of Channels and if required enable the option Render Multichannel Tracks to Multichannel Files.
Import Audio from CD	File → Import → Audio CD.	Use the Media Explorer View. Drag and drop to arrange view.
Export Mix to Audio CD	After preparing projects to required format, Utilities → Burn Audio CD.	After preparing project to required format, File → Render. Amongst other options, select Output Format Audio CD Image. See User Guide for details.
Batch Render Files	SONAR does not appear to support this.	Prepare individual files in File → Render dialog box, clicking each time on Add to Render Queue. Then File → Open Render Queue, with Render All or Render Selected.

12. Customization

Section Overview

Understanding REAPER's customization lies at the very heart of really getting to grips with the program. Now read on ..

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Customization Overview	Edit → Preferences → Customization, then select required category.	No "one stop shop." Different customizations are available thru various menus.
Create Custom Actions	Some ability to bind keys to commands thru Edit → Preferences → Keyboard Shortcuts. Cannot create custom actions or macros.	Use Actions → Show Actions List to access actions editor. Any command can be assigned a keyboard shortcut. Many hundreds of additional actions that can be assigned to keyboard shortcuts, menus, toolbars, or control devices. Any number of actions can be chained together to create custom macros, also assignable to keyboard shortcuts, menus, toolbars, or control devices. Also supports scripting with EEL, Lua and (if you insist) Python.
Custom Menus	Cannot create your own menus.	Use Options → Customize Menus/Toolbars to customize menus and/or toolbars. You can rearrange REAPER's menus, including hiding unwanted commands.
Custom Toolbars	Cannot create your own toolbars.	You can also add REAPER actions and your own custom actions to REAPER menus and toolbars.
Custom Colors and Skins	SONAR supports custom color schemes but is not skinnable.	Actions → Show action list, then select and run the action Theme Development: show theme tweak/configuration window. You can also create your own themes (using WALTER), or select any theme from the REAPER stash.

From SONAR to REAPER

13. Miscellaneous: What Else Is Similar, What's Different and What's Missing?

Section Overview

This section summarizes in overview those areas where SONAR and REAPER are most significantly different. Also included here are some features that are present in one or other of these DAWs but not the other.

Task/Activity	In SONAR you did this ...	In REAPER you do this ...
Assign Parameter Controls to Control Surface	Use ACT.	REAPER handles this very differently, via Param button in FX window and Actions list editor.
Create/Use Audio/MIDI Matrix	Use Matrix View.	REAPER has no equivalent of this.
Edit Notation or Lyrics	Use Staff View or Lyrics View.	Double-click on item to open it in MIDI Editor. Choose View → Mode: musical notation.
Stretch and fit items to tempo, etc.	Use Audio Snap.	The closest equivalent to this in REAPER is Dynamic Splitting: right-click on media item, then Item Processing → Dynamic Split Items.
Automatically correct vocal pitch	Use Melodyne.	The closest equivalent in REAPER is the Cockos VST plug-in ReaTune.
Surround panning	Use the Surround Panner.	Use the Cockos VST plug-in ReaSurround.
Automatically color tracks according to the track name	SONAR does not appear to support this.	Extensions → Auto Color/icon/layout (requires SWS extensions).
Create and manage mixer snapshots on a per project basis.	SONAR does not appear to support this.	Extensions → Snapshots (requires SWS extensions). Snapshots allow many different mixer, track, FX, etc. settings (and different permutations of these) to be saved and recalled within a single project file, and even to be copied between project files.
Create and manage screen sets	User Screensets toolbar module.	View → Screensets/Layouts (or Control + E). Screen sets allow different windows and track layouts to be saved and instantly recalled. This includes the use of docking in Windows screensets.
Monitor and manage CPU, disk and RAM performance	SONAR displays only limited information on its CPU and Disk meters.	View → Performance Meter for comprehensive performance management. Double-click on any track name in the Performance Meter Window to open FX window for that track.
Create and manage global database(s) of clips, media items, audio files, automation items, etc.	SONAR does not appear to support this.	View → Media Explorer (or Control + Alt + X).

14. REAPER Main Menu Command Keyboard Shortcut Summary Tables (Note: not all commands have default keyboard shortcuts)

File Management (File Menu)

New project	Ctrl + N
Open project	Ctrl + O
Save project	Ctrl + S
Save project as ...	Ctrl + Alt + S
Save new version of project	Ctrl + Alt + Shift + S
New project tab	Ctrl + Alt + N
Close project	Ctrl + F4
Project settings ...	Alt + Enter
Render	Ctrl + Alt + R
Save live output to disk (bounc)	Ctrl + Alt + B
Batch file/item converter	Ctrl + Shift + F
Quit	Ctl + Q

Edit Commands (Edit Menu)

Undo	Ctrl + Z
Redo	Ctrl + Shift + Z
Select all items/tracks/ envelope points depending on focus	Ctrl + A
Copy items/tracks/envelope points within time selection if any	Ctrl + Shift + C
Copy items/tracks/envelope points ignoring time selection	Ctrl + C
Cut items/tracks/envelope points within time selection if any	Ctrl + Shift + X
Cut items/tracks/envelope points ignoring time selection	Ctrl + X
Paste	Ctrl + V

Options Commands (Options Menu)

Auto crossfade media items when editing	Alt + X
Show all takes in lanes when room	Ctrl+ L
Item grouping enabled	Alt + Shift + G
Enable snapping	Alt + S

View Toggle Commands (View Menu)

Docker	Alt + D
Mixer	Ctrl + M
Master Track	Ctrl + Alt + M
Big Clock	Alt + C
Dynamic Split	D
Fx Browser	Shift F
Grouping Matrix	Ctrl + Alt + G
Media Item Properties	F2
Media Explorer	Ctrl + Alt + X
Navigator	Ctrl + Alt + V
Nudge/Set Items	N
Performance Meter	Ctrl + Alt + P
Project Media/FX Bay	Ctrl + B
Region/Marker Manager	Ctrl + Alt + Shift + R
Routing Matrix	Alt + R
Screensets/Layout	Ctrl + E
Tempo Envelope	Alt + T
Toolbar Docker	F
Transient Detection Settings	Ctrl + Alt + Shift + T
Track Manager	Ctrl + Shift _+ M
Transport	Ctrl + Alt + T
Undo History	Ctrl + Alt + Z
Video Window	Ctrl + Shift + Z
Virtual MIDI Keyboard	Alt + B
Show/hide all floating windows	Ctrl + Alt + F
Fullscreen	F11

Enable Grid	Alt + G
Snap/Grid Settings ...	Alt + L
Locking enabled	L
Locking settings ...	Shift + L
Preferences	Ctrl + P

Insert Commands (Insert Menu)

Media file ...	Insert
Marker	M
Marker (prompt for name)	Shift + M
Region (from time selection)	Shift + R
Tempo/time signature change marker	Shift + C
Measure from tome selction (detect tempo)	Alt + Shift + C
Track	Ctrl + T

Item Management (Item Menu)

Copy loop of selected area of item	Ctrl + Alt + L
Nudge/set items	Nudge
Split items at cursor	S
Split items at time selection	Shift + S
Item properties	F2
Source properties	Ctrl + F2
Group, Group items	G
Group, Remove items from group	U
Group, Select all items in group	Ctrl + G
Take, Next take	T
Take, Previous take	Shift + T
Take, Crop to active take	Alt + Shift + T
Take, Show FX chain for active take	Shift + E
Item processing, Normalize items	Ctrl + Shift + N
Item processing, Norm items, common gain	Shift + N
Item processing, Dynamic split items	D
Stretch markers, add stretch marker at cursor	Shift + W
Open items in edior	Ctrl + Alt + E

From SONAR to REAPER