VST to RTAS Adapter v2.0

fxpansion

1   Introduction

The VST-RTAS Adapter detects VST plug-ins and places them inside an RTAS 'wrapper'. Each of these wrappers appears as an individual RTAS plug-in inside Pro Tools. The wrapper is a small piece of code which loads the original VST plug-in and allows it to talk to Pro Tools using the RTAS protocol.

Wrapped plug-ins behave exactly like any other RTAS plug-in. Their settings are saved with your Pro Tools sessions, and they can be manipulated and auto-mated in just the same way as native RTAS plug-ins.

The Adapter supports VST effect and instrument ('software synths') plug-ins. This new version of the Adapter also contains support for multiple outputs from plug-ins.

The Adapter is designed to be as easy to use as possible. However you will find it very useful to read through this manual fully.

If you want to convert all your VST plug-ins to RTAS quickly, you can read chapters 2 and 3 to get up and running.

If you want to be more selective about which plug-ins to convert, or if you want to have more precise control over the process, please also read chapters 4 and 5. The Troubleshooting guide in Chapter 7 may also be useful if you run into problems.

Chapter 6 provides a brief guide to using RTAS plug-ins in Pro Tools 7. This chapter provides no substitute for reading your Pro Tools documentation fully.

Please do not contact us with questions on how to use Pro Tools! Consult your Pro Tools documentation or contact Digidesign support with your Pro Tools queries.

Many thanks,

The FXpansion team
www.fxpansion.com

Credits

Programming:	Angus Hewlett, SKoT McDonald, Paul Chana
Graphics:	Adam Ferns, Alex Akers
Manual:	Mayur Maha
Beta-testing / QA:	Gareth Green
Project Management:	Rhiannon Bankston-Thomas

Special thanks to the beta-testing team!

2   Installation

VST-RTAS Adapter v2 is designed especially for Pro Tools 7 or higher. If you're using Pro Tools v6.x, you'll need to use v1.06 of the adapter. Please register your adapter on the FXpansion website, after which you'll have access to the download area containing the older version.
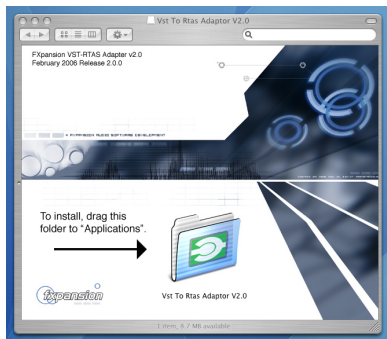
If you have VST-RTAS Adapter v1.x installed, please run it prior to using VST-RTAS Adapter v2, choose 'Remove Converted Plug-Ins' and Quit.

MacOSX Installation

Mount the downloaded **VST to RTAS Adapter v2** disk image.

Drag and drop the **VST to RTAS Adapter V2.0** folder to your Applications folder.

To launch the Adapter configuration program, run **VST to RTAS Adapter Config** inside the **Applications/VST to RTAS Adapter V2.0** folder.

Windows Installation

Extract all the files from the downloaded archive to your desktop or to a temporary folder. Explore the extracted files in My Computer.

Run **VST to RTAS Adapter v2.0 Win Setup.exe** and follow the on-screen instructions to install the software.

After installation, a new program group called **FXpansion/Vst to RTAS Adapter v2.0** will appear in the **Start Menu/Programs** area.

Launch the Adapter configuration program using the **VST to RTAS Adapter v2.0** shortcut in this program group.

Authorization

The first time you launch VST to RTAS Adapter v2, you will be asked to enter your serial number. This is found on the confirmation email you received after purchasing the Adapter.

Please remember to keep this email, and to register your serial with us so that we have a record of it.

IMPORTANT: Online Registration

Please make sure you register your serial number at www.fxpansion.com so that we have a record of it should you lose your purchase confirmation email.

Registering also allows you access to the user download area, containing software updates.

Your serial number represents your license to use the software.

Lost serials will NOT be replaced.

Technical support

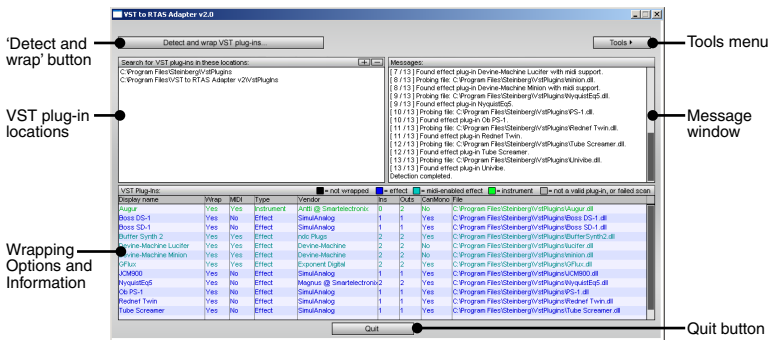If you run into problems with the Adapter, please make sure that :

1. you have read this manual.

2. you have read the FAQ at www.fxpansion.com/support

3. you have read the Pro Tools documentation.

4. you have read the documentation for the plug-ins you are trying to wrap.

5. you have made sure that everything is installed properly, updating to the latest versions of the plug-ins if necessary.

If you still cannot resolve the problem after taking the above steps, you can contact us for technical support. Please note that you must be registered in order to receive support. Further details can be found here:

www.fxpansion.com/support

3 The Adapter configuration program

'Detect and wrap' button

Tools menu

VST plug-in locations

Message window

Wrapping Options and Information

Quit button

VST plug-in locations

VST-RTAS Adapter will scan for plug-ins in the folders listed here.

By default, the system VST folder(s) and VST-RTAS Adapter's 'local' VST folder are selected:

• **Mac**

/Library/Audio/Plugins/VST

/Users/<user>/Library/Audio/Plugins/VST

/Applications/VST to RTAS Adapter v2.0/VST

• **Windows**

<Registry-defined VSTplugins folder>
        (if it exists; e.g. C:\Program Files\Steinberg\VstPlugIns)

C:\Program Files\FXpansion\VST to RTAS Adapter v2.0\VstPlugIns

To add a folder, simply click the ⊞ button, navigate to the desired folder and select it.

To remove a folder from the list, select it in the list and click the ⊟ button.

Please make sure you specify valid VST plug-in locations. Failure to do so can result in problems such as the Adapter attempting to scan files that are not plug-ins. This is especially true on Windows, where not all **.dll** files are VST plug-ins!

The Adapter's 'local' VST folder exists so that you can copy individual plug-in files to it, if you do not want to scan all your plug-ins.

5

Message window

This window shows a log of the detection/wrapping process. Use the scroll-bar on the right of the window to scroll through the contents.

Wrapping Options and Information

This part of the Adapter shows a list of VST plug-ins detected in the specified VST plug-in folders. There are a number of columns displaying options and information for each detected plug-in. Please refer to chapter 5 ('Wrapping Options and Information') for further details on these parameters.

'Detect and wrap' button

The 'Detect and wrap VST plug-ins...' button is a one-click command for detecting and wrapping all the VST plug-ins found in the specified VST folder locations into RTAS plug-ins.

Tools menu

If you want to be more selective about the plug-ins to convert, or if you want to have more precise control over the process, use the extra commands in the Tools menu.

Please see chapter 4 ('Commands and the Tools menu') for further details.

Quit button

Clicking this button quits the Adapter program.

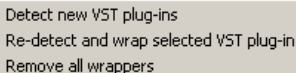# 4   Commands and the Tools menu

Detect and wrap VST plug-ins...   `Detect and wrap VST plug-ins...`

Clicking this button is a one-click method of scanning the specified VST folders and automatically creating wrapped RTAS plug-ins from them. Use this method if you want to quickly convert all your VST plug-ins into RTAS plug-ins.

If you'd prefer to scan for available VST plug-ins and selectively decide which plug-ins to wrap into RTAS, you should use the 'Detect new VST plug-ins' command in the Tools menu, in conjunction with the 'Wrap' parameter in the Wrapping Options.

Extra commands in the Tools menu

> Detect new VST plug-ins
> Re-detect and wrap selected VST plug-in
> Remove all wrappers

• Detect new VST plug-ins

Running this command detects any VST plug-ins not already in the list. Any newly-found plug-ins are **not** automatically wrapped: to wrap them, set the 'Wrap' parameter to 'Yes'.

• Re-detect and wrap selected VST plug-in

During the detection process, any plug-in which does not respond within about 2 seconds is marked as invalid. This can happen for a variety of reasons: a plug-in may try to display a dialog box or require authorization upon first launch, for example.

The 'Re-detect and wrap selected VST plug-in' command is provided for plug-ins like this which require special attention. It permits a much longer period (around 2 minutes) for the plug-in to respond before timing out.

• Remove all wrappers

This command removes any wrapped plug-ins from the system, and clears the list of detected plug-ins.

7

5   Wrapping Options and Information

VST Plug-Ins:				■ = not wrapped ■ = effect ■ = midi-enabled effect ■ = instrument ☐ = not a valid plug-in, or failed scan				
Display name	Wrap	MIDI	Type	Vendor	Ins	Outs	CanMono	File
Augur	Yes	Yes	Instrument	Antti @ Smartelectronix	0	2	No	C:\Program Files\Steinberg\VstPlugins\Augur.dll
Boss DS-1	Yes	No	Effect	SimulAnalog	1	1	Yes	C:\Program Files\Steinberg\VstPlugins\Boss DS-1.dll
Boss SD-1	Yes	No	Effect	SimulAnalog	1	1	Yes	C:\Program Files\Steinberg\VstPlugins\Boss SD-1.dll
Buffer Synth 2	Yes	Yes	Effect	ndc Plugs	2	2	Yes	C:\Program Files\Steinberg\VstPlugins\BufferSynth2.dll
Devine-Machine Lucifer	Yes	Yes	Effect	Devine-Machine	2	2	No	C:\Program Files\Steinberg\VstPlugins\lucifer.dll
Devine-Machine Minion	Yes	Yes	Effect	Devine-Machine	2	2	No	C:\Program Files\Steinberg\VstPlugins\minion.dll
GFlux	Yes	Yes	Effect	Exponent Digital	2	2	Yes	C:\Program Files\Steinberg\VstPlugins\GFlux.dll
JCM900	Yes	No	Effect	SimulAnalog	1	1	Yes	C:\Program Files\Steinberg\VstPlugins\JCM900.dll
NyquistEq5	Yes	No	Effect	Magnus @ Smartelectronix	2	2	Yes	C:\Program Files\Steinberg\VstPlugins\NyquistEq5.dll
Ob PS-1	Yes	No	Effect	SimulAnalog	1	1	Yes	C:\Program Files\Steinberg\VstPlugins\PS-1.dll
Rednet Twin	Yes	No	Effect	SimulAnalog	1	1	Yes	C:\Program Files\Steinberg\VstPlugins\Rednet Twin.dll
Tube Screamer	Yes	No	Effect	SimulAnalog	1	1	Yes	C:\Program Files\Steinberg\VstPlugins\Tube Screamer.dll

This part of the Configuration application is a table showing a summary of detected plug-ins on your system. Use the scrollbar to the right of the table to navigate through the list.

It is important to remember that a plug-in will only appear as an RTAS plug-in within Pro Tools if the 'Wrap' parameter is set to 'Yes'.

Colour-coding

Each plug-in in the list is colour-coded to help you verify a plug-in's status at a glance.

■   Detected but unwrapped plug-in.

■   Wrapped effect plug-in.

■   Wrapped effect plug-in with MIDI capability

■   Wrapped instrument plug-in.

☐   Invalid/incompatible plug-in, or failed scan.

Display name

Click on this field in order to edit the plug-in name that appears on your RTAS plug-in menu.

Wrap (Yes/No)

This parameter dictates whether the plug-in is wrapped for use in Pro Tools or not. After a 'Detect and wrap' command, this will automatically be set to 'Yes' if the plug-in can be wrapped. However, if only a 'Detect' command is executed, the parameter will be set to 'No' – you will need to manually set it to 'Yes' for any plug-in(s) you want to wrap. Please see the 'Commands' section for more information about detection and wrapping.

MIDI (Yes/No)

Indicates if a plug-in supports MIDI.

In order for a plug-in to synchronize with the tempo of your Pro Tools session, it requires a MIDI port. Some plug-ins do not possess this by default: manually changing this parameter to 'Yes' forces the plug-in to be MIDI-enabled, thereby enabling host tempo synchronization.

Type (Effect/Instrument)

Indicates whether a plug-in is an effect or an instrument. Some plug-ins do not properly declare whether they are instruments or effects: this parameter allows you to manually set the plug-in type.

Vendor

Like the Display name, this field can be edited. Pro Tools 7 allows you to or-ganise your plug-in menu by manufacturer (this can be set up in the Pro Tools preferences). Many plug-ins omit this field, in which case it will be shown as (unknown), and there can also be inconsistencies in the vendor name for plug-ins from the same manufacturer. Click on the vendor name in order to edit it.

Ins

This column displays the number of inputs for each plug-in. If a plug-in pos-sesses more than 2 inputs (there are some plug-ins like this, designed to be used in modular environments like Plogue Bidule or EnergyXT) it can still be wrapped, but Pro Tools will utilize only the first 2 inputs. Generally, instrument plug-ins will possess no inputs.

Outs

This column shows the number of outputs for each plug-in. Pro Tools 7 can han-dle multiple outputs from a plug-in: please refer to your Pro Tools documentation for more details on utilizing multiple outputs.

CanMono

This column reports whether a plug-in can operate in mono. If a mono to stereo or stereo to stereo plug-in can operate in mono, it will also appear as a mono plug-in in Pro Tools. This parameter is user-editable, so that you can force plug-ins to operate in mono.

File

The full path and filename of the wrapped VST plug-in is shown here. Wrapped plug-ins require the original VST plug-in in order to function.

6   A guide to using RTAS plug-ins in Pro Tools 7

This brief guide to using wrapped plug-ins in Pro Tools does not have the scope for giving a full understanding of the Pro Tools audio routing system, or for the various other functions of the software which can be involved when using plug-ins, such as automation, MIDI etc.

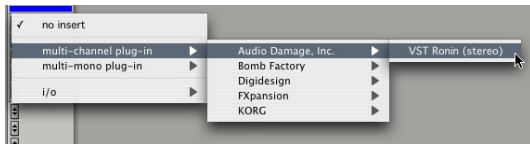**Please do not contact us with questions about using Pro Tools.**

Consult your Pro Tools documentation or contact Digidesign support.

RTAS Inserts in the Pro Tools mixer

RTAS plug-ins are launched using the insert points on Pro Tools mixer channels.

Click on an insert button as shown in the screenshot to the right. An audio track is shown to illustrate the principle, but any type of track can be used, with the exception of MIDI tracks.

Upon clicking an insert button, an RTAS plug-in menu appears, such as that shown in the screenshot below.

Wrapped plug-ins have a "VST" prefix.

Once you navigate through the menu to the desired plug-in, click on it in order to load it into the insert point. The plug-in's graphical interface will also appear.
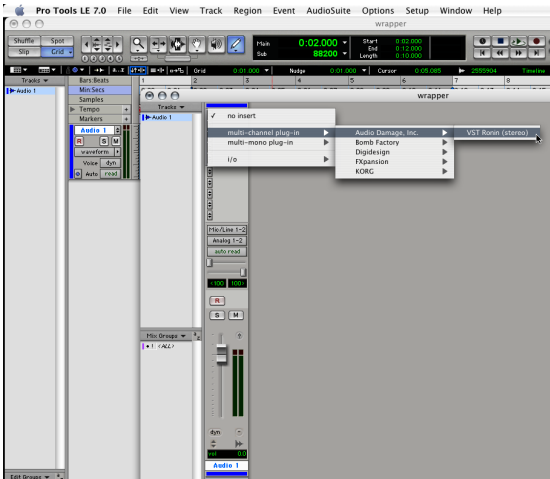
Please note that some VST plug-ins do not have a full graphical interface. For such plug-ins, a generic interface will be used.

The same method is used for effect and instrument plug-ins, although multi-output instrument plug-ins involve a few extra steps (see later in this chapter for more details).
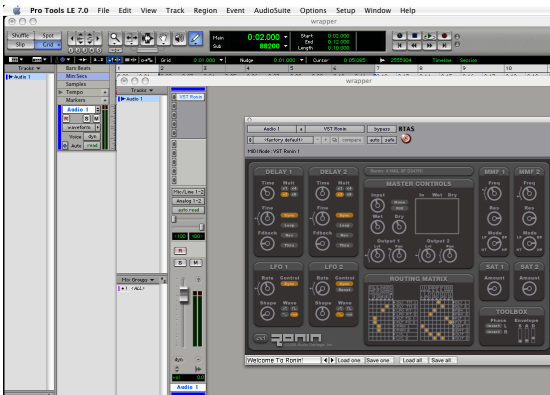
Inserting an RTAS effects plug-in onto a track

1. Click on an available insert point on the desired channel, and navigate through the plug-in menu to the effect plug-in.
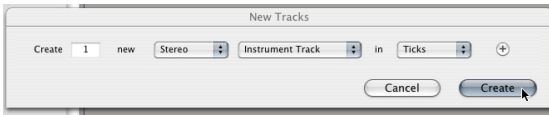

2. Click on the effect plug-in in order to launch it as an insert on the channel. The interface will appear automatically.
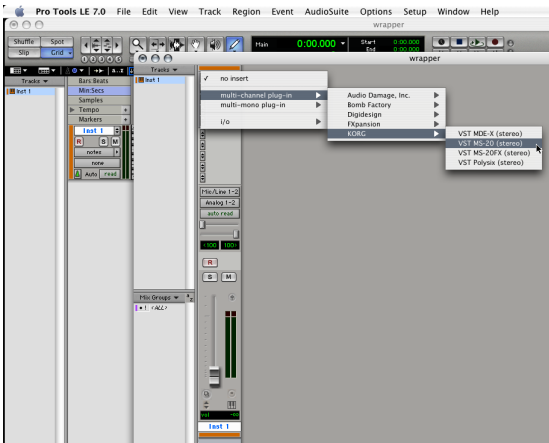

11

Using RTAS instruments

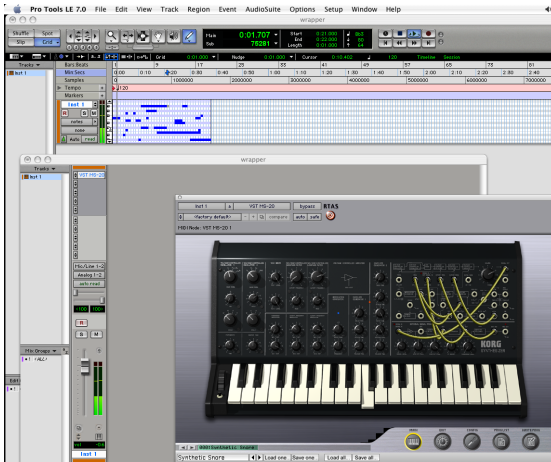1. Create a new stereo Instrument track.

2. Click on an available insert point on the Instrument track, and navigate through the plug-in menu to the desired instrument plug-in.

3. Click on the instrument plug-in in order to launch it as an insert on the track. The interface will appear automatically.
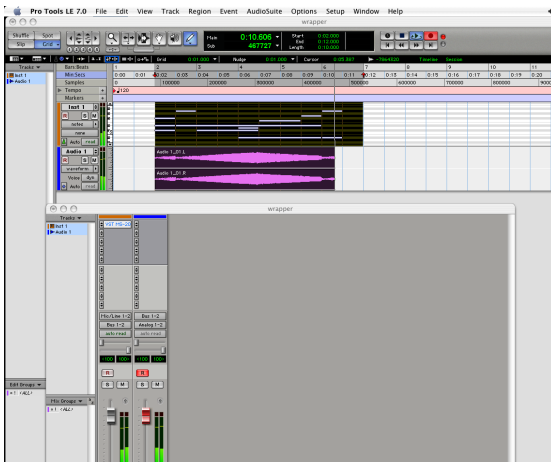
4. Record or draw some MIDI notes onto the Instrument track. When you play back the sequence, the instrument should respond.

5. To record the output of the instrument as audio, firstly set the output of the Instrument track to a Bus. Create a new Audio track and set its input to the same Bus.

You're now ready to record the output of the instrument to this new Audio track.
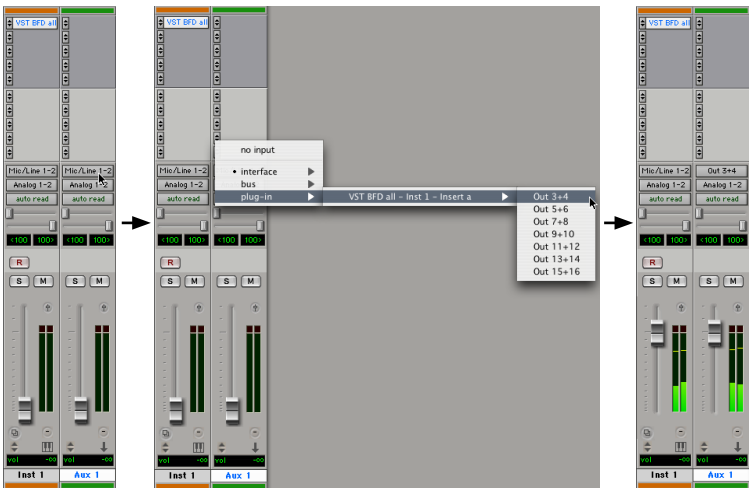
Working with multiple-output instrument plug-ins

Some instrument plug-ins have more than one stereo output. Please run the Adapter configuration program and inspect the 'Out' parameter in order to verify the number of outputs for your instrument plug-ins.

When using such instrument plug-ins, the primary stereo output pair is routed to the output of the Instrument track on which the plug-in is inserted.

To hear each extra output:

1. Create an Aux track. Whether it is mono or stereo depends upon the output configuration of the plug-in itself. Most multi-out plug-ins have extra stereo outputs, so you would create stereo Aux tracks for these. However, some plug-ins have extra mono outputs, or a combination of mono and stereo. Please refer to the plug-in vendor's documentation for further guidance on the types of outputs required for each plug-in.

2. Click the Input selector for the Input menu to be displayed. Any extra outputs from plug-ins are displayed in the 'plug-in' section of the menu. After clicking on the desired plug-in output, the Aux track will monitor the signal from that output.

7   Troubleshooting

Certain plug-ins don't wrap!

The main reasons for this are as follows:

• The plug-in may need to be authorized.

• The plug-in may be trying to display a dialog box (for example, an authorization dialog box) before properly initializing itself.

Solution**:**

If the plug-in requires a specific authorization procedure prior to launching it, resolve this now.

Select a plug-in which won't wrap and run the 'Re-detect and wrap selected VST plug-in' command in the Tools menu. This command gives the plug-in more time to respond, and should resolve the problem. If an authorization window pops up for the plug-in, take the necessary steps to authorize the plug-in.

I still can't wrap certain plug-ins!

• Certain plug-ins which employ wrapping techniques of their own, such as the Waves plug-ins and the Korg LegacyCell multiple plug-in performance tool (the actual Korg synths and effects plug-ins themselves have been tested and work fine), may not work properly. This is for technical reasons and cannot be overcome without major updates by the plug-in vendors. In the case of Waves, native RTAS versions are available.

• You may need to update the plug-in or some of its components to the latest version (please consult the plug-in vendor for further assistance).

• The plug-in may be buggy or may not fully comply with the VST 2.3 standard. Certain plug-ins may not have been updated to run in recent operating systems due to lack of continued support. There is nothing we can do in this case, as we cannot fix other vendors' buggy plug-ins.

• The file may not be a plug-in! Please make sure you select valid VST plug-in folders in the Adapter configuration program.

I can't see some of my plug-ins in the RTAS plug-in menu!

The plug-ins displayed on the RTAS plug-in menus depend on whether you're using mono or stereo tracks.

The CanMono parameter in the Wrapping Options and Information section indicates whether a non-mono plug-in can also operate in mono.

I can't get tempo-synced plug-ins to synchronize!

In the Adapter configuration program, set the MIDI parameter to 'Yes'.