



# REASON

Version  
**2.5**

→ ReFill Packer

14 Channel Expandable Mixer → Analog Polysynth → Grainable Polysynth → Digital Samplers → REX-loop Player → Drum Machine → ReBirth Input Device → Multiple Effects Processors → Shelving and Parametric EQs → Master Song Sequencer → Pattern Sequencer → 64 Channel Audio Output → 64 Channel ReWire Output → 512 Band Vocoder → CV Processing Tools → Full Automation → Total Recall

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# REASON

→ ReFill Packer

# About ReFill Packer

The ReFill Packer is an application that enables you to build your own ReFills. A ReFill is a kind of component package for Reason that can contain patches, samples, REX files and Song files. On your computer, ReFills appear as large files with the extension “.rfl”.

With ReFill Packer, you can “pack” patches, samples, Song files etc., into one self-contained file. Storing audio samples in a ReFill will significantly reduce the size of the files, with no loss of audio quality. The advantages of ReFills are obvious; third party manufacturers can produce downloadable sample collections for Reason for example, and it simplifies exchanging samples in general.

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🔗 **Samples (Wave and AIFF files) are compressed to about half their original file size when stored in ReFills.**

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In Reason, you can use the browser to list and access the embedded sounds and other components within the ReFills. just as if the ReFills were folders on your hard disk.

## Sharing Songs - ReFills vs. Self-Contained Songs

ReFills and self-contained songs (see the chapter “Song File Handling” in the printed Reason documentation) are similar in certain respects. A self-contained song contains not only the references to the used files, but also the files themselves. You can choose exactly which files should be included in the self-contained song, except you cannot include files that are part of a ReFill. Thus, if your song contains samples or REX files from a ReFill, other users must have the same ReFill to be able to play the song. Files that are already part of a ReFill cannot be included in a new ReFill nor a self-contained song.

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🔗 **When you make a Song self-contained, samples (Wave and AIFF files) are compressed to about half their original size, using the same non-lossy compression method as in ReFills.**

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So what should you use - ReFills or self-contained songs? Well, it depends on the situation:

- ◆ **If you want to share a particular Song with other Reason users that contains a few non-ReFill files, the easiest option is probably to make the song self-contained.**

This song would play back with all non-ReFill files embedded into the song. Users can also extract these sounds and make the song refer to them on disk as usual.

- ◆ **If you regularly use “custom” (non-ReFill) samples, REX files, patches, SoundFonts etc., and want to share a library of Songs (that reference these custom files), the best option would be to create a ReFill that includes all your “custom” files.**

This way, you wouldn't have to worry about knowing what files are referenced, or having to open each separate song and make it self-contained.

## File Handling Hints

The above examples can also illustrate a point regarding non-ReFill (especially audio) file handling.

- ◆ **As a general rule, if you intend to share your music, it is more flexible to store your “custom” files in the original form, i.e not packed into a ReFill that is then used to reference the files.**

This is because you may wish to share a Song that contains a single custom sample. If you had organized and packed all your custom samples into a large ReFill, the entire ReFill would have to be present for other users to be able to reproduce that single sample, which is impractical. One work-around to this scenario would be to simply re-reference this particular sample to the original non-ReFill sample, and then make the Song self-contained. But this method could also have its drawbacks if there are a lot of custom ReFill files referenced.

On the other hand if you have a huge amount of samples, it may be tempting to pack them into a ReFill to save disk space. Then by all means go ahead, but it would be good practice to save the original files offline, and not to throw them away (in case of a situation outlined above).

# What File Formats can be Part of the ReFill?

The following table lists the file formats that you can use in a ReFill:

File Type	Extension	Description
Song	.rsn	This is the main document format in Reason. It contains your music and the setup of the rack, along with references to any used samples and loops (or it can contain the actual samples and loops, if you have made the song "self-contained").
Published Song	.rps	A published song is a self-contained song intended for playback only. It cannot be changed and its components cannot be extracted.
Subtractor Patch	.zyp	This is a patch for the Subtractor synth device, containing all panel settings. You store your synth sounds by saving Subtractor patches.
NN19 Sampler Patch	.smp	This is a patch for the NN19 Sampler device, containing references to and settings for all used samples, along with panel settings.
Redrum Patch	.drp	This is a patch for the Redrum drum machine device. It contains information about which drum samples are used, along with all drum sound settings. In effect, a Redrum patch is a stored drum kit.
Malström Patch	.xwv	This is a patch for the Malström synth device, containing all panel settings. You store your synth sounds by saving Malström patches.
NNXT Sampler Patch	.sxt	This is a patch for the NNXT Sampler device, containing references to and settings for all used samples, along with panel settings.
RV7000 Patch	.rv7	This is a patch for the RV7000 reverb effect, containing all panel settings.
Scream 4 Patch	.sm4	This is a patch for the Scream 4 distortion effect, containing all panel settings.

File Type	Extension	Description
REX files	.rx2, .rcy or .rex	REX files are created in another Propellerheads application, the ReCycle loop editor. They contain audio loops chopped into slices, with one slice for each significant beat in the loop. Used in Reason by the Dr. Rex Loop Player.
Samples	.wav or .aif	Samples can be in Wave or AIFF format with support for a large number of resolutions and sample rates.
SoundFont files	.sf2	The Soundfont format was co-developed by E-mu Systems and Creative Technologies and is used with many audio cards and software synthesizers. SoundFont banks store wavetable synthesized sounds, allowing users to create and edit multi-sampled sounds in special Soundfont editing programs. The Soundfonts can then be played back in wavetable synthesizers, typically on audio cards, thereby effectively turning an ordinary sound card into a sampler. Regardless of which editing program was used to create them, these banks are similarly and hierarchically organized, with folders for instruments, presets, samples etc. Refills can contain individual samples and presets from a Soundfont bank, but <i>not</i> the complete Soundfont.
MIDI files	.mid	Reason supports import/export of standard MIDI files.
Splash image files	.jpg, .jpeg	You can add a picture to the ReFill, which is displayed when opening the ReFill in the Reason browser.
Text files	.txt	A text file contains the text information in the ReFill.

# Using ReFill Packer

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! **Files that are already part of a ReFill cannot be used in another ReFill!**

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To create your own ReFill, proceed as follows:

## Preparations

1. **Locate the “Template” folder inside the ReFill Packer Program folder.**

The Template folder contains two files; a text file named “info.txt”, and an image file named “splash.jpg”.

2. **Make a copy of the Template folder.**

Let's assume you name this copied folder “ReFill”.

3. **Place all the files you wish to include in the ReFill inside the “ReFill” folder.**

It is a good idea to organize the files in subfolders according to the category the files belong to, i.e place Subtractor patches in one subfolder, all samples in another etc., and give these subfolders appropriate names.

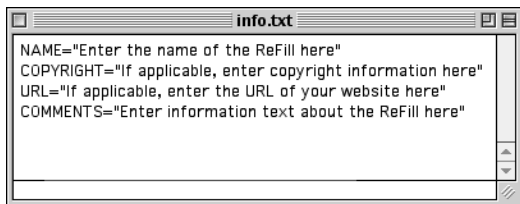
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! **The “info.txt” and the “splash.jpg” documents should not be placed in a subfolder!**

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4. **Open the file “info.txt” inside the “ReFill” folder.**

This is an ordinary text file that will open in any standard text editor, like “Simple Text” (Mac) or “Note Pad” (PC).



- **As you can see, there are four rows of text information, “Name, Copyright, URL and Comments”.**

The information entered in this text file will be included in the ReFill to be created.

5. **Enter the information you wish to include with your ReFill by substituting the text inside the brackets (the brackets should not be removed) with your own text, as appropriate.**

Make sure not to change any text outside the brackets - keep it exactly as is!

6. **When you are done, save the file but do not rename it!**

It must be named “info” with the extension .txt.

- **You also have the option of substituting the picture file named “splash.jpg” inside the ReFill 1 folder with a picture of your choice.**

This image will be displayed in the ReFill, when selected in the Reason browser. The included “splash.jpg” file is a default picture that looks like this:



If you would like to use your own picture it must have the following properties:

- It must be in the JPEG format (extension .jpg or .jpeg).
- The dimensions have to be 64x64 pixels.
- It must be named “splash.jpg”.

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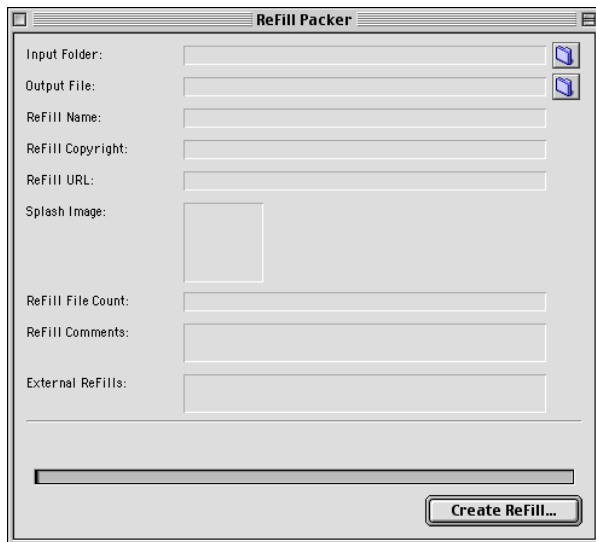
! **For ReFill Packer to work, a picture meeting the above requirements, and a text file named “info.txt” must be present in the folder (not in a subfolder) that is to be packed!**

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## Creating a ReFill

### 1. Launch ReFill Packer.

The program opens showing empty text and image fields.



Next, you select a Input folder, i.e the folder that contains the files that are to be packed into a ReFill. This can be done in two ways:

- ➔ **By selecting “Select Input Folder” from the ReFill menu.**  
This opens a file dialog allowing you to navigate to the location of the folder.
- ➔ **Clicking the icon at the end of the Input Folder text field, opens the same file dialog.**

### 2. When you have located the folder, select it (do not open it) and click “Choose”.

Now the window will display the text contained in the “info.txt” file and the splash image file. The text cannot be edited in this window.



### 3. Select a destination for the ReFill, by selecting “Select Output Folder” from the ReFill menu, or by clicking the icon at the end of the Output Folder text field.

A file dialog opens, allowing you to select a folder (or to create a new folder).

### 4. Select the folder and click “Choose”.

- ➔ **If any Song file inside the ReFill folder is referencing another ReFill, you can select to have the external ReFills listed as part of the Re-Fill information, by ticking the “Warn for External ReFill References” item on the ReFill menu.**

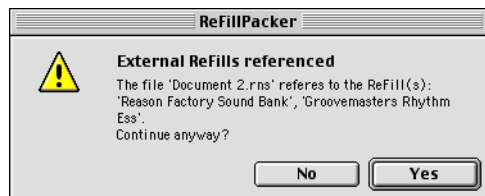
This serves two purposes, it will list the ReFills needed to reproduce the song(s), and it can warn you about references that you were possibly unaware of.

### 5. Click “Create ReFill...”.

The files are verified and packed, indicated by the progress bar at the bottom of the window.

- If you ticked the option “Warn for External ReFill References”, and any are found, the following dialog is shown.

Click Yes to continue, or No to abort the operation.



6. The ReFill file is created at the selected destination, and is ready for use in Reason.

The ReFill Packer window now additionally displays the number of files contained in the ReFill and any external ReFill references (given that this item is ticked on the ReFill menu).

