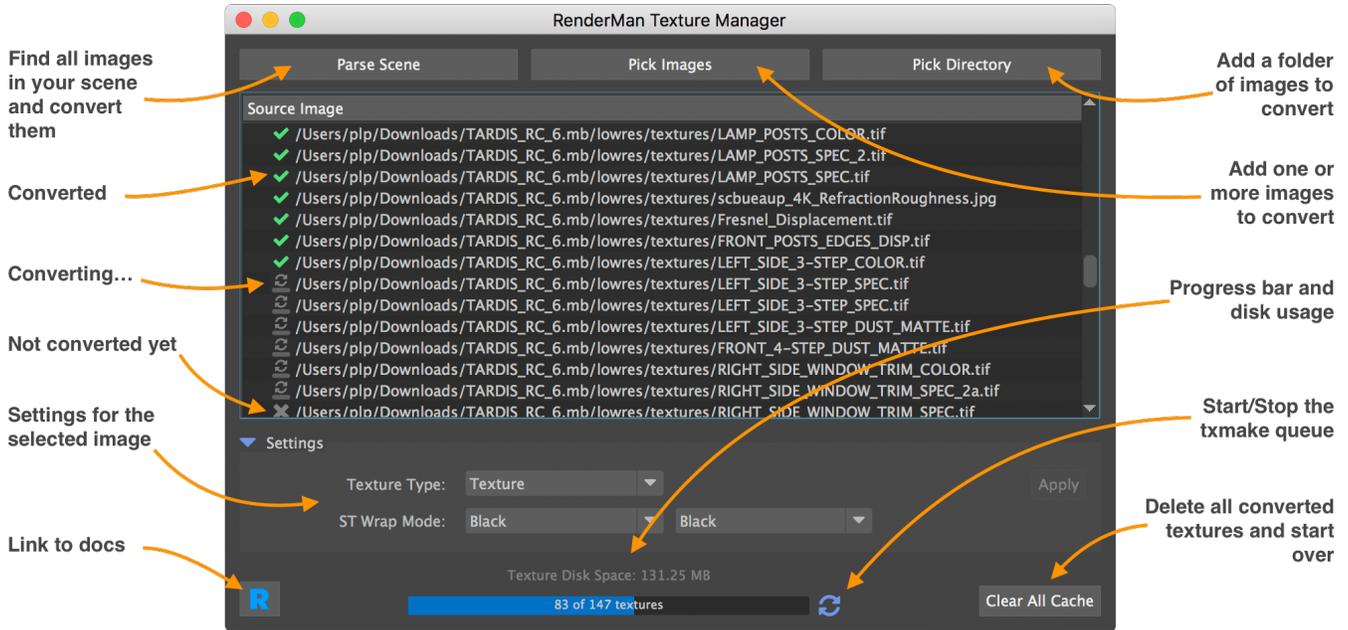


Texture Manager

The Texture Manager has one simple role: convert images to RenderMan's texture format, using [txmake](#). It handles single images as well as texture atlases (UDIM, Mudbox, ZBrush).

User interface



When you open a new scene, the Texture Manager will find all images used as textures and add them to a queue to convert them. The conversion settings will be based on a set of rules defined in a [json file](#) (see below).

Just press **Parse Scene** whenever you want new textures to be converted. **Pick Image** and **Pick Directory** allow you to pre-convert images without having to know how to use [txmake](#).

Stop / Start the conversion queue

By default, the conversion queue is always running, but sometimes you may want to stop the conversion process.

The conversion queue can be stopped and restarted by clicking on the icon on the right of the progress bar. When the queue is stopped, the running txmake processes are immediately killed but existing textures are intact. When you restart, it pick up where it left.

Conversion informations

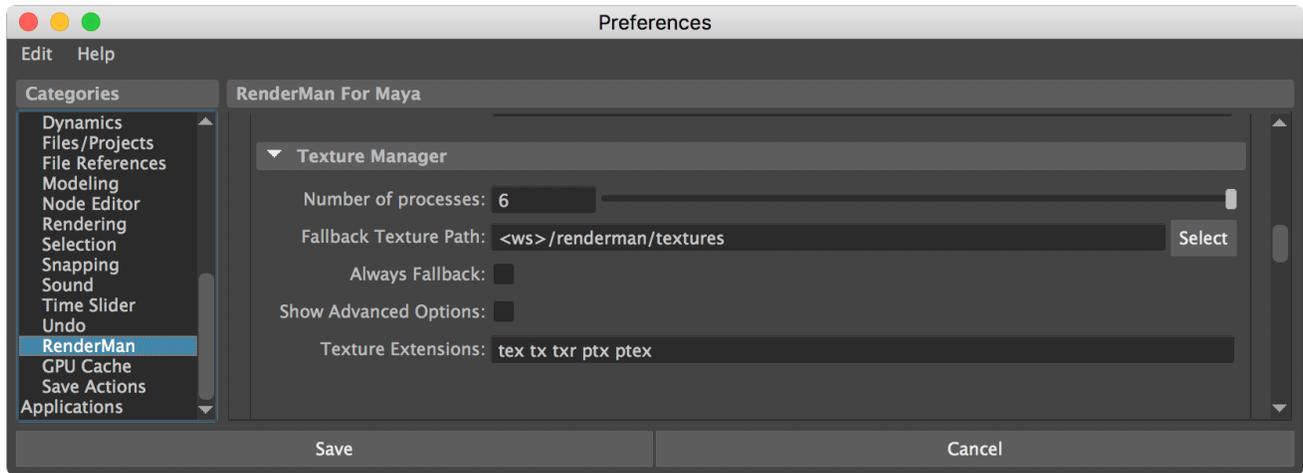
There is a disk usage and progress indicator at the bottom of the Texture Manager window.

Each file in the list also has a status icon.

Interactive versus Batch rendering

- During interactive renders, the texture manager will add new textures to the queue and return a temporary texture until the conversion is done. Once done, it will send an update to the renderer and your texture will appear.
- When you start a **Batch** or a **Preview** render, you need all your textures to be converted first. Starting with 22.3, RfM will stop the conversion queue and add any remaining conversion task to the LocalQueue or Tractor job to ensure you always get the expected image.

Settings

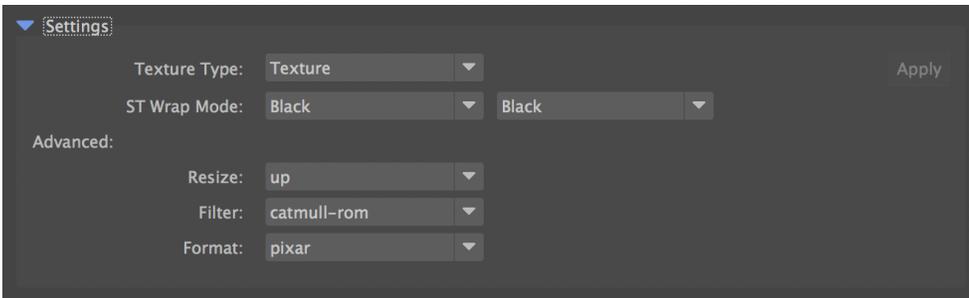


Number of processes: How many txmake processes will be launched at the same time. The default is 2 but it is often beneficial to add more processes to speed up the queue.

Fallback Texture Path: By default, the texture manager saves the texture next to the source image. If, for any reason, it is impossible to save in that directory, the fallback texture path will be used.

Always Fallback: Always save converted textures in the fallback texture directory.

Show Advanced Options: Show more advanced options in the user interface.



Texture extensions: All texture file extensions so the texture manager knows which files can be marked as already converted.

Txmake Configuration

The texture manager uses a set of rules to choose optimal txmake parameters based on:

- The type of node using the texture: `pattern`, `light`, `lightfilter` or `imageplane`.
- A set of base parameters for that type of node
- one or more rules to modify the base parameters when considering the file's name, the bit depth, etc.

These settings are defined in a `$RMANTREE/etc/txmanager_rules.json`.



The default rules are build for efficiency and you shouldn't have to modify them unless you have specific pipeline requirements

JSON structure

Here is a very basic example. See `$RMANTREE/etc/txmanager_rules.json` for the real rules.

```

{
  "pattern": {
    "args": {
      "texture_type": "regular",
      "smode": "periodic",
      "tmode": "periodic",
      "texture_format": "pixmap",
      "texture_filter": "catmull-rom",
      "resize": "up-",
      "data_type": null,
      "compression": "lossless",
      "compression_level": null
    },
  },
  "rules": {
    "'_i8t' in '%(img_name)s'": {
      "args": {
        "texture_format": "tiff",
        "data_type": "byte"
      }
    }
  }
}

```

Category

In the example above, the category is `pattern`, but there are other pre-defined categories: `light`, `lightfilter` and `imageplane`.

args

This section is a dictionary representing default txmake parameter values for the current category. The key names (`texture_type`, `smode`, `tmode`, etc) are coming from the TxParams class of the txmanager python module.

rules

Here we define a set of rules that will all be executed in the file's order. The key string should evaluate as a python expression and return True once substituted.

There are a number of available substitution tokens:

token	contents
node_type	the node type (PxrDiskLight, PxrTexture, etc).
img_atlas	True if the texture is a UDIM or Mudbox texture set.
img_name	the image name, without its file extension.
img_ext	the image's file extension, with its leading dot.
img_type	the image's data type: int or float
img_depth	the image's bit depth: 8, 16, 32

In the example above, the rule:

```

'_i8t' in '%(img_name)s'": {
  "args": {
    "texture_format": "tiff",
    "data_type": "byte"
  }
}

```

... matches `"_i8t"` in the image name, which is here interpreted as shorthand for "8 bits integer tiff format" and sets the texture format to `"tiff"` and the image to `"byte"` (8 bits integer, see txmake documentation). For example, a file named `"roof_top_diffColor_i8t_v06.png"` would match that rule.

Of course, you can create more sophisticated tests by using the `and` and `or` keywords.

```
"%(img_type)s' == 'float' and %(img_depth)d > 16"
```

The standard rules tend to rely on the `node_type`, `img_type` and `img_depth` to pick the best file format and compression algorithm.