

## Mast Tutorial

Mast is a convenient commandline tool for generating manifest and file hash lists. It makes the process very simple, and even allows manifests to be updated without repeating inclusion/exclusion criteria by storing the command parameters in a comment line at the top of the generated output. Lets try a simple example. Lets say we have the following folder structure:

```
$ ls -R
.:
demo_rtar  mint

./demo_rtar:
Lorem_ipsum.txt  lib  meta  web

./demo_rtar/lib:
demo_rock

./demo_rtar/lib/demo_rock:
tryme.rb

./demo_rtar/meta:
data

./demo_rtar/web:
index.html  rocklobster.jpg

./mint:
loremipsum.txt  tryme.rb
```

Now lets look at the same folder via ‘mast’.

```
$ mast
#!mast
demo_rtar
demo_rtar/Lorem_ipsum.txt
demo_rtar/lib
demo_rtar/lib/demo_rock
demo_rtar/lib/demo_rock/tryme.rb
demo_rtar/meta
demo_rtar/meta/data
demo_rtar/web
demo_rtar/web/index.html
demo_rtar/web/rocklobster.jpg
mint
```

```
mint/loremipsum.txt
mint/tryme.rb
```

As you can see it has listed all the files contained in the current folder. Notice also the first line is empty except for the ‘#’ character. This is a standard shell comment mark. We can specify special criteria to the mast command and these options will be reflected on this line. For example, lets say the mint directory is extraneous and we do not want it included in the list of files.

```
$ mast -x mint
#!mast -x mint
demo_rtar
demo_rtar/Lorem_ipsum.txt
demo_rtar/lib
demo_rtar/lib/demo_rock
demo_rtar/lib/demo_rock/tryme.rb
demo_rtar/meta
demo_rtar/meta/data
demo_rtar/web
demo_rtar/web/index.html
demo_rtar/web/rocklobster.jpg
```

So you can see how the commandline options carry over to the top comment line of the output. The advantage of this is that if you save the output to a standard location, ie. a file named MANIFEST or meta/manifest with an optional .txt prefix (case insensitive), then you can automatically update the file by calling +mast update+.

```
$ mast -x mint > MANIFEST
$ mast update
MANIFEST updated.
```

You can also add a checksum to the file list.

```
$ mast -x mint -g sha1
```

Mast also provides options for ignoring files based on their basename, as well as omitting default excludes and ignores so that all files are listed. Use the —help option for more details.