

Manuals, or man pages, are available for every command. They can all be found at <http://ss64.com/bash/> or on a Unix machine by inputting `man [command]` in the Terminal. Also, Google is your friend for anything shell and ImageMagick related.

ls - list - List information about files, i.e. how to find out what's in my folders

Syntax: `ls [options]... [file]...`

`ls -l` : list one file per line

`ls -d */` : list directories in current directory

`ls *` : list ALL subdirectories

cd - change directory - Change the current working directory to a specific folder

Syntax: `cd [options] [directory]`

`cd /d/test/` : change to the test folder on the D drive

`cd test/` : change to the test folder within the current working directory, note the lack of leading forward slash (optionally: `cd ./test/` the “.” at the beginning says “start here”)

`cd ..` : move up one directory

`cd` : with no options will return you to your home, or default, directory

mkdir - make directory - Create a folder

Syntax: `mkdir [options] folder...`

`mkdir test` : create a directory named test

rm - remove - Remove files

Syntax: `rm [options]... file...`

`rm test.txt` : delete test.txt

`rm -R test/` : delete folder test and all of its contents

`rm -iR test/` : interactively delete every file inside of folder test followed by the folder itself

find - Search a hierarchy of folders for filename(s) that meet specified requirements, like Name, Size, Type, etc

Syntax: `find [path...] [expression]`

xargs - Execute a command, passing constructed argument list(s) that are typically long lists of filenames created by ls or find and piped to xargs

Syntax: `xargs [options] [command]`

`find . -name “*.tif” -size -5500k -print0 | xargs -0 -n 1 -P 4 mogrify -compress group4`

find starting here all <anything>.tif files under 5500k and perform group4 compression running 4 instances of mogrify at one time

Identify a file

```
identify shells.tif
```

Identify with verbose, or lots, of information

```
identify -verbose shells.tif
```

Time any command by adding *time* before everything else

```
time identify -verbose shells.tif
```

Compress all files that end in .tif and are under 5500k one at a time

```
find . -name "*.tif" -size -5500k -print0 | xargs -0 -l '{' mogrify -compress group4 "}"
```

Compress all files that end in .tif and are under 5500k in parallel, 6 at a time

```
find . -name "*.tif" -size -5500k -print0 | xargs -0 -n 1 -P 6 mogrify -compress group4
```

Decompress all files that end in .tif in parallel, 6 at a time

```
find . -name "*.tif" -print0 | xargs -0 -n 1 -P 6 mogrify +compress
```

Deskew a single image and output to a new file

```
convert 0001.tif -deskew 40 deskewed_0001.tif
```

Deskew all TIFFs that end in .tif in folder hierarchy

```
find . -name "*.tif" -print0 | xargs -0 -n 1 -P 6 mogrify -deskew 40
```

Crop the canvas size of an image down to 8.5" x 11" at 600ppi

```
convert deskewed_0001.tif -gravity center -extent 5100x6600 fixed_0001.tif
```

Find all *.tif in a folder hierarchy, deskew them, crop down to 8.5" x 11" at 600ppi, and then compress with group4 compression

```
find . -name "*.tif" -print0 | xargs -0 -n 1 -P 6 mogrify -deskew 40 -gravity center -  
extent 5100x6600 -compress group4
```

Create a web derivative JPEG that is 700px wide at a quality of 85%

```
convert 0001.tif -strip -resample 96x96 -filter -lanczos -resize 700x\> -quality 85  
0001.jpg
```

Create thumbnails, fast!

```
convert 0001.tif -thumbnail 68 -quality 60 thumb_0001.jpg
```