

My 10 favorite UNIX commands

1. find - searches a directory structure for files. '-exec' runs a command on each file found.

```
find . -name '*.txt' -exec script.pl {} \;
```

2. curl / wget - command line web.

```
curl -O "http://courses/lecture_notes/html.pdf"
wget "http://courses/lecture_notes/html.pdf"
curl -O "http://someurl.com/dir[1-3]/file[1-100].gz"
```

3. comm - compares SORTED files for identical lines.

```
comm a.txt b.txt # returns 3 columns: only in a:only in b:in both
comm -1 -2 a.txt b.txt # returns only lines shared in the two files
comm -1 -3 a.txt b.txt # returns a list of items only in b.txt
```

4. tar - combines multiple files into a single file.

```
tar -cf file.tar # create file from current directory called file.tar
tar -cf . - | (cd /place/otherplace; tar xf - ) # copies directory
```

5. grep | sort | uniq

```
sort file | uniq -c | sort -n # counts duplicate lines - sorts outputs
grep ">" file.fasta |sort |uniq -c |sort -n # counts duplicate names
grep "word" file | perlscrip.pl'
```

6. for - Do stuff multiple time on multiple stuff

```
for i in `ls`; do mv $i $i.bak; done
```

7. convert pc to unix

```
perl -i.old -p -e 's/\r/\n/g' filename
```

8. head/tail

```
tail -f filename # continuously show last lines of a changing file
head -10000 filename | tail -10 # show the last ten lines of the first 10000 lines
```

9. ssh

```
ssh host 'head log.out' # run a command on a remote host
tar -cf . - | ssh host 'tar xpf - ' # copies current directory to remote server
```

10. screen

```
screen # starts a session that you can disconnect from and reconnect to later
screen -r # reconnect to a disconnected screen
control-A control-D within screen disconnects the current screen
```

Further Reading: **Classic Shell Scripting** - Arnold Robbins, Nelson H.F. Beebe