

Chapter 6 - Unix Commands In-Depth

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Anatomy of a Command

```
$ Command [options] [arguments] # Unix command structure
```

Examples:

```
- $ ls -sCF /usr/bin
```

```
- $ ls -s -C -F /etc
```

```
$ man ls # command manual
```

```
$ apropos ls # shows all related file to this command (ls)
```

```
$ whereis echo # shows where all echo related files are located
```

```
$ which echo # only shows executable
```

Meta Characters

```
$ Wildcard
```

```
- ? # matches one character
```

```
- * # matches one or more characters
```

```
- [] # matches one of the characters in [...]
```

```
$ ls *.txt
```

```
$ ls hi?.txt
```

```
$ ls hi[12357].txt
```

Redirection

```
$ ls > ls.txt # writes the output of ls command to ls.txt file
```

```
$ sort < /etc/group # sorts a textfile alphabetically
```

```
$ sort < /etc/group > sort.txt # same as above but puts output into sort.txt
```

```
$ find / -name 'hi.txt' 2> /dev/null # find a file by name. Permission denied messages will be omitted.
```

```
$ find /export/home -name 'hi.txt' > out.txt 2>&1 #Puts error and output into out.txt file, errors first
```

```
$ find /export/home -name 'hi.txt' 2> out.txt 1>&2 # same as above but content first, then errors
```

Pipes

The Output of the first process is the input of the second process.

```
$ who | wc # word count who command
$ cat /etc/passwd | grep unix30 # shows only lines that contain unix30
$ echo $PATH # shell variable path
$ ${PATH}${TERM} # shell variable value
$ echo today is `date` # prints current date
$ \$PATH # Escape the dollar sign
```

Quotas

The amount of disk space for each user is allocated

```
$ /etc/vfstab #enable quotas option

$ quotacheck -acug /export/home # scan filesystem for disk usage, create, check
and repair quota files
```