



File Management

1. Start the Admin virtual machine.
2. Log on with the credentials:
 - User name: 'student'
 - Password: 'password'

A. Using the man/info pages, find out what the following commands do. If you do not understand what the man page tells you use Google or the text book on Moodle to work out the function. Note: one of the commands does not have a man page and one will not work when you try it – use your initiative here! (Your lab tutor will explain why this is the case.):

Command	Purpose
cp	
touch	
mv	
rm	
ls	
rmdir	
cd	
mkdir	
more	
less	
cat	
whereis	
cut	
head	
tail	
wc	
sort	
tr	



Using the Right Command

Carry out the following using the commands you investigated earlier. Remember, you can use the man pages, the text book (or even Google!) to help!

1. Create a directory called 'hello'.

2. Create a file in the 'hello' directory called 'world'.

3. Go into the 'hello' directory.

4. Return to your home directory.

5. List the contents of the present working directory (PWD).

6. Within the 'hello' directory, create a new directory called 'cheese'.

7. Move the file 'world' into the directory 'cheese'.

8. Rename the file 'world' to 'planet'.

9. Copy the file 'planet' to your home directory.

10. Delete the file 'planet' from your home directory.

11. View the contents of the '/etc/passwd' file one page at a time.

12. What is the file path and man file location for the program 'ifconfig'?

13. Count the number of users on the system (hint the file /etc/passwd contains all users, one per line)



Some Commands in More Detail

Cut

The cut command is used to cut (now there's a surprise!) sections from a text file. So, let's take an example:

```
cut -c 1-10 /etc/passwd
```

Here we use the -c option to specify which characters we wish to select. This selects columns 1-10 of the file and outputs them on the screen (or in every day speak, the first ten characters of each line).

B. Display /etc/passwd using a screen reader (hint: these are more or less the same thing!). What happens?

C. Enter the above cut example at the command line. What result do you get?

Here's a more complex example:

```
cut -f 1 -d : /etc/passwd
```

Firstly, the command has two arguments here -f and -d. -f is used to tell cut what field you wish to extract from the file, in this case field 1. -d is used to tell cut what character delimits the field (in other words, how can I tell field 1 from field 2 etc.). Finally we have the argument of the file we want to extract the data from (in this case the /etc/passwd file used to store user account data).

D. Enter the above example at the command line. What result do you get?

The Sort Command

The sort command is used to sort files either alphabetically or numerically. So, if we take the same file as above:

```
sort /etc/passwd
```

will sort the file /etc/passwd alphabetically from the start of the line. The results will be displayed on the screen. Try it...

E. What option can you add to sort reverse alphabetically (z-a)?