Operating Systems Lab Sheet 8 – Linux

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* **(Exercise 1) Exercise 4: Practicing with the man, info and whatis commands**

1. Use the whatis command to find out what the **pwd** command does?

Pwd can print out the name of the current working directory which can also be returned and the path of the current working directory can also be returned.

1. Use the man command to find out what the **ls** command does? Ls lists the directory contents.
2. Use the man or info command to find out what the command **ls -l** allows you to do? Ls lists the directory contents but it shows you the details of the contents of the directory.
3. Use the man or info command to find out which option on the **ls c**ommand will give you the files, sorted by file size, largest first -S.
4. Use whatis to find out what passwd command does. Passwd enables you to check out the password file (5), while (1) can update the authentication tokens of the user. The sslpasswd (lsslu) can compute the hashes of a password.

**(Exercise 2) Exercise 5: Finding Graphical Help**

Although it is vital that any network or system administrator working under Linux is able to obtain help in textmode using the commands we have been looking at, anyone working in a desktop environment can normally work straight from a GUI. The Help is located in **Applications – Accessories - Help**

Of course, you will be able to find **online documentation** for the man or info pages also without too much difficulty. One useful location is <http://www.linuxcommand.org/superman_pages.php>. Use this now to find help on the **cd** command. What does the cd command allow you to do? Cd changes the current directory to a certain directory.

**(Exercise 3) Exercise 6: Find out who you are currently logged on as using *whoami***

At the command prompt type

whoami

This will tell you what your **current** **login** (username) is. This might seem like a trivial command but there are circumstances where this command can be very useful e.g. if you are performing a Linux session and you have more than 1 username e.g. you have administrative rights where you can also make use of the username called **root** and perhaps other user names e.g. testname along with your regular account name e.g. t00012345.

Exercise : find out what the su command does. The su or System User can run a command with group ID and a substitute user. Su can enable a single user to temporarily become another user.

At the command line you should now log in as **root** by typing

su root

You will be asked for the root password. It is “**itt12345**”. Once you have supplied this, you will become the root user and not the “regular” user you had been. Your prompt will change also, signifying that you are root, with a **#** instead of a $.

Use the whoami command again – you should see that your current login is now **root**.

Being an administrator means that test user accounts are often created for various purposes and with so many possible usernames being used it is easy to forget which one you are currently using during a session, so whoami comes in very handy here.

### (Exercise 4) Exercise 9: Find out Various System Information using *uname -a*

You should now issue the command

uname -a

to retrieve **all** the information the uname command can give you.

Name *any* 4 other pieces of information that this option gives? If you are not sure what the information given means, check out the uname command using the man command.

1. The type of operating system currently being used.

2. The name of the local domain

3. The date and time the OS was set up in terms of the current release level of the OS implementation.

4. The current version level within the OS’ release.

### *(Exercise 5)*

### Exercise 10:Find out the calendar for a particular month and the current date and time respectively using *cal* and *date* At the command prompt type

### cal 3 2008

You get back the **calendar for the month** indicated.

To find the calendar for the **current month** it is sufficient to issue the command cal without any arguments.

Now use the cal command to find out what day of the week the 21st July 1786 fell on.

Friday

Now type

date

### You get back the current system date and time information.

What option would you need to use to set the system time? su root

Then date -s “String” (Date and Time)

Now attempt to set the system time to 02:12. What happens? Does this make sense?

The time on the system does not change even though the String time is accepted for a few seconds. Nothing unusual happens as the clock is set up as a digital clock which displays the time in 24-hour time. No hardware clock is used here as the system time is not shown in the 12-hour time. A couple of seconds later, the system time changes after you adjust the time on the clock in the command terminal.