THE ONE PAGE *LINUX* MANUAL

A summary of useful Linux commands

Starting & Stopping

shutdown -h now	Shutdown the system now and do not reboot
halt	Stop all processes - same as above
shutdown -r 5	Shutdown the system in 5 minutes and reboot
shutdown -r now	Shutdown the system now and reboot
reboot	Stop all processes and then reboot - same as above
startx	Start the X system

Accessing & mounting file systems

mount -t iso9660 /dev/cdrom /mnt/cdrom	Mount the device cdrom and call it cdrom under the /mnt directory
mount -t msdos /dev/hdd /mnt/ddrive	Mount hard disk d as a msdos file system and call it ddrive under the /mnt directory
mount -t vfat /dev/hda1 /mnt/cdrive	Mount hard disk a as a VFAT file system and call it cdrive under the /mnt directory
umount /mnt/cdrom	Unmount the cdrom

Finding files and text within files

find / -name fname	Starting with the root directory, look for the file called fname
find / -name "*fname*"	Starting with the root directory, look for the file containing the string fname
locate missingfilename	Find a file called missingfilename using the locate command - this assumes you have already used the command updatedb (see next)
updatedb	Create or update the database of files on all file systems attached to the linux root directory
which missingfilename	Show the subdirectory containing the executable file called missingfilename
grep textstringtofind /dir	Starting with the directory called dir , look for and list all files containing textstringtofind

The X Window System

xvidtune	Run the X graphics tuning utility
XF86Setup	Run the X configuration menu with automatic probing of graphics cards
Xconfigurator	Run another X configuration menu with automatic probing of graphics cards
xf86config	Run a text based X configuration menu

Moving, copying, deleting & viewing files

ls -l	List files in current directory using long format
ls -F	List files in current directory and indicate the file type
ls -laC	List all files in current directory in long format and display in columns

rm name	Remove a file or directory called name
rm -rf name	Kill off an entire directory and all it s includes files and subdirectories
cp filename /home/dirname	Copy the file called filename to the /home/dirname directory
mv filename /home/dirname	Move the file called filename to the /home/dirname directory
cat filetoview	Display the file called filetoview
man -k keyword	Display man pages containing keyword
more filetoview	Display the file called filetoview one page at a time, proceed to next page using the spacebar
head filetoview	Display the first 10 lines of the file called filetoview
head -20 filetoview	Display the first 20 lines of the file called filetoview
tail filetoview	Display the last 10 lines of the file called filetoview
tail -20 filetoview	Display the last 20 lines of the file called filetoview

Installing software for Linux

rpm -ihv name.rpm	Install the rpm package called name
rpm -Uhv name.rpm	Upgrade the rpm package called name
rpm -e package	Delete the rpm package called package
rpm -l package	List the files in the package called package
rpm -ql package	List the files and state the installed version of the package called package
rpm -i --force package	Reinstall the rpm package called name having deleted parts of it (not deleting using rpm -e)
tar -zxvf archive.tar.gz or tar -zxvf archive.tgz	Decompress the files contained in the zipped and tarred archive called archive
./configure	Execute the script preparing the installed files for compiling

User Administration

adduser accountname	Create a new user call accountname
passwd accountname	Give accountname a new password
su	Log in as superuser from current login
exit	Stop being superuser and revert to normal user

Little known tips and tricks

ifconfig	List ip addresses for all devices on the machine
apropos subject	List manual pages for subject
usermount	Executes graphical application for mounting and unmounting file systems

/sbin/e2fsck hda5	Execute the filesystem check utility on partition hda5
fdformat /dev/fd0H1440	Format the floppy disk in device fd0
tar **-cMf** /dev/fd0	Backup the contents of the current directory and subdirectories to multiple floppy disks
tail -f /var/log/messages	Display the last 10 lines of the system log.
cat /var/log/dmesg	Display the file containing the boot time messages - useful for locating problems. Alternatively, use the **dmesg** command.
*	wildcard - represents everything. eg. cp from/* to will copy all files in the from directory to the to directory
?	Single character wildcard. eg. cp config.? /configs will copy all files beginning with the name config. in the current directory to the directory named configs.
[xyz]	Choice of character wildcards. eg. ls [xyz]* will list all files in the current directory starting with the letter x, y, or z.
linux single	At the lilo prompt, start in single user mode. This is useful if you have forgotten your password. Boot in single user mode, then run the **passwd** command.
ps	List current processes
kill 123	Kill a specific process eg. kill 123

Configuration files and what they do

/etc/profile	System wide environment variables for all users.
/etc/fstab	List of devices and their associated mount points. Edit this file to add cdroms, DOS partitions and floppy drives at startup.
/etc/motd	Message of the day broadcast to all users at login.
etc/rc.d/rc.local	Bash script that is executed at the end of login process. Similar to autoexec.bat in DOS.
/etc/HOSTNAME	Conatins full hostname including domain.
/etc/cron.*	There are 4 directories that automatically execute all scripts within the directory at intervals of hour, day, week or month.
/etc/hosts	A list of all know host names and IP addresses on the machine.
/etc/httpd/conf	Paramters for the Apache web server
/etc/inittab	Specifies the run level that the machine should boot into.
/etc/resolv.conf	Defines IP addresses of DNS servers.
/etc/smb.conf	Config file for the SAMBA server. Allows file and print sharing with Microsoft clients.
~/.Xdefaults	Define configuration for some X-applications. ~ refers to user s home directory.
/etc/X11/XF86Config	Config file for X-Windows.
~/.xinitrc	Defines the windows manager loaded by X. ~ refers to user s home directory.

File permissions

File type
- = file
d = directory
l = link

Execute
Write
Read
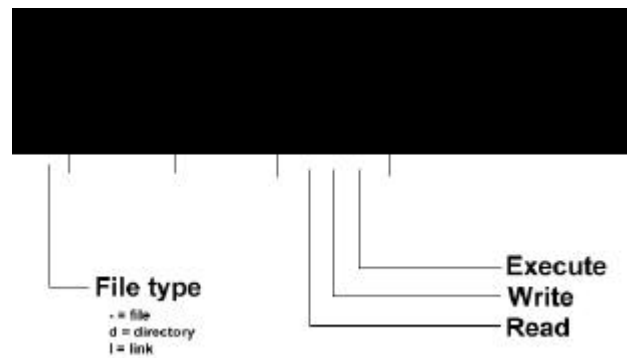
If the command ls -l is given, a long list of file names is displayed. The first column in this list details the permissions applying to the file. If a permission is missing for a owner, group of other, it is represented by - eg. drwxr-x   x

Read = 4	File permissions are altered by giving the chmod command and the appropriate octal code for each user type. eg
Write = 2	
Execute = 1	
	chmod 7 6 4 filename will make the file called filename R+W+X for the owner, R+W for the group and R for others.
chmod 7 5 5	Full permission for the owner, read and execute access for the group and others.
chmod +x filename	Make the file called filename executable to all users.

X Shortcuts - (mainly for Redhat)

Control|Alt + or -	Increase or decrease the screen resolution. eg. from 640x480 to 800x600
Alt | escape	Display list of active windows
Shift|Control F8	Resize the selected window
Right click on desktop background	Display menu
Shift|Control Altr	Refresh the screen
Shift|Control Altx	Start an xterm session

Printing

/etc/rc.d/init.d/lpd start	Start the print daemon
/etc/rc.d/init.d/lpd stop	Stop the print daemon
/etc/rc.d/init.d/lpd status	Display status of the print daemon
lpq	Display jobs in print queue
lprm	Remove jobs from queue
lpr	Print a file
lpc	Printer control tool
man subject | lpr	Print the manual page called subject as plain text
man -t subject | lpr	Print the manual page called subject as Postscript output
printtool	Start X printer setup interface