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
yum	RedHat packet and update manager
yast	SuSE packet and update manager

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

sudo Run command as user

sudo su - Run command shell as user with new user environment.

Little known tips and tricks

ifconfig -a List ip addresses for all devices on the machine

ifup <interface> Bring network interface up
ifdown <interface> Bring network interface down

apropos subject List manual pages for subject

usermount Executes graphical application for mounting and unmointing filesystems

/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 systemlog.

dmesg Display the file containing the boot time messages - useful for locating problems during system boot.

* 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/grub 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
kill 123 462 789 Kill all processes listed
kill -9 123 Unconditional kill

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/sysconfig/network Same as above but for RedHat and SuSE

/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.

~ refers to user's home directory.

~/.Xdefaults Define configuration for some Xapplications.

/etc/X11/XF86Config Config file for X-Windows.

~/.xinitrc Defines the windows manager loaded by X.

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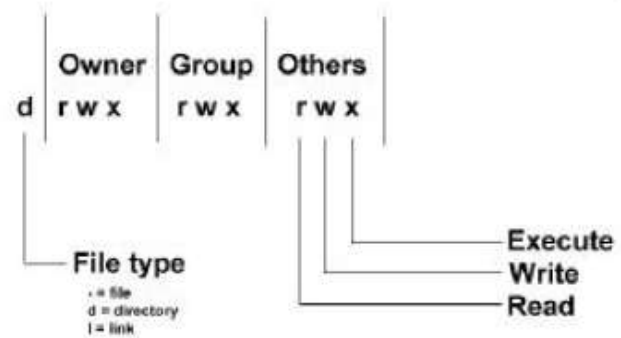
If the command ls -l is given, a long list of file names is displayed. The first column in this list details the permissions applying to the file. If a permission is missing for a owner, group of other, it is represented by - eg. drwxr-x—x

Read = 4 File permissions are altered by giving the
Write = 2 chmod command and the appropriate
Execute = 1 octal code for each user type. Eg

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.

A summary of useful *LINUX* commands

chmod 755	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/SuSE)

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

Mixed Commands

adduser *adduser dsoneil* | This command will automatically add a new user to the system | The Bash script can be found in /usr/sbin if it needs to be changes

alias *alias help=man* | The alias command allows you to substitute a new name for a command
alias long=ls -al | An alias can also contain command line options
| Unless the alias definition is included in your .login file it is only temporary

apropos *apropos keyword* | Display command names based on keyword search

at *at 1:23 lp /home/index.html* | The at command runs a list of commands at a specified time (e.g. print @ 1:23)
at 1:50 echo "lp Job Done" | This uses the echo command to send a message at 1:50 saying a print job is done
at -l | Lists all scheduled jobs; an alias for the atq command
at -d 5555 | This will cancel job number 5555; an alias for the atrm command

batch Example: | Temporarily blank

cat *cat /etc/filename* | Prints specified file to the screen
cat file.a > file.b | Moves file.a to file.b
cat file.a > file.b | Appends the content of file.a to the end file.b

cd *cd /home/dsoneil* | Changes directories to the specified one
cd ~username | This will move you to the users specified home directory

chfn *chfn dsoneil* | This will allow you to change finger information on that user
| As an example it will allow you to change dsoneil to Darcy S. O'Neil

chmod *chmod 666 filename* | This command will give a file Read - Write permission for everyone
chmod 777 filename | This command gives Read - Write - Execute permission to everyone
chmod a=rwx file | This gives Read - Write - Execute permission to all users
For a complete listing of the available chmod permission commands please refer to Page 4 - Table 1

chown *chown dso /home/html* | This command will change the owner of the specified directory to dso
chown dso /home/file.a | This command will change the owner of the specified file to dso

clear *clear* | This will clear your screen

cmp *cmp -s file.a file.b* | Compares 2 files of any type. The -s option will return nothing in the files arethe same

cp *cp file.a file.b* | This will create a duplicate of file.a under a new file name, file.b

cpio *ls /home | cpio -o > /root* | This will copy the files of /home to the directory /root
cpio -it < /root > bk.indx | This will extract all of the files to /root and creates an index file called bk.indx

cpkgtool | Graphical front end to installpkg, removepkg, makepkg that uses ncurses.

cron locally scheduled jobs

du *du -k /home/html* | Provides a summary of the disk space usage, in kb, within the specified path
du -k /home/html/file.a | Provides a summary of disk spaced used by a particular file

df *df -h* | Displays the total size, used and available space on all mounted file systems

fdformat *fdformat /dev/fd0* | low level format of a floppy device in drive fd0
fdformat /dev/fd0H1440 | This will fromat a "Double Sided High Density"disk

file *file file.a* | This command will try to determine what type of file file.a is. (exec, text, etc.)
file -z file.a.tar | Looks inside a compressed file to determine it's type.
file -L file.a | Follows symbolic links to be followed to determine file type

find *find /path -name passwd* | Locates the specified string (passwd), starting in the specified directory (/path)
| All filenames or directories containing the string will be printed to the screen

finger *finger* | This will list all users currently logged into the UNIX system

free *free -t -o* | Provides a snapshot of the system memory usage

fsck *fsck /hda* | file system check and repair

git | This is a file system viewer

grep *cat /etc/passwd | grep dso* | This searches for and limits the command output to the pattern specified
| In this case all instances of dso from the /etc/passwd file are printed
grep -i "Sample" /home/dsoneil | The -i option makes the search indifferent to case (e.g. sample or SAMPLE)

groupadd *groupadd sudos* | Create a new group called sudos on the system

groups *groups* | Shows which groups you are in

gzip *gzip file.a* | This will zip file.a and give it the extension file.a.gz
gzip -d file.a.gz | This will unzip the file file.a.gz
tar -zxvf file.a.tar.qz | The z flag allow you to decompress the tar file on the fly

hostname | Get or set hostname. Typically, the host name is stored in the file /etc/HOSTNAME.

Ifconfig *ifconfig eth0* | This will display the status of the currently defined interface (.e.g Ethernet Card 0)
ifconfig eth0 up | This flag causes the iterface to be activated (To

A summary of useful *LINUX* commands

deactivate an interface use *down*)

ifconfig eth1 192.168.0.2 up | Makes eth1 active with IP address 192.168.0.2

insmod | used (by root) to install modular device drivers

installpkg *installpkg -r packagename.tgz* | This will install a Slackware package with the name you specify (-r option)

removepkg *removepkg -copy packagename* | This will remove the named package but make a copy in the /tmp directory

rpm2targz *rpm2targz filename.rpm* | This will convert an RPM file to a Slackware .tgz package

upgradepkg *upgradepkg packagename.tgz* | This will upgrade a Slackware package and remove any old or no used files

jobs *jobs* | This will list all jobs presently running on your system

kernelcfg | GUI to add/remove kernel modules (as root in X terminal).

kill *kill 2587* | Kills the process specified by the Process ID Number (2587)

kill -9 2587 | The -9 flag forces the process to die

last *last -300* | Prints to the screen the username, location, log-in and log-off times of the last

last -5 username | -x logins to the system. The username will select the last x time that person has

| used the system. The last command is not traceable.

lastlog *lastlog* | Displays a list of the login attempts / times of all users on the system (security check)

less *less /html/index.html* | Less displays information a screen at a time, you can also page back and forth

ln *ln -s /usr/dso ./home/html* | Creates a "soft" link from the first directory or file to the second. A user changing

| into ./home/html will actually be directed to the /usr/dso directory.

locate *locate wordperfect* | The locate command will locate the file specified aand output a directory path (see "*updatedb*")

lpr *lpr /home/html/index.html* | This command will print the file index.html to the printer

lprm *lprm 12* | This command will cancel pint job 12 in the printer queue

lpq *lpq* | This will show the contents of the print queue

ls *ls -al* | Lists all information on all files (-a) in the current directory in single line

| format (-l). Includes permissions, owners, modification time, file size and name

ls -F | Marks (directories with a trailing /) - (executables with an *) (symbolic links w/ @)

lsmod | used (by root) to show kernel modules currently loaded

make *make mrproper* | Cleans up junk accidentally left behind by the development team

make xconfig | This will ask you a series of questions about your system and drive requirements

make dep | This will uses dependencies

make clean | The clean command will clean up any unnecessary files left lying around

make bzImage | This will begin the process of compiling your new kernel

make lnx | This specified that the source will be compiled under a Linux system

make install | After the make command this will install the compiled binaries to their directories

| To create a log of installed programs do: make install > /root/install_logs/program-1.0

man *man vi* | Prints the manual page on the specific topic (vi) to the screen. To scroll down

| the page use the Space Bar, to scroll up use the letter b, to exit press the q key

mkdir *mkdir pascal* | This will create new directory (pascal) in the present directory

mkfs *mkfs -t msdos -c -v /dos-drive* | Formats a partition and builds a new filesystem on it

mkfs -t xfs -c -v /home | -t specifies filesystem type, -v produces

verbose output, -c checks for bad blocks

more *more /home/html/index.htm* | Paginates the specified file so it can be read line by line (using Enter key) or

| screen by screen using the Space Bar. Use b key to move back and q to quit.

mount *mount -t msdos /dev/hda5 /dos* | Mounts the msdos partition on the Hard Drive (hda5) to the directory /dos

mount -t iso9660/dev/sr0 /cd | Mounts the CD-ROM under the directory /cd

mount -t msdos /dev/fd0 /mnt | Mounts the floppy drive with an msdos file system to /mnt

mount -a /etc/fstab | Attempts to mount all file systems located in the /etc/fstab file

mv *mv ./home/file ./dso/file* | Moves the specified file to another directory

nice *nice -5 sort one.a > two.b* | This command adjusts the priority of a process before it starts

| The higher the number the lower the priority. All process start at 10

nohup | This command allows a process to continue after you log out

passwd *passwd* | Launches the password program so the user can change their password

ps *ps* | Lists all current running processes, their corresponding pids, and their status

ps -ef | grep dsoneil | This will find all of the processes for user dsoneil

pstree *pstree -p* | Provides a list of running processes in a tree structure

pwd *pwd* | Prints the current working directory

quota *quota* | Lists the user's quotas for both ada (/home/ada/a#/username) and amelia

| (/var/spool/mail/username), indicating the number of blocks used and the users quota

renice *renice -5 12345* | Adjusts the priority of the running process 12345 (The 5 lowers the priority)

rm *rm file.a* | Removes the specified file in your current directory

rm -i file.a | Removes specified file but prompts for confirmation before deleting

rm -r /home/dso | Removes the specified directory and all files in that directory

rmdir *rmdir pascal* | Removes the empty directory specified, if not empty you will receive an error

rmdir -r pascal | Removes the directory and all files in that directory

route *route -n* | Displays the Linux Kernel IP routing table

route add -net 192.168.0.0 eth0 | This will tell other systems what network to route your system on

route add default gw 192.168.0.5 eth0 | This will tell the your system where the Internet gateway is located

| This information can be added to you /etc/rc.d/rc.local system files (Slackware)

rpm *rpm -i file.2.0-i386.rpm* | This will unpack an RPM file. This is the most basic method of installation

rpm -U file.2.0-i386.rpm | This will install an upgrade to a previous RPM package.

rpm -i –force file.rpm | The –force option will force the package to re-install

rpm -e file.2.0-i386.rpm | This will remove and RPM package. (You do not need to use the complete name)

rpm -i –nodeps file.rpm | This command uses the "no dependencies" flag.

rpm -qa | This will give a screen print out of all packages installed (q is query)

rpm -qa | grep gtk | This will print out all of the rpm packages will gtk in the file name

rpm -qi file.2.0-i386.rpm | This will provide information on the package you are about to install

rpm –rebuild file.2.0.rpm | This will rebuild a package if it has been corrupted by another installation process

su *su username* | This will allow you to access the Superuser privileges. Type exit to revert back to normal

shutdown *shutdown -t 10.00* | This will notify all logged in users that

the system will shut down at 10:00 AM

shutdown -r -t 20.00 | This will reboot the system at 8:00 PM

shutdown -t +10 good day | This will shutdown the system in 10 minutes with the message "good day" sen

shutdown -f | The -f flag will cause Linux to do a fast reboot

tar *tar -cf /user/dso /home* | This command copies the directory /home to the directory /user/dso

tar cvf /backup.tar /dso | This will create a tar archive of everything in the directory /dso

tar -xvf file.a.tar | This command will extract the tar archive

tar -tvf file.a.tar | more | This will allow you to check whether the tar archive starts with a directory

tar -zxvf file.a.tgz | This command will unzip and extract the file in one step as opposed to using gzip

top *M for memory usage information* | This program shows a lot of stuff that goes on with your system. In the

P for CPU information | program, you can type: q to quit

touch *touch file.a* | Creates an empty file in the current directory with the name file.

uname *uname -a* | This will print to the screen the Linux Kernel in use on your system

updatedb *updatedb* | This will update the "locate" database

userdel *userdel -r dsoneil* | This will delete the user dsoneil from the system, the -r option will delete the users /home directory

w *w* | Lists all users currently logged into the UNIX system. Provides information such

| as username, login time, idle time, and current action

which *which -a filename* | This will search through all directories in your current path and find all files named filename

who *who* | Lists currently logged on users username, port, and when they logged in

whoami *whoami* | Tells the user who they are acting as; usually their own username.

DNS Diagnostic tools

dig The domain information groper (dig) is the most versatile and complete of these lookup tools. It has two modes: simple interactive mode for a single query, and batch mode which executes a query for each in a list of several query lines. All query options are accessible from the command line.

dig [@server] domain [query-type] [query-class] [+query-option] [-dig-option] [%comment]
The usual simple use of dig will take the form
dig @server domain query-type query-class
For more information and a list of available commands and options, see the dig man page.

host The host utility emphasizes simplicity and ease of use. By default, it converts between host names and Internet addresses, but its functionality can be extended with the use of options.
host [-aCdlrTwv] [-c class] [-N ndots] [-t type] [-W timeout] [-R retries] hostname [server]

For more information and a list of available commands and options, see the host man page.

nslookup nslookup has two modes: interactive and non-interactive. Interactive mode allows the user to query name servers for information about various hosts and domains or to print a list of hosts in a domain. Non-interactive mode is used to print just the name and requested information for a host or domain.

nslookup [-option...] [[host-to-find] | [- [server]]]

Interactive mode is entered when no arguments are given (the

default name server will be used) or when the first argument is a hyphen (`-') and the second argument is the host name or Internet address of a name server.

Non-interactive mode is used when the name or Internet address of the host to be looked up is given as the first argument. The optional second argument specifies the host name or address of a name server.

Due to its arcane user interface and frequently inconsistent behavior, we do not recommend the use of nslookup. Use dig instead.

DNS Management tools

named-checkconf

The named-checkconf program checks the syntax of a named.conf file.

named-checkconf [-jvz] [-t directory] [filename]

named-checkzone

The named-checkzone program checks a master file for syntax and consistency.

named-checkzone [-djqvD] [-c class] [-o output] [-t directory] [-w directory] [-k (ignore|warn|fail)] [-n (ignore|warn|fail)] zone [filename]

rndc

The remote name daemon control (rndc) program allows the system administrator to control the operation of a name server. If you run rndc without any options it will display a usage message as follows:

rndc [-c config] [-s server] [-p port] [-y key] command [command...]

command is one of the following:

rndc reload

Reload configuration file and zones.

rndc reload zone [class [view]]

Reload the given zone.

rndc refresh zone [class [view]]

Schedule zone maintenance for the given zone.

rndc retransfer zone [class [view]]

Retransfer the given zone from the master.

rndc freeze [zone [class [view]]]

Suspend updates to a dynamic zone. If no zone is specified then all zones are suspended. This allows manual edits to be made to a zone normally updated by dynamic update. It also causes changes in the journal file to be synced into the master and the journal file to be removed. All dynamic update attempts will be refused while the zone is frozen.

rndc thaw [zone [class [view]]]

Enable updates to a frozen dynamic zone. If no zone is specified then all frozen zones are enabled. This causes the server to reload the zone from disk, and re-enables dynamic updates after the load has completed. After a zone is thawed, dynamic updates will no longer be refused.

rndc notify zone [class [view]]

Resend NOTIFY messages for the zone

rndc reconfig

Reload the configuration file and load new zones, but do not reload existing zone files even if they have changed. This is faster than a full reload when there is a large number of zones because it avoids the need to examine the modification times of the zones files.

rndc stats

Write server statistics to the statistics file.

rndc querylog

Toggle query logging. Query logging can also be enabled by explicitly directing the queries category to a channel in the logging section of named.conf.

rndc dumpdb [–all|–cache|–zone] [view ...]

Dump the server's caches (default) and / or zones to the dump file for the specified views. If no view is specified all views are dumped.

rndc stop [–p]

Stop the server, making sure any recent changes made through dynamic update or IXFR are first saved to the master files of the updated zones. If –p is specified named's process id is returned.

rndc halt [–p]

Stop the server immediately. Recent changes made through dynamic update or IXFR are not saved to the master files, but will be rolled forward from the journal files when the server is restarted. If –p is specified named's process id is returned.

rndc trace

Increment the servers debugging level by one.

rndc trace level

Sets the server's debugging level to an explicit value.

rndc notrace

Sets the server's debugging level to 0.

rndc flush

Flushes the server's cache.

rndc flushname name

Flushes the given name from the server's cache.

rndc status

Display status of the server. Note the number of zones includes the internal bind/CH zone and the default ./IN hint zone if there is not a explicit root zone configured.

rndc recursing

Dump the list of queries named is currently recursing on.

DNS paths and configuration files

Host Resolving order
        /etc/nsswitch.conf
        /etc/host.conf
        /etc/resolv.conf
Resolving configuration
        /etc/hosts

DNS configuration
        /etc/named.conf   # DNS main configuration file
        /etc/named.zones # Imported from named.conf
DNS home and zonefile's note none chrooted environment in SuSE
        /var/lib/named
        /var/lib/named/log
        /var/lib/named/master
        /var/lib/named/slave
        /var/lib/named/root.hint
        /var/lib/named/127.0.0.1.zone
        /var/lib/named/localhost.zone
        /var/lib/named/master/0.168.192.in-addr.arpa
        /var/lib/named/master/my-site.com
Linux Network configuration SuSE & RedHat
        /etc/sysconfig/network
        /etc/sysconfig/network-scripts/ifcfg-eth-id

Linux system log
        /var/log/messages

Linux/UNIX filesystem

vgs   Show volume groups, here it contains of one physical disk, 10 logical volumes and it is 55.81GByte with 19.31GB free to use.
          VG   #PV #LV #SN Attr   VSize   VFree
          rootvg 1   10 0   wz--n– 55.81g 19.31g

lvs rootvg   Show logical volumes
LV   VG   Attr LSize Origin Snap% Move Log Copy% Convert
  homelv   rootvg –wi–ao 10.00g
  locallv   rootvg –wi–ao 1.00g
  optlv   rootvg –wi–ao 4.00g
  rootlv   rootvg –wi–ao 512.00m
  srvlv   rootvg –wi–ao 4.00g
  swaplv   rootvg –wi–ao 1.00g
  tmplv   rootvg –wi–ao 4.00g
  usrlocallv rootvg –wi–ao 4.00g
  usrlv   rootvg –wi–ao 4.00g
  varlv   rootvg –wi–ao 4.00g

df -g   Show mounted filesystems and utilization.
Filesystem   Size Used Avail Use% Mounted on
rootfs   504M 235M 244M 50% /
devtmpfs   239M 212K 239M 1% /dev
tmpfs   244M 4.0K 244M 1% /dev/shm
/dev/mapper/rootvg-rootlv
                  504M 235M 244M 50% /
/dev/sda1   122M   27M 89M 24% /boot
/dev/mapper/rootvg-homelv
                  9.9G 151M 9.2G 2% /home
/dev/mapper/rootvg-locallv
                  1008M 34M 924M 4% /local
/dev/mapper/rootvg-optlv
                  4.0G 136M 3.7G 4% /opt
/dev/mapper/rootvg-srvlv
                  4.0G 137M 3.7G 4% /srv
/dev/mapper/rootvg-tmplv
                  4.0G 137M 3.7G 4% /tmp
/dev/mapper/rootvg-usrlv
                  4.0G 2.9G 883M 77% /usr
/dev/mapper/rootvg-usrlocallv
                  4.0G 137M 3.7G 4% /usr/local
/dev/mapper/rootvg-varlv
                  4.0G 278M 3.5G 8% /var