UNIX Commands

Login and Exit

yppasswd	Change password
rlogin *machine*	Log into a remote machine
telnet *machine*	Log into a remote machine
exit	End a shell session
Ctrl-D	End shell session
logout	Log out of remote session

Help

man *command*	Describes the command
man -k *keyword*	Search for keyword

Display directory listing

ls	Display directory listing
ls -l	Display access permissions
ls -a	Display hidden files
ls -d	Display directory
ls -t	Display files sorted by time
ls *dir*	Display contents of directory
ls *file*	Display file
ls ???*	Display all files with more than 3 characters in name

Change, Create, Remove Directories

pwd	Display current directory
cd	Change to your home directory
cd ..	Change to parent directory
cd dir	Change to another directory
mkdir dir	Create a new directory
rmdir dir	Remove a directory (must be empty)
rm -r dir	Remove a directory and everything within it

Create, Copy, Move, Delete Files

touch *file*	Create an empty file
cp *src-file dst-file*	Copy a file to another file
cp *src-file dst-dir*	Copy a file to a directory
cp -r * *dst-dir*	Copy all files and sub-directories to another directory
mv *src-file dst-file*	Move a file to another file (renames file)
mv *src-file dst-dir*	Move a file to another directory
mv *src-dir dst-dir*	Move a directory to another directory

Note: filenames can be up to 255 characters long but should not contain special characters, e.g., $ * [ ] & < >

Change file permissions

chmod o+r *file*   Change file to allow read access to anyone

chown *username file*   Change onwer of file to username

chgrp *new-grp file*   Change group owner of file to new-grp

Note: -rwxr-x--- shows permissions on a regular file to be:

owner=read,write,execute;   group=read,execute;   others=nothing

Display Contents of a File

cat *file*   Display contents of file

cat -v *file*   Display non-printing characters

head *file*   Display first 10 lines

tail *file*   Display last 10 lines

more *file*   Display file one screen at a time

wc *file*   Count number of words in file

Sort, Compare, Convert, Compress Files

sort *file1 > file2*   Sort lines in file1 and output to file2

sort -1 -n *file1 > file2*   Sort by column 1 numerically and output to file2

uniq *input-file*   Remove or report adjacent duplicate lines

unix2dos unx-file dos-file   Convert from UNIX to DOS format

dos2unix dos-file unx-file   Convert from DOS to UNIX format

cmp *file1 file2*   Compare byte-by-byte 2 files

diff *file1 file2*   Compare line by line 2 files

sdiff *file1 file2*   Compare 2 files by displaying them side by side

compress *file*   Compress a file

gunzip *file*   Uncompress a file

tar cf *file.tar* .   Create a tar archive of current directory

tar xf *file.tar*   Restore tar archive to current directory

Search for Strings within Files

grep *string file(s)*   Display lines containing string in file(s)

grep -v *string file(s)*   Display lines that do not contain string

Printing

lp *file*   Print file to default printer

lpr *file*   Print file to default printer

lpstat   Check status of printer queue

lpstat -p   Check status of all printer queues

lpq   Check contents printer queue

lprm *job#*   Remove job from printer queue

lprm -   Remove all your jobs from printer queue

lp -P*printer file*   Print to a specific printer queue

ls -l | lp   Print directory listing

head file | lp   Print first 10 lines of file

Redirect Output

cmd	lp	Direct cmd output to printer
cmd > file	Direct cmd output to file
cmd	tee *file*	Direct output to screen and file
cmd >> file	Direct cmd output to end of file
*cmd1	cmd2*	Direct cmd1 output to input of cmd2

Conditional Execution

cmd1 && cmd2	Execute cmd2 only if cmd1 is successful
cmd1 || cmd2	Execute cmd2 only if cmd1 fails

BACKGROUND PROCESSES

Command	**Effect**
cmd *&*	Run job in background
jobs	List jobs running in background in current shell session
fg	Bring most recent background job into foreground
fg job#	Bring job# into foreground
bg	Put job into background
bg job#	Put job# into background
Ctrl-z	Suspend current job and put it in background (resume with fg or bg)
at *timespec cmd*	
Ctrl-d	Execute commands at a specified time
batch *cmd* Ctrl-d	Execute commands in the batch queue
atq	Display jobs running in at and batch queues
atrm *job#*	Remove job from at or batch queue

Checking Processes

ps	Display current shell processes
ps -ef	Display all processes
ps -ef	grep username	Display all processes for a user
kill -9 PID	Stop a process

Disk Space, User and Environment Information

du -sk	Display disk space of current directory in 1024k blocks
du -sk dir	Display disk space of dir in 1024k blocks
df -k	Display data for mounted file systems
env	Display environment variable settings
setenv ENV-VAR XXX	Set an environment variable
alias	Display all defined aliases
umask	Display current default file protection mask
whoami	Display your username
id	Display your user and group ids

users	Display users logged in
groups	Display which groups you belong to
w	Display who is logged in and what they are doing