Bash Commands

uname -a	Show system and kernel
head -n1 /etc/issue	Show distribution
mount	Show mounted filesystems
date	Show system date
uptime	Show uptime
whoami	Show your username
man command	Show manual for command
df -h	Show free space disk
df	Size files
du	Size files

Bash Shortcuts

CTRL-z	Sleep program
CTRL-a	Go to start of line
CTRL-e	Go to end of line
CTRL-u	Cut from start of line
CTRL-k	Cut to end of line
alt-left/right	Move next work
!!	Repeat last command
!abc	Run last command starting with abc
!$	Last argument of previous command
ALT-.	Last argument of previous command
!*	All arguments of previous command
^abc^123	Run previous command, replacing abc with 123

Bash Variables

env	Show environment variables
echo $NAME	Output value of $NAME variable
export NAME=value	Set $NAME to value
$PATH	Executable search path
$HOME	Home directory

Bash Variables (cont)

$SHELL	Current shell

IO Redirection

cmd < file	Input of cmd from file
cmd1 <(cmd2)	Output of cmd2 as file input to cmd1
cmd > file	Standard output (stdout) of cmd to file
cmd > /dev/null	Discard stdout of cmd
cmd >> file	Append stdout to file
cmd 2> file	Error output (stderr) of cmd to file
cmd 1>&2	stdout to same place as stderr
cmd 2>&1	stderr to same place as stdout
cmd &> file	Every output of cmd to file

Pipes

cmd1 | cmd2	stdout of cmd1 to cmd2
cmd1 |& cmd2	stderr of cmd1 to cmd2

Command Lists

cmd1 ; cmd2	Run cmd1 then cmd2
cmd1 && cmd2	Run cmd2 if cmd1 is successful
cmd1 || cmd2	Run cmd2 if cmd1 is not successful

ls Options

-a	Show all (including hidden)
-R	Recursive list
-r	Reverse order
-t	Sort by last modified
-S	Sort by file size
-l	Long listing format
-1	One file per line
-m	Comma-separated output
-Q	Quoted output

Search Files

grep pattern files	Search for pattern in files
grep -i	Case insensitive search
grep -r	Recursive search
grep -v	Inverted search
grep -o	Show matched part of file only
find /dir/ -name name*	Find files starting with name in dir
find /dir/ -user name	Find files owned by name in dir
find /dir/ -mmin num	Find files modifed less than num minutes ago in dir
whereis command	Find binary / source / manual for command
locate file	Find file (quick search of system index)

File Operations

touch file1	Create file1
cat file1 file2	Concatenate files and output
less file1	View and paginate file1
file file1	Get type of file1
head file1	Show first 10 lines of file1
tail file1	Show last 10 lines of file1
tail -F file1	Output last lines of file1 as it changes

Watch a Command

watch -n 5 'nt -p'	Issue the 'ntpq -p' command every 5 seconds and display output

Process Management

ps	Show snapshot of processes
top	Show real time processes
kill pid	Kill process with id pid
pkill name	Kill process with name name
killall name	Kill all processes with names beginning name

File Permissions

chmod 775 file	Change mode of file to 775
chmod -R 600 folder	Recursively chmod folder to 600
chown user:group file	Change file owner to user and group to group
First digit is owner permission, second is group and third is everyone.	
4	read (r)
2	write (w)
1	execute (x)

Tar Command Examples

tar -cvf a.tar /dir	Create a tar archive called a.tar for dir
tar cvzf a.tar.gz /dir	gzip compressed archive
tar -xvf Archive.tar.gz	Uncompress
v	show the progress of archive file
c	create a archive file.
x	extract a archive file.
f	filename of archive file
t	viewing content of archive file.
j	filter archive through bzip2.
z	filter archive through gzip
r	append or update files