

UNIX COMMANDS

<u>Abbreviations</u>	<u>Function</u>	<u>Noted By</u>
Owner	User that owns the file.	u
Group	Group that owns the file.	g
Everybody Else	Anyone who is not one of the previous two.	o
n/a	All three groups	a

<u>Basic Commands</u>	<u>Function</u>	<u>Example</u>	<u>Definition</u>
ls	Lists the contents of the current directory.	ls /System/Library ls -l /System/Library ls -t	Lists contents of System Library Long lists contents of /System/Library Displays contents that is sorted by time.
cd	Change directory; Switches to a different folder.	cd RETURN cd documents	Goes to the home directory for the current user (~). Changes the current directory to documents.
pwd	Print to the screen the current directory.	[localhost:/usr/sbin] ac_rep% pwd /usr/sbin [localhost:/usr/sbin] ac_rep	Displays the directory path on the screen.
mkdir	Make a new directory(folder).	mkdir foodir	Makes the folder "foodir" in the current working directory.
cp	Copies a file.	cp door door2 cp door doordir cp -R doordir ~/New\Folder/	Creates a copy of file "door" called "door2" Creates a copy of "door" in the folder "doordir" Copies contents of folder doordir and its contents to "New Folder" in the current user's home directory.

UNIX COMMANDS

Basic Commands (Continued)

	<u>Function</u>	<u>Example</u>	<u>Definition</u>
compress	Compresses files.	compress door	Compresses the file door.
uncompress	Decompresses files.	uncompress door	Decompresses the file door.
cal	Displays calendar for current month or year.	cal year	
man	Displays online manual.	man cal	Displays the manual for calendar.
login	Lets you log on to your computer.	login hostname user	
passwd	Allows you to change your password.	passwd doctor	
su	Changes user level to superuser	su	
users	Displays all users logged into computer.	users	
uptime	Shows how long the computer has been running.	uptime	
who	Shows current user and session id.	who	
date	Displays date and time stamp.	date	
wall	Sends a text message to all users on the local machine.	wall "Hi, maintenance will begin in 3 minutes. Please log off."	Displays message "Hi, maintenance will begin in 3 minutes. Please log off." to all connected users logged in.
touch	Creates a file from the command line.	touch "george.txt" "howard.txt"	Creates a new file of "george" and names it "howard".

UNIX COMMANDS

Manipulating Files and

<u>Folders</u>	<u>Function</u>	<u>Example</u>	<u>Definition</u>
mv	Move or rename a file or folder.	mv door door.old	Renames the file or folder "door" to "door.old"
rm	Remove (delete) a file.	rm door.old rm -R door	Deletes the file "door.old" The directory "door" and its contents are removed, even if door is not empty. BE VERY CAREFUL WITH THIS COMMAND
rmdir	Remove (delete) a directory (folder).	rmdir doordir rmdir door	Removes the "doordir" directory. Directory must be empty to use this command. The directory "door" and its contents are removed unless door is not empty.
<u>Viewing a File</u>			
cat	Concatenates a file to standard output (displays the file on the screen).	cat /etc/motd	Displays a long file, etc/motd, on the screen.
more	Displays a file using the pager, more, to show one screen at a time.		Press space bar for <u>more</u> of the file. To quit more, type q or Control-c.
head	Displays the top part, first 10 lines, of a file.		To show more lines, type: head -20 <i>filename</i> . Replaces 20 with the number of lines you want to see. Replace <i>filename</i> with the name of the file you wish to view.
tail	Displays last 10 lines of a file.	tail -f <i>filename</i>	Displays last lines, but keeps updating the display as the file is being added to. Type Control-c to quit.
find	Searches for files on the computer.	find ~ -name door	Will show each item found with its full path. (/Users/ac_rep/doordir/door)

UNIX COMMANDS

<u>File System Check</u>	<u>Function</u>	<u>Example</u>	<u>Definition</u>
fsck -y	Typed in single-user mode, will run the file system check like Disk Utility.	fsck-fy	Use DisK Utility, booted from a CD, before using this command. Forces fsck to run even though it thinks it doesn't need to.
<u>Super User</u>			
sudo	Executes the next command as the super user.	sudo -s	Opens a shell as the super user. Type <i>exit</i> to return to previous user.
<u>Pipe</u>			
	Called a pipe, the character is used to "connect" two commands.	ls door more	Displays the contents of the directory called door one page at a time.
<u>Redirect</u>			
>	Character used to redirect the output of a command.	AppleSystemProfiler > ~/ASP_Report.txt	Redirects the file to the current user's home directory.
<u>Grep</u>			
grep	A filter that is used to search a block of text for a word or phrase.	cat system.log grep CG	Takes the output of the system.log and redirects it to the grep command. Grep filters the text to display only the lines with CG in them.
<u>Restart and Shutdown</u>			
reboot	Restarts the computer, flushing the disk cache to disk first.	sudo reboot	If not in root, then the sudo command must be used.
halt	Shuts down the system, flushing the disk cache to disk.	sudo halt	If not in root, then the sudo command must be used.

UNIX COMMANDS

Viewing Network Settings

Settings

Function

Example

Definition

ifconfig

This Command is shor for "show network" interface configuration.

ifconfig -a

Shows all configured interfaces.

Network Utilities

finger

Fingers an Internet location.

finger doctor@med.net

Looks up the user name (doctor), address and machine name.

ftp

Transfers files via FTP protocol.

<ftp://george:doctor@med.net>

Goes to George to transfer files via FTP.

ping

Pings a network host.

ping ipaddress

Sends a packet out to ipaddress to verify it is out there.

NetInfo

nicl

Provides an interactive way of looking at and changing the contents of the NetInfo database.

sudo nicl .

Prompt of /> will a appear where you can type in ls to view the contents of a directory at the root level. (Last dot is significant.)

nigrep

Searches the NetInfo resources for a certain term.

[localhost:~] ac_rep% nigrep user .

Searches the string "user" in the local domain. (Last dot is significant and denotes the local domain.)

nidump

NetInfo dump; Outputs the contents of certain specific directories so you can inspect, reord or edit them.

nidump passwd .

Will dump the last user's information to the screen. (Last dot is significant and denotes the local domain.)

niload

NetInfo load; Loads information previously dumped.

sudo niload -d passwd . < users.txt

Loads the information dumped by nidump.

UNIX COMMANDS

Changing File Permissions, Owner and Group

	<u>Function</u>	<u>Example</u>	<u>Definition</u>
chmod	Changes the <u>mode</u> (permissions) of a file or folder	chmod 777 aFile chmod a-rwx aFile	Set permissions on to rwx to aFile. Same as above.
chown	Changes the <u>owner</u> of a file or folder.	chown root door.txt	Changes the owner of the file door.txt to root.
chgrp	Changes the <u>group</u> of a file or folder.	chgrp root door.txt	Changes the group of the file door.txt to the group root.
Process Management			
open	Opens a file.	open /Applications/Calculator.app/	Opens the Calculator application in the GUI. (Also works with documents.
ps	Shows a list of processes.	ps ps -auxc ps auxw	Shows the processes running by the current user in the current terminal. Shows all processes running on any terminal, by any user on the computer. Shows the full name of all processes running on any terminal, by any user on the computer.
top	Show a constant updating list of processes with the most recently launched processes at the top of the list.	top -u	Shows all of the processes sorted by CPU usage. To get of to top, type Control-c or -q.
kill	Forces a process to quit	kill <i>pid_of_process</i>	Kills the process where <i>pid_of_process</i> is the process identity (pid) number shown by top or ps. Same as force quitting.

UNIX COMMANDS

<u>Troubleshooting Commands</u>	<u>Function</u>	<u>Example</u>	<u>Definition</u>
sample	Monitors which routines a process is spending time in. Gathers information about a process that responds slowly or not at all. Sample creates a file of the analysis it has performed and displays the full path of the file on the command line.	sudo sample 355 5	Shows the routines of process number 355 and the time duration (in seconds) of the sampling rate. (Sudo is only needed if the process you want to sample is running as a user other than the one you're logged in as.)
CRASHREPORTER	Background process that watches for applications that have unexpectedly quit.	CRASHREPORTER=-YES-	Starts Crashreport and shows a report with all forced quit in the crash.log.
AppleSystemProfiler	Shows the ASP on the command line.		
defaults write com.apple	Changes the default settings of an application. Useful when you can't log in due to a Finder problem.	defaults write com.apple.loginwindow (space) Finder/Applications/Utilities/Terminal.app	Terminal application launches instead of Finder.

**Helpful options found
by typing in h or ?