Common Unix Commands

A

apt-get
apt-get is a tool to automatically update a Debian machine and to get and install Debian packages/programs.

apt-get update
apt-get update updates the list of available packages and their versions, but it does not install or upgrade any packages.

apt-get upgrade
apt-get upgrade actually installs newer versions of the packages you have. After updating the lists, the package manager knows about available updates for the software you have installed.

apt-get install
apt-get install installs one or more packages desired for installation or upgrading. Packages are specified by their package name, not a fully qualified file name.

awk
A programming language tool used to manipulate text. The language of the AWK utility resembles the shell programming language in many areas, although AWK's syntax is very much its own. Use it with print and cut.

B

bzip2
A portable, fast, open source program used to compress and decompress files at a high rate.

C

cat
A Unix/Linux command that can read, modify or concatenate text files. Cat commands are most commonly used for displaying the contents of a file.

cd
The cd command changes the current directory in Linux and can toggle between directories conveniently. Cd is similar to the CD and CHDIR commands in MS-DOS.

chmod
chmod changes the access mode (permissions) of one or more files. Only the owner of a file or a privileged user may change the access mode.

chown
chown changes file or group ownership and has the option to change ownership of all objects within a directory tree, as well as having the ability to view information on objects processed.

cmp
The cmp utility compares two files of any type and writes the results to the standard output. By default, cmp is silent if the files are the same; if they differ, the byte and line number at which the first difference occurred is reported.

cp
The cp command copies files and directories; copies can be made simultaneous to another directory if the copy is under a different name.

cron
cron is a Linux system process that will execute a program at a preset time. To use cron, a user must prepare a text file that describes the program to be executed and the times at which cron should execute them. Then the crontab program can be used to load the text file that describes the cron jobs into cron.

D

date
date sets a system's date and time. This is also a useful way to output/print current information when working in a script file.

df
df displays the amount of disk space available on the file system containing each file name argument. With no file name, available space on all currently mounted file systems is shown.

E

echo
echo allows a user to repeat, or "echo," a string variable to standard output.

env
env runs a program in a modified environment or displays the current environment and its variables.

exec
exec replaces the parent process with whatever command is typed. This command treats its arguments as the specification of one or more subprocesses to execute.

exit
The exit command terminates a script and can return a value to the parent script.

export
export converts a file into a different format than the one in which it is currently. Once a file is exported, it can be accessed by any application that uses its format.

F

find
find searches the directory tree to find particular groups of files that meet specified conditions, including --name and --type, -exec and --size and --mtime and –user.

free
free displays the total amount of free and used physical memory and swap space in the system, as well as the buffers and cache used by the kernel.

G

grep
grep searches files for a given character string or pattern and can replace the string with another. This is one method of searching for files within Linux.

gzip
gzip is the GNU project's open source program used for file compression, compressing web pages on the server end for decompression in the browser. This is popular for streaming media compression and can concatenate and compress several streams simultaneously.

I

ifconfig
ifconfig is used to configure the kernel-resident network interfaces. It is used at boot time to set up interfaces. After that, it is usually only needed when debugging or when system tuning is needed.

L

less, more
less command lets an admin scroll through configuration and error log files, displaying text files one screen at a time, with backward or forward moving available in files. There is more mobility within files.

ln
ln command creates a new name for a file through hard linking, allowing multiple users to share one file.

ls
ls command lists files and directories within the current working directory, allowing admins to see when configuration files were last edited.

M

man
short for "manual," man allows a user to format and display the user manual built into Linux distributions which documents commands and other aspects of the system.

N

netstat

netstat provides information and statistics about protocols in use and current TCP/IP network connections. It is a helpful forensic tool in figuring out which processes and programs are active on a computer and are involved in network communications.

nslookup

nslookup allows a user to enter a host name and find the corresponding IP address. A reverse of that process to find the host name is also possible.

P

passwd

passwd updates a user's authentication tokens (changes their current password).

ping

ping allows a user to verify that a particular IP address exists and can accept requests. Ping can be used to test connectivity and determine response time, as well as to ensure that a host computer the user is trying to reach is actually operating.

ps

ps reports the statuses of current processes in a system.

pwd

The pwd (print working directory) command displays the name of the current working directory. This is a basic Linux command.

R

rsync

rsync syncs data from one disk or file to another across a network connection. Rsync is similar to rcp, but has more options.

S

sdiff

sdiff finds differences between two files by producing a side-by-side listing indicating lines that are dissimilar. Sdiff then merges the files and outputs results to the outfile.

sed

sed is a stream editor that is used to filter text in a pipeline, distinguishing it from other editors. Sed takes text input, performs operations on it and outputs the modified text. Sed is typically used to extract part of a file using pattern matching or to substitute multiple occurrences of a string within a file.

shutdown

shutdown is a command that turns off the computer and that can be combined with variables such as -h, for halt after shutdown, or -r, for reboot after shutdown.

sudo

sudo allows a system admin to give certain users the ability to run some (or all) commands at the root level and logs all commands and arguments.

ssh

ssh is a command interface used for securely gaining access to a remote computer and is used by network admins to control servers remotely.

tar

The tar program provides the ability to create archives from a number of specified files or to extract files from such an archive.

top

top is a set of protocols for networks that performs distributed information processing in offices and displays the tasks on the system that take up the most memory. TOP can sort tasks by CPU usage, memory usage and runtime.

U

uname

uname displays the name of the current operating system and can print information about the system.

V

vi

vi is a text editor that allows a user to control the system by solely using the keyboard instead of a combination of mouse selections and keystrokes.

W

wget

wget is a network utility that retrieves files from the web that support http, https and ftp protocols. wget works non-interactively in the background while a user is logged off. This can create local versions of remote websites, re-creating directories of original sites.

whoami

whoami prints or writes the user/login name associated with the current user ID to the standard output.

X

xargs

xargs reads, builds and executes arguments from standard input; blank lines in the input are ignored.