Key Linux Commands

Documentation:
----
man - Format and display the on-line manual pages
help - Display help info about Bash builtin commands
info - Read/display Info documents
manpath - Determine user's search path for man pages
apropos - Search the whatis database for strings
whatis - Search the whatis database for complete words

Information:
----
which - Shows the full path of (shell) commands
whereis - Locate the binary, source, and manual page files for a command
locate, slocate - Find file paths containing string using slocate database
find - Search for files in a directory hierarchy
type - Show if command is alias, etc.
file - Determine type of file
printenv - Print one (or all) environment variable values
hostname - Show or set the system's host name
uname - Print system (kernel, etc.) information
uptime - Tell how long the system has been running
free - Display amount of free and used memory in the system
vmstat - Report virtual memory statistics
dmesg - Print or control the kernel ring buffer (e.g., boot messages)
alias - Show (or set) alias value for command
unalias - Remove/unset alias
id - Print UID and GID info for username

Files:
----
cat - Concatenate files and print on the standard output
tac - Concatenate and print files in reverse
more, less - Output file page by page
tail - Output the last part of files
head - Output the first part of files
rm - Remove files or directories
mv - Move (rename) files
cp - Copy files and directories
dd - Convert and copy a file
touch - Change file timestamps (or create empty file)
ln - Make links between files
grep, egrep, fgrep - Print lines matching a pattern
wc - Print the number of newlines, words, and bytes in files
chmod - Change file access permissions
chown - Change file owner (and group)
chgrp - Change group ownership
stat - Display file or filesystem status
od - Dump files in octal and other formats

Directories:
----
ls - List directory contents
pwd - Print name of current working directory
cd - Change directory
mkdir - Make directories
rmdir - Remove empty directories
du - Estimate file space usage

Environment Variables:
----
printenv - Print one (or all) environment variable values
export - Make environment variable be inherited by children
env - Run a program in a modified environment

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Processes:
----
ps - Snapshot of the current processes
pstree - Display a tree of processes
top - Display current processes (realtime)
kill - Terminate a process (send a signal)
fuser, lsof - Identify processes using files or sockets
id - Print UID and GID info for current process
nice - Run a program with modified scheduling priority
renice - Alter priority of running process(es)
umask - Set process' file creation permissions mask [builtin]
ulimit - Control process resources limits [builtin]

Filters:
----
basename - Strip directory and suffix
cat - Concatenate and write files
csplit - Split by context
cut - Print selected parts of lines
dirname - Strip non-directory suffix
envsubst - Convert shell vars to environment values
expand - Convert tabs to spaces
fmt - Reformat paragraph text
fold - Wrap long input lines
grep, egrep, fgrep - Print lines matching a pattern
head - Output the first part of files
join - Join lines on a common field
nl - Number lines and write files
paste - Merge lines of files
pr - Paginate or columnate files
sed - Stream editor
sort - Sort text files
split - Split into fixed-size pieces
tac - Reverse files
tail - Output the last part of files
tee - Redirect to multiple files
tr - Translate characters
tsort - Topological sort
unexpand - Convert spaces to tabs
uniq - Uniquify files
xargs - Convert standard input to command argument(s)

File Comparison:
----
diff - Compare 2 files line by line
cmp - Compare 2 files byte by byte
comm - Compare sorted files by line
diff3 - Compare 3 files line by line
sdiff - Merge 2 files side-by-side
patch - apply a diff file to an original

Filesystems/devices:
----
df - Report filesystem disk space usage
mount - Mount a filesystem
umount - Unmount filesystem
fdisk, cfdisk, sfdik- Manipulate disk partition table
mkfs - Build a Linux file system
fsck- Check and repair a Linux file system
debugfs - Ext2/ext3 file system debugger
mkswap - Set up a Linux swap area
swapon, swapoff - Enable/disable devices and files for swapping
mknod - Make block or character special files
dd - Convert and copy a file

Key Linux Commands

Archiving and Compression:
----
tar - Package/unpackage files (archive)
gzip, gunzip - Compress or expand files
zip, unzip - Package and compress (archive) files
bzip2, bunzip2 - Compress or expand files
bzcat - decompresses files to stdout
compress, uncompress - Compress or expand files (old)
cpio - Copy files to and from archives

Login, Shell/Command, Logout:
----
su - Run as a substitute user (e.g., root)
sudo - Execute a command as another user (e.g., root)
exit - Exit a shell
logout - Logout/exit a login shell (e.g., SSH shell)
chroot - Run command or interactive shell with special root directory

Remote Login and File Transfer:
----
ssh - Secure remote login/shell
sftp - Secure file transfer program
scp - Secure remote file copy
rsh - Remote login/shell (insecure!)
rlogin - Remote login (insecure!)
ftp - File transfer program (insecure!)
rcp - Remote file copy (insecure!)

Users:
----
passwd - Update a user's password
chsh - Change your login shell
useradd - Create a new user or update default new user information
userdel - Delete a user account and related files
usermod - Modify a user account
groupadd - Create a new group
groupdel - Delete a group
groupmod - Modify a group

Printing and Formatting:
----
lpr - Print files
lpq - Show printer queue status
lprm - Cancel print jobs
lpstat - Print cups status information
enscript - Convert text files to PostScript for printing, etc.
a2ps - Format files for printing on a PostScript printer
mpage - print multiple pages per sheet on PostScript printer

Booting, Startup, Shutdown:
----
lilo - Install LILO boot loader
grub - Run the GRUB (boot loader) shell
init, telinit - Change system runlevel
halt, reboot, poweroff - Stop the system
shutdown - Bring the system down

Kernel Modules:
----
lsmod - Show the status of Linux kernel modules
modprobe - Add and remove modules from the Linux kernel
insmod - Insert a module into the Linux kernel
rmmod - Remove a module from the Linux kernel
modinfo - Show information about a Linux kernel module
mkinitrd - Creates initial ramdisk images for preloading modules

Key Linux Commands

Network:
----
ping, ping6 - Send ICMP ECHO_REQUEST to network hosts
traceroute - Print the route packets take to network host
ifconfig - Configure a network interface
ifup, ifdown - Start/stop a network interface
route - Show/manipulate the IP routing table
netstat - Print network connections, routing tables, etc.
host, dig, nslookup - DNS lookup utilities
whois - Client for the whois directory service (DNS)
iptables - Administration tool for IPv4 packet filtering and NAT
arp - Manipulate the system ARP cache
arping - Send ARP REQUEST to a neighbour host

Terminal:
----
stty - Change and print terminal line settings
reset, tset - Terminal initialization
clear - Clear the terminal screen

Job Control:
----
jobs - List jobs (running in background)
fg - Move job to foreground
bg - Move job to background

Hardware:
----
hdparm - Get/set hard disk parameters
lshw - List hardware
lspci - List all PCI devices
lsscsi - List all SCSI devices
lsusb - List USB devices
usbview - Display information on USB devices
usbmodules - List kernel driver modules available for a USB device

Misc:
----
md5sum - Compute and check MD5 message digest
sha1sum - Compute and check SHA1 message digest

service - Start/stop/restart/status a system service/daemon
chkconfig - Update/query runlevel information for system services

watch - Execute a program periodically, showing output fullscreen
screen - Terminal manager/multiplexer (multiple shells on a console)

sysctl - Configure kernel parameters at runtime
ldconfig - Update link bindings info for shared libraries
ldd - Print shared library dependencies for an executable
mkrescue - Make rescue floppy

date - Print or set the system date and time
hwclock - Query and set the hardware clock (RTC)
ntpdate - Set the system date and time via NTP

true - Do nothing, successfully
false - Do nothing, unsuccessfully

mail, nail - Send and receive mail (command line)