# LINUX QuickRef LINUX

**version 2.0.2** **October 2003**

## Contents



*Unless noted, all commands are to be entered on one line (use the " \" continuation character if needed).*

## Mounting Filesystems

| | |
|---|---|
| `mount -t msdos /dev/fd0H1440 /mnt/floppy` | Mount an MS-DOS formatted floppy disk at /mnt/floppy. |
| `mount -t iso9660 /dev/cdrom /mnt/cdrom` | Mount a CD-ROM drive at /mnt/cdrom. |
| `mount -t vfat /dev/hda1 /mnt/win` | Mount a VFAT hard drive partition hda1 at /mnt/win. |
| `mount -t smbfs //system/share/ /mnt/samba` | Mount a SMB share located at //system/share at /mnt/samba. |
| `mount -t iso9660 -o loop image.iso /mnt/iso` | Mount an ISO image as a filesystem at /mnt/iso using the loopback device. |
| `mount -t ext2 /dev/pda /mnt/ezdrive` | Mount a Linux filesystem formatted SyQuest EZ-Drive cartridge at /mnt/ezdrive. |
| `umount /mnt/cdrom` | Unmount the CD-ROM. |
| `usermount` | Executes graphical utility for mounting and unmounting filesystems. |
| `exportfs -ra` | Re-apply NFS export directives as listed in /etc/exports. |

## Finding Files and Text Within Files

| | |
|---|---|
| `find / -name filename` | Starting at the / directory, find the file “filename”. |
| `find / -name "*string*"` | Starting at the / directory, find the file containing the word “string”. |
| `find / -perm +4000 -user root -print` | Find existing files on the system that have their SUID root permissions set. |
| `find / -perm +2000 -group <group> -print` | Find existing files on the system that have their SGID permissions set. |
| `find / -nouser -print` | Find existing files on the system that don't belong to any user listed in /etc/passwd. |
| `info` | Lists the commands and utilities installed with brief description as to what they are used for, or do. |
| `locate filename` | Locate a file “filename” using the updatedb database (see next). |
| `updatedb` | Create or update the database used by the locate command. |
| `apropos subject` | List man pages for “subject”, searches the whatis database for strings. |
| `whatis` | Search the whatis database for complete words. |
| `makewhatis` | Create or update the database used by whatis and apropos commands. |
| `which filename` | Show the subdirectory containing the executable file “filename”. |
| `grep -r textstring /dir` | Starting with the directory “/dir”, recursively find and list all files containing the string “textstring”. |

## Move Copy, Delete and View Files

| | |
|---|---|
| `mv filename /home/dirname` | Move the file “filename” to the directory /home/dirname. |
| `cp filename /home/dirname` | Copy the file “filename” to the directory /home/dirname. |

| | |
|---|---|
| `rm name` | Remove the file or directory “name”. |
| `rm -rf dir` | Remove the entire directory “dir”, forcing the removal of included files and subdirectories recursively as well. |
| `ls -l` | List files in current directory in long format. |
| `ls -F` | List files in current directory and indicate the file types. |
| `ls -laC` | List all files in current directory in long format and display in columns. |
| `cat filename` | Display the file “filename”. |
| `more filename` | Display the file “filename” one page at a time. Advance pages by pressing the spacebar. |
| `less filename` | Display the file “filename” one page at a time. Advance pages by pressing the spacebar, backup with the “b” key. |
| `zless filename` | Same as above, only used with files compressed with gzip. |
| `head filename` | Display the first 10 lines of the file “filename”. |
| `head -25 filename` | Display the first 25 lines of the file “filename”. |
| `tail filename` | Display the last 10 lines of the file “filename”. |
| `tail -25 filename` | Display the last 25 lines of the file “filename”. |

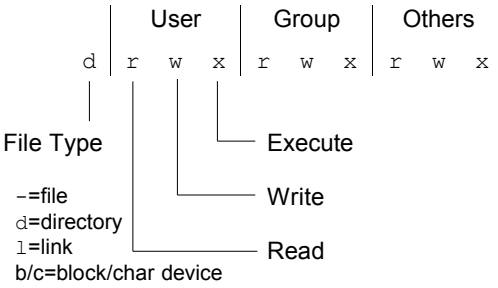
# Meta Characters

| | |
|---|---|
| `*` | Multiple-character wildcard. |
| `?` | Single-character wildcard. |
| `[a-z0-9]` | Single-character character range (“a” through “z” or “0” through “0”). |
| `[abc123]` | Single-character choice (“a”, “b”, “c”, “1”, “2” or “3”). |
| `[!xyz]` | Single-character choice, but as not the characters “x”, “y” or “z”. |

# Regular Expressions

| | |
|---|---|
| `.` | Match a single character (functionally equivalent to how the '?' character works in glob expansions). |
| `*` | Match zero or more repeated occurrences of the *previous* character. |
| `+` | Match one or more repeated occurrences of the *previous* character. |
| `?` | Match zero or one repeated occurrences of the *previous* character. |
| `^` | Matches an expression that follows it at the beginning of a line. Needs double quotes when used with grep. |
| `$` | Matches the regular expression that precedes it at the end of a line. Needs single quotes when used with grep. |
| `[a-z0-9]` | Single-character range (“a” through “z” or “0” through “0”). |
| `[abc123]` | Single-character choice (“a”, “b”, “c”, “1”, “2” or “3”). |
| `[^x,y,z]` | Single-character choice, but *not* the characters “x”, “y” or “z”. |
| `(abc)` | Grouped characters “abc”. |
| `\` | Used to escape regular expression characters such as +, *, and ^ to include the literal character in a match. |

# File Permissions




When the command “ls –l” is used, a list of file names is displayed. The first column in this list details the file type and the permissions applied to the file. If a permission is denied for a set, User (Owner), Group and Others, it is represented by a –.

Read = 4
Write = 2
Execute = 1

File permissions are altered by giving the “chmod” command and the appropriate octal code for each set. Ex.:

```
chmod 764 filename
```

will make the file “filename” r-w-x for the user, r-w for the group, and r for any others.

# Symbolic Links

| | |
|---|---|
| `symlink -r /` | List all the symbolic links on the system. |
| `symlink -rv / \| fgrep "dangling"` | Find all symbolic links that are "dangling", excluding other mounted filesystems. |
| `ln -l linkname` | Display the link-path for a link. |

| | |
|---|---|
| `find . -type l -exec ls -l {} \;` | Find all symbolic links and show what they point to. |

## chmod Modes

| | |
|---|---|
| `chmod 600` | Read and write permissions for user only. |
| `chmod 700` | Read, write and execute permissions for user only. |
| `chmod 755` | Full permission for user, read and execute for group and others. |
| `chmod 711` | Full permission for user, execute for group and others. |
| `chmod 444` | Read permissions only for everybody. |
| `chmod +x filename` | Make the file “filename” executable for everybody; user, group and others. |
| `chmod go-w filename` | Revoke write permissions for group and others on the file “filename”. |
| `chmod ug=r filename` | Set the permissions to readable only for user and group on the file “filename”. |
| `chmod a=r,u+w filename` | Set the permissions to readable only for all (everybody) and add write-able for user on the file “filename”. |

## User Administration

| | |
|---|---|
| `useradd username` | Create a new user account named “username”. |
| `passwd username` | Assign a password to “username”. |
| `su` *-or-* `su -` | Switch user to root, or root and to include root’s set environment (must know root password to use). |
| `su -c "command"` | Run “command” (include any options within the quotes) as root. |
| `su username` | Switch user to “username” . |
| `exit` | Exit, logoff or logout of account. |

## Printing

| | |
|---|---|
| `/etc/rc.d/init.d/lpd start` | Start the print daemon. |
| `/etc/rc.d/init.d/lpd stop` | Stop the print daemon. |
| `/etc/rc.d/init.d/lpd status` | Display the status of the print daemon. |
| `lpq` | Query and display jobs in print queue. |
| `lpq -a` | As above, only for all printers controlled by the lpd daemon. |
| `lpr` | Print a file. |
| `lprm` | Remove jobs from print queue. |
| `lprm -a` | Remove all jobs from the print queue for the logged user. |
| `lprm -a all` | Remove all jobs for all users from the print queue (run as root). |
| `lpc` | Printer control tool. |
| `printtool` | Run the X Windows printer setup utility. |

## man Pages

| | |
|---|---|
| `man -k word` | Display man pages containing “word”. |
| `man subject \| col -b \| lpr` | Print the man page “subject” as plain text. |
| `man -t subject \| col -b \| lpr` | Print the man page “subject” as Postscript. |

*Manual pages are organized into topics:*

| | |
|---|---|
| `/usr/man/man1` | *Commands* - Commands you run from within a shell. |
| `/usr/man/man2` | *System Calls* - Documentation for kernel functions. |
| `/usr/man/man3` | *Library Calls* - Manual pages for libc functions. |
| `/usr/man/man4` | *Special Files* - Information about files in the /dev/ directory. |
| `/usr/man/man5` | *File Formats* - Details of formats for /etc/passwd and other files. |
| `/usr/man/man6` | *Games*. |
| `/usr/man/man7` | *Macro Packages* - Descriptions of the Linux file system, manual pages, and others. |
| `/usr/man/man8` | *System Management* - Manual pages for root operator utilities. |
| `/usr/man/man9` | *Kernel Routines* - Documentation on Linux kernel source routines or kernel module specifications. |

*And each man page is organized into sections:*

| | |
|---|---|
| *Name* | The name of the command and a brief description. |
| *Synopsis* | How to use the command and command-line options. |
| *Description* | An explanation of the program and its options. |
| *Files* | A list of files used by the command and their location. |
| *See Also* | A list of related man pages. |
| *Diagnostics* | A description of unusual output. |

| | |
|---|---|
| *Bugs* | Known problems. |
| *Author* | The program's main author and other contributors. |

## Shutdown & Reboot

| | |
|---|---|
| `shutdown -h now` *-or-* `init 0` | Shutdown the system now and halt (no reboot). |
| `shutdown -r now` *-or-* `init 6` | Shutdown the system now and reboot. |
| `shutdown -r 5` | Shutdown the system in 5 minutes and reboot. |
| `halt` | Stop all processes and shutdown. |
| `reboot` | Stop all processes and reboot. |

## Installing Software

| | |
|---|---|
| `./configure ; make ; make install` | Execute the scripts preparing the source files for compiling and installation on the system. |
| `apt-get update` | Update package list. |
| `apt-get upgrade` | Upgrade installed packages. |
| `apt-get upgrade -u` | Upgrade installed packages. Will not install new or remove old packages (they're put on “hold”). |
| `apt-get install name` | Install package ”name” (also resolves any dependencies). |
| `apt-get remove name` | Removes package “name” (also removes any unneeded dependencies). |
| `dpkg -i pkg.deb` | Install package “pkg.deb”. |
| `dpkg -r pkg.deb` | Removes package “pkg.deb”. |
| `dpkg -iGRE temp` | Install all packages in the directory “temp” (including subdirectories) that are newer or not already installed. |
| `rpm -ivh name.rpm` | Install the RPM package “name.rpm”. |
| `rpm -Uvh name.rpm` | Upgrade or install RPM package “name.rpm”. |
| `rpm -Fvh name.rpm` | Upgrade only previously installed RPM package “name.rpm”. |
| `rpm -e name` | Delete the RPM package “name” (do not include “.rpm” extension). |
| `rpm -e name --nodeps` | Force deletion of RPM package “name, even if dependencies are present. |
| `rpm -l name` | List the files in the RPM package “name”. |
| `rpm -ql name` | Query for the installed version and list the files in the RPM package “name”. |
| `rpm -Va` | Verify the integrity of all currently installed packages. |
| `rpm -qai` | Query all installed packages, displaying details on each package. |
| `rpm -i --force name` | Reinstall package “name”, forcing the installation of all files included. |

## Modules

| | |
|---|---|
| `insmod` | Inserts a module into the kernel. |
| `lsmod` | Lists the modules currently used by the kernel. |
| `rmmod` | Removes a module (use 'lsmod' to determine module name). |
| `depmod` | Creates a "Makefile" dependency file (modules.dep). |
| `modprobe` | Loads the modules.dep dependency file created by 'depmod'. |

## Configuration Files

| | |
|---|---|
| `/etc/inittab` | Specifies the runlevel that the system should boot into. |
| `/etc/fstab` | List of devices, mount points and mount options (read, write, etc.). |
| `/etc/exports` | Filesystems being exported by the NFS (Network File System) daemon. |
| `/etc/motd` | Message Of The Day; displayed to all users at login. |
| `/etc/rc.d/rc.local` | Shell script that is executed at the end of boot process. |
| `/etc/profile` | Global environment variables. |
| `/etc/bashrc` | Global functions and aliases. |
| `/etc/cron.*` | Directories that automatically execute scripts stored within at timed intervals. |
| `/etc/HOSTNAME` | Contains full host name, including domain. |
| `/etc/hosts` | A list of known host names and IP addresses on the network. |
| `/etc/resolv.conf` | Defines IP addresses of DNS servers. |
| `/etc/samba/smb.conf` | Configuration file for the Samba server, allowing file/print sharing with MS Windows clients. |

| | |
|---|---|
| `/etc/httpd/conf/ httpd.conf` | Configuration file for the Apache web server. |
| `/etc/X11/XF86Config` | Configuration file for X Windows. |
| `/usr/X11R6/lib/X11/ app-defaults` | X Window application defaults. |
| `~/.Xdefaults` | Configuration file for some X Window applications. |
| `~/.xinitrc` | Defines the window manager loaded by X Windows. |
| `~/.Xclients` | Defines the window manager loaded by X Windows (Red Hat). |

# System Services

| | |
|---|---|
| `chkconfig --list` | Reports whether an xinetd system service has been started or stopped. |
| `chkconfig --list <daemon>` | Checks the status of a particular service. |
| `chkconfig --level 345 nscd off` | Turns "nscd" service off in runlevels 3, 4, and 5. |
| `/etc/init.d/<daemon> stop` *-or-* `start` *-or-* `restart` | Stop, start or restart the individual service <daemon>. |
| `service <daemon> stop` *-or-* `start` *-or-* `restart` | Stop, start or restart the individual service <daemon>. (rh) |
| `/etc/init.d/xinetd stop` *-or-* `start` *-or-* `restart` | To stop, start or restart a service which is managed by xinetd. |
| `service xinetd stop` *-or-* `start` *-or-* `restart` | To stop, start or restart a service which is managed by xinetd. (rh) |

| *Linux Runlevels* | | | |
|---|---|---|---|
| 0 | Halt | 3 | Multiuser mode (console) |
| 1 | Single-user mode | 4 | unused |
| 2 | Multiuser, without NFS | 5 | Multiuser mode (X Windows) |
| | | 6 | Reboot |

# Crontab

| | |
|---|---|
| `crontab -u <username> -e` | Edit a user's crontab file directly using the environment-specified editor. |
| `crontab -u <username> <filename>` | Read a file of cron job entries into a user's crontab file. |
| `0,15,30,45 * * * * fetchmail` | Run the command 'fetchmail' every 15 minutes. |
| `* */4 * * * backup >> /root/backup-log 2>&1` | Run a backup job every 4 hours, writing all stdout and stderr to a log file. |

*Crontab*

| Entry | Meaning |
|---|---|
| 0-59 | Minute |
| 0-23 | Hour |
| 1-31 | Day of Month |
| 1-12 | Month |
| 0-7 | Day of Week |

/etc/crontab format

`* * * * * command`

# Networking

| | |
|---|---|
| `ifconfig -a` | List IP address for all devices on system. |
| `ifconfig eth0 192.168.1.12 broadcast 192.168.1.255 netmask 255.255.255.0` | Assign the IP address 192.168.1.12 to the first Ethernet device (eth0), using standard Class C broadcast and netmask. |
| `route add -net default gw 192.168.1.100 netmask 0.0.0.0 metric 1` | Adds a route for a default gateway located at 192.168.1.100 for the system. |

# Archiving

| | |
|---|---|
| `tar -xvf archive.tar` | Decompress the files archived in the tarred file "archive.tar.gz", listing the contents to the console. |
| `tar -xzvf archive.tar.gz` | Decompress the files archived in the gzipped and tarred file "archive.tar.gz". |
| `tar -xjvf archive.tar.bz2` | Decompress the files archived in the bzip2 and tared file "archive.tar.bz2". |
| `tar -tvf archive.tar` | Display list of contents in file "archive.tar". |
| `tar -cvf filename` | Create a tar file, "filename.tar", from file "filename". |
| `tar -cxvf filename` | Create a gzipped tar file, "filename.tar.gz", from file "filename". |
| `tar -cjvf filename` | Create a bzip2 tar file, "filename.tar.bz2", from file "filename". |
| `tar -cMf /dev/fd0` | Backup the contents of the current directory, including subdirectories, to multiple floppy disks. |
| `bzip2 -dc <file.bz2> \| -tar -xvf -` | Un-bzip2 and untar "file.tar.bz2" |

# Bash Shell

| | |
|---|---|
| `history` | Search through the history file. |
| `history 20` | List the last 20 commands entered. |
| `history \| grep variable` | Pipe the output of history though the grep command, searching for "variable". |
| `!!` | Executes the last command entered in the history file. |
| `!#` | Executes the command numbered "#" in the history file. |

| | |
|---|---|
| `!string` | Executes the command with the most recent matching string "string". |
| `env` | Display the shell environment variables. |
| `printenv` | Display the environment variables in use. |

## Vim / Vi Editor

| | |
|---|---|
| `:q` | Quit, saving changes. |
| `:q!` | Absolute quit (no prompt). |
| `:wq` | Write file, then quit. |
| `x` | Delete character at cursor. |
| `dw` *-or-* `dd` | Delete word or delete line. |
| `D` | Delete from cursor to EOL. |
| `u` | Undo. |
| `.` | Repeat last edit command. |
| `:set paste` *-and-* `:set nopaste` | Allows pasting indented lists without cascading the indents. Use ':set nopaste" after pasting. |
| `vim `find . -name "*" -exec grep -l "pattern" {} \; -print`` | Search for a pattern within the files in the current directory, then edit the file if found. |

## X Windows

| | |
|---|---|
| `startx` | Start X Windows. |
| `startx -- :1` | Run an X session on another terminal. Use Ctrl-Alt-F7 and Ctrl-Alt-F8 to switch displays. |
| `XF86Setup` | An X configuration utility with automatic probing of graphics cards. |
| `Xconfigurator` | Another X configuration utility with automatic probing of graphics cards. |
| `xf86config` | A text-based X configuration menu. |
| `xvidtune` | An X graphics tuning utility. |
| `gnome-session` | Starts GNOME in the .xinitrc or .Xclients files. |
| `startkde` | Starts KDE in the .xinitrc or .Xclients files. |
| `fvwm95` | Starts fvwm95 in the .xinitrc or .Xclients files. |
| `Alt-Esc` | Display a list of active windows. |
| `Ctrl-Alt+` *-or-* `Ctrl-Alt-` | Increase or decrease screen resolution. |
| `Ctrl-Alt-F`*n* | Switch to virtual console *n*, where *n* is a number from 1 to 6. |
| `Ctrl-Alt-F7` | Return to the current X session. |
| `Shift-Ctrl-F8` | Resize the selected window. |
| `Shift-Ctrl-r` | Refresh the screen. |
| `Shift-Ctrl-x` | Start an xterm session. |
| `Ctrl-Alt-Esc` | Invoke the xkill cursor. |
| `Ctrl-Alt-BkSpace` | Kill the X-server. |

## ssh and GnuPG

| | |
|---|---|
| `ssh-keygen` | Generate a pair of public and private keys. |
| `ssh -t myserver top` | Run the console program "top" on "myserver" remotely. |
| `gpg –gen-key` | Generate a pair of public and secret (private) keys. |
| `gpg –output revokedkey.asc --gen-revoke keyID` | Generate a revocation certificate for a private key, redirected to file "revokedkey.asc". |
| `gpg -r username -sea filename` | Encrypt file "filename" for recipient "username", creating signed armored ASCII text file "filename.asc". |
| `gpg -o filename -d filename.asc` | Decrypt the file "filename.asc", producing the original file "filename". |
| `gpg --import user.asc` | Import public key for user to your public keyring from file "user.asc". |
| `gpg --export –armor username > key.asc` | Export public key from your keyring to an ASCII armored file "key.asc". |
| `gpg --list-keys` | List keys in your public keyring. |
| `gpg –fingerprint username` | Display fingerprints for keys in public keyring for "username". |
| `gpg -c filename` | Symmetrically encrypt the file "filename". |
| `tar -cf - /dir \| gpg -c -o encrypted_dir.gpg` | Create a tar file of a directory, then symmetrically encrypt the file (GnuPG uses gzip compression natively). |

## Tips & Tricks

| | |
|---|---|
| `df -h` | Displays disk filesystems mounted, including space used and available, in "human-readable" form. |

| | |
|---|---|
| `/sbin/e2fsck hda5` | Execute the filesystem check utility on the hard drive partition hda5 (unmount hda5 first!). |
| `mkbootdisk --device /dev/fd0 -2.4.20` | Creates a boot disk on the floppy drive with version 2.4.20 of the kernel. |
| `fdformat /dev/fd0H1440` | Format a floppy disk in device fd0 as high-density 1.44 MB. |
| `/sbin/mke2fs -c /dev/fd0` | Format a floppy disk with the Linux ext2 filesystem, checking for bad blocks. |
| `dd if=/dev/hda of=/dev/hdb` | Create a data dump of one hard drive onto another (ghosting). |
| `cat /var/log/messages \| less` | Display the system log with paging. |
| `cat /var/log/dmesg \| less` | Display the boot messages log with paging; useful for troubleshooting. |
| `dmesg \| less` | Same as above. |
| `linux single` | Issued at LILO prompt, will boot into single-user mode (if root password is lost, boot “linux single” and change password). |
| `ps` | List current running processes for logged user. |
| `ps -aux` | List all current running processes for all users and daemons. |
| `kill 1234` | Kill (stop) a process with job ID of “1234”. |
| `kill -9 `ps -fu uname \|awk '{ print $2 }'\|grep -v PID`` | Run as root, kills all processes being run by the user “uname”. |
| `sysreport` | Collects detailed info on the system's hardware and setup, creating a compressed tar file in the /tmp directory by that name. (rh) |
| `ulimit -c` | Displays current limit on core file size. |
| `ulimit -c 1000` | Sets allowable size limit on core files to 512K (1000 x 512-byte blocks). |
| `uname -a` | Displays system info (OS, host name, kernel version, date, time, time zone, year, processor type and label). |
| `Alt-F`*n* | Switch to virtual console *n*, where *n* is a number from 1 to 7 (the default maximum). |
| `Alt-→` | Switch to the next highest virtual console. |
| `Alt-←` | Switch to the next lowest virtual console. |
| `reset` | Resets your terminal console if a binary file was displayed with cat. |
| `stty -s` | Display what special characters (such as ^C for interrupt, ^U for kill, ^Z to stop, ^Q to quit, etc.) are used on the system. |
| `split -b 1420k bigfile` | Split “bigfile” into smaller 1420k files, xaa, xab, xac, etc. that fit on a floppy disk. |
| `cat xaa xab xac > bigfile` | Reassemble “bigfile” from smaller files created with 'split'. |
| `rename .htm .html *` | Rename all files in the directory with “.htm” extensions to “.html”. |
| `for i in $1 ; do mv "$i" `echo $i \| sed 's/ /_/g'` ; done` | Rename all files in the directory, replacing any spaces in filenames with the underscore character. |
| `rdate -s ntpserver && hwclock --systohc` | Synchronize your machine's system and hardware clocks with a network time server (given as a hostname or IP address). |
| `ifconfig \| awk '/inet/{print $2}' \| awk -F: '{print $2}'` | Lists just the IP addresses currently bound to the system. |
| `ldd /path/program` | List all of the shared library dependencies used by “program”. |

## GNU/Linux Links

http://www.kernel.org/
Linux Kernel Archives – The kernel sources.

http://www.fsf.org/
Free Software Foundation – GNU General Public License (GPL) and GNU software utilities and commands.

http://www.debian.org/
Debian Linux – GNU/Linux distributor.

http://www.redhat.com/
Red Hat Linux – GNU/Linux distributor.

http://www.suse.com/
SuSE – GNU/Linux distributor.

http://www.mandrake.com/
Mandrake – GNU/Linux distributor.

http://www.slackware.com/
Slackware Linux Project – GNU/Linux distributor.

http://www.gentoo.org/
Gentoo Linux – GNU/Linux distributor.

http://www.apache.org/
Apache Software Foundation – web server software.

http://www.squid-cache.org/
Squid – web proxy cache software.

http://www.samba.org/
Samba – file sharing with Windows systems.

http://www.sendmail.org/
Sendmail – email server software.

http://www.mysql.com/
MySQL – SQL database server software.

http://www.perl.com/
Perl – software programming/scripting software.

http://wwwxfree86.org
Xfree86 Project – X11 software.

http://www.gnome.org/
GNOME Project – desktop environment software.

http://www.kde.org/
K Desktop Environment – desktop software.

http://www.openoffice.org/
OpenOffice.org – Office suite software.

http://www.vim.org/
Vim (Vi IMproved) – text editing software.

http://www.mozilla.org/
Mozilla – web browser software.

http://www.mutt.org/
Mutt – email client software.

http://www.gnupg.org/
GnuPG – GNU Privacy Guard personal encryption and digital signature software.

http://www.gimp.org/
GIMP – GNU Image Manipulation Program.

http://wwwroaringpenguin.com/
Roaring Penguin – PPPoE software.

http://www.tldp.org/
The Linux Documentation Project – HOWTOs, manuals and documentation.

http://www.icon.co.za/~psheer/book/rute.html.gz
RUTE Linux – book on Linux.

http://oreillynet.com/linux/cmd/
O'Reilly Linux Commands – online reference.

http://www.pathname.com/fhs/
Filesystem Hierarchy Standard – filesystem layout and structure standards.

http://www.dsl.org/book/
Linux Cookbook – tips, tricks and recipes for Linux.

http://www.oualline.com/vim-cook.html
Vim Cookbook – tips, tricks and recipes for Vim.

http://cvsbook.red-bean.com/
CVS Book – very good book on using CVS.

http://www.perldoc.com/
PerlDoc – Perl documentation.

http://www.ooodocs.org/
OOo Docs – OpenOffice forums and docs.

http://linux.oreilly.com/
O'Reilly Linux – Linux articles and books.

http://www-106.ibm.com/developerworks/linux/
IBM developerWorks – Linux articles and tutorials.

http://www.nichedev.org/
Niche Development – Linux and technical docs.

http://www.linuxgazette.com/
Linux Gazette – monthly Linux magazine.

http://www.linuxjournal.com/
Linux Journal – monthly Linux magazine.

http://www.linux-mag.com/
Linux Magazine – monthly Linux magazine.

http://www.linux.com/
Linux.com – news, articles and resources.

http://www.lwn.net/
Linux Weekly News – news and resources.

http://www.rootprompt.org/
RootPrompt – news and resources.

http://www.promote-opensource.org/
Promote Open Source – news and resources.

http://www.linuxguru.net/
LinuxGuru – news and articles.

http://www.ugu.com/
UNIX Guru Universe – tips and resources.

http://www.sourceforge.net/
SourceForge – open-source software projects.

http://www.rpmfind.net/
RPMfind – online RPM package search.

http://www.linuxsecurity.com/
Linux Security – alerts and patch resources.

http://www.linmodems.org/
LinModems – Linux modem compatibility list.

http://freshmeat.net/
freshmeat – Linux and open-source software.

http://counter.li.org/
Linux Counter – Registry of Linux users; get counted!

http://www.thelinuxshow.com/
The Linux Show – a weekly Linux talk show.