

Redhat keyboard shortcuts

Redhat keyboard shortcuts

from :

<http://www.unixguide.net/linux/linuxshortcuts.shtml>

Linux essential shortcuts and sanity commands :

Ctrl+Alt+F1 : switch to the first text terminal.

Under linux you can have several (6 in standard setup) terminals opened at the same time.

Ctrl+Alt+Fn : switch to the nth text terminal

tty : print the name of the terminal in which you are typing this command.

Ctrl+Alt+F7 : switch to the first GUI terminal (if X-windows is running on this terminal).

Ctrl+Alt+Fn : swtc to the nth GUI terminal (if a GUI terminal is running on screen n-1).

On default, nothing is running on terminals 8 to 12,

but you can run another server there.

Tab : (In a text terminal) Autocomplete the command if there is only one option,

or else show all the available options.

ArrowUp : scroll and edit the command history. Press Enter to execute.

Shift+PageUp : scroll terminal output up. Work also at the login prompt,

so you canscroll through your bootup messages.

Shift+PageDown : Scroll terminal output down.

Ctrl+Alt++ : (in X-windows) change to the next X-server resolution (if you set up the X-server to more than one resolution).

Ctrl+Alt+BkSpc : (in X-windows) kill the current X-windows server.

Use if the X-windows server crushes and cannot be exited normally.

Ctrl+Alt+Del : shutdown the system and reboot. This is the normal shutdown command for a user at the text-mode console.

Ctrl+c : kill the current process (mostly in the text mode for small applications).

Ctrl+d : log out from the current terminal. See also the next command.

Ctrl+d : send [End-of-File] to the current process. Don't press it twice else you also log out (see the previous command).

Ctrl+s : stop the transfer to the terminal.

Ctrl+q : resume the transfer to the terminal. Try if your terminal mysteriously stops responding.

Ctrl+z : send the current process to the background.

exit : logout.

logout : logout.

reset : restore a screwed-up terminal (a terminal showing funny characters) to default setting.

MiddleMouseButton : paste the text which is currently highlighted somewhere else

~ : (tidle) my home directory (normally the directory /home/my_login_name).

cd : change directory to home directory (same as the last one)

cd ~ : same as the last one.

. : (dot) current directory.

.. : (two dots) directory parent to the current one.

Common Linux commands--system info :

pwd : print working directory

hostname : print the name of the local host (the machine on which you are working)

netconf : (as root) to change the name of the machine.

whoami : print my login name.

id username : print user id (uid) and his/her group id (gid), effective id (if different than the real id) and the supplementary groups.

date : print or change the operating system date and time.

setclock : (as root) to set the hardware (BIOS) clock from the system (Linux) clock.

time+command : determine the amount of time that it takes for a process to complete a command.

who : determine the users logged on the machine.

rwho -a : (remote who) determine all users logged on your network.

The rwho service must be enabled for this command to run.

If it isn't, run setup as root to enable "rwho".

finger user_name : system info about a user.

last : show listing of users last logged-in on your system.

history | more : show the last (1000 or so) commands executed from the command line on the current account.

The " | more" causes the display to stop after each screenful.

uptime : show the amount of time since the last reboot.

ps : (=print status) list the process currently run by the current user.

ps aux | more : list all the processes currently running, even those without the controlling terminal, together with the name of the user that owns each process.

top : keep listing the currently running processes, sorted by cpu usage (top users first).

htop : get GUI-based top process running currently.

uname -a : (=Unix name with option "all") info on your (local) server.

guname : (in X-window terminal) to display the info more nicely.

free : memory info (in kilobytes).

df -h : (=disk free) : print disk info about all the filesystems (in human-readable form)

du / -bh | more : (=disk usage) print detailed disk usage for each subdirectory starting at the "/" (root) directory (in human legible form)

cat /proc/cpuinfo : cpu info -- it shows the content of the file cpuinfo.

Note that the files in the /proc directory are not real files -- they are hooks to look at information available to the kernel.

cat /proc/interrupts : list the interrupts in use.

cat /proc/version : Linux version and other info

cat /proc/filesystems : show the types of filesystems currently in use.

cat /etc/printcap : show the setup of printers.

lsmod : (as root) show the kernel modules currently loaded.

use /sbin/lsmod to execute this command when you are non-root user.

set | more : show the current user environment.

echo \$PATH : show the content of the environment variable "PATH".

set : to see the full environment variable.

dmesg | less : print kernel messages (the content of the so-called kernel ring buffer).

Press "q" to quit "less"

less /var/log/dmesg : to see what "dmesg" dumped into this file right after the last system bootup.

Basic operations :

any_command --help | more : display a brief help on a command

man topic : display the contents of the system manual pages (help) on the topic.

apropos topic : show the list of the commands that have something to do with topic.

help command : display brief info on a bash (shell) build-in command.

ls : list the content of the current directory.

ls -al | more : list the content of the current directory, all files (also those starting with a dot), and in a long form.

cd directory : change directory

cp source destination : copy files

mcop source destination : copy a file from/to a DOS filesystem

mv source destination : move or rename files.

ln source destination : create a hard link called destination to the file called source.

ln -s source destination : create a symbolic (soft) link called destination to the file called source.

rm files : remove (delete) files.

rm -f files : force remove files without questions asked.

mkdir directory : make a new directory

rmdir directory : remove an empty directory.

rm -r files : (recursive remove) remove files, directories, and their subdirectories.

cat filename | more : view the content of a text file called "filename", one page at a time.

less filename : scroll through a content of a text file. press q when done.

pico filename : edit a text file using the simple and standard text editor called pico.

pico -w filename : edit a text file, while disabling the long line wrap.

find / -name "filename" : find the file called "filename" on your filesystem starting the search from the root directory "/".

locate filename : find the file name of which contains the string "filename".

./program_name : run an executable in the current directory, which is not on your PATH.

touch filename : change the date/time stamp of the file filename to the current time.

Create an empty file if the file does not exist.

xinit : start a barebone X-windows server (without a windows manager).

startx : start an X-windows server and the default windows manager.
startx -- :1 : start another X-windows session on the display 1 (the default is opened on display 0).
xterm : (in X terminal) run a simple X-windows terminal.
konsole :
kvt :
eterm :
xboing : (in X terminal) very nice, old-fashioned game.
xboard : chess game
shutdown -h now : (as root) shut down the system to a halt.
halt : halt the machine
reboot : reboot the machine

Network apps :

netscape : (in X terminal) run netscape (requires a separate Netscape installation).
netscape -display host:0.0 : (in X terminal) run netscape on the current machine and direct the output to machine named "host"
idsplay 0 screen 0.
lynx file.html : view an html file or browse the net from the text mode.
pine : a good text-mode mail reader.
elm : a good and standard text-mode mail reader.
mail : read or compose mail. a basic operating system tool for e-mail.(shell script)
mutt : a basic but usefull and fast mail reader.
licq : (in X term) an icp "instant messaging" client.
kxirc : like the last one.
talk username1(@machinename) : talk to another user currently logged on your machine
mc : launch the "Midnight Commander" file manager (looks like "Norton Commander" for Linux)
telnet server : connect to another machine using the TELNET protocol.(use a remote machine name or IP address)
(TELNET is not very secure -- everything you type goes in open text, even your password!)
rlogin server : (=remote login) connect to another machine.
rsh server : (=remote shell) another way to connect to a remote machine.
ftp server : ftp another machine.
ncftp : ftp but adds extra features
gftp : ftp with GUI
(FTP is good for copying files to or from a remote machine. Try user "anonymous" if you don't have an account on the remote server.)
? : see the list of available ftp commands after connection using FTP.
get : copy a file from the remote system to the local system using FTP connection.
mget : get many files at once using FTP connection.
put : copy a file from the local system to the remote system using FTP connection
mput : put many files at once using FTP connection.
bye : disconnect from FTP connection.
ncftpput and ncftpget : for automation in a script
eg :
ncftpput -u my_user_name -p my_password -a remoute.host.domain remote_dir *local.html
minicom : minicom program (looks like "Procomm for Linux")

File (de)compression :

tar -zxvf filename.tar.gz : (=tape archiver) untar a tarred and compressed tarball
tar -xvf filename.tar : untar a tarred but uncompressed tarball
gunzip filename.gz : decompress a zipped file (*.gz or *.z).
gzip : compress files to zipped (*.gz or *.z)
zip : same as the last one
compress : smae as the last one
bunzip2 filename.gz2 : (=big unzip) decompress a file (*.bz2) zipped with bzip2 compresion utility. Used for big files.
unzip filename.zip : decompress a file (*.zip) zipped with a compression utility compatible with PKZIP for DOS.
unarj e filename.arj : extract the content of an *.arj archive.
uudecode -o outputfile filename : decode a file encoded with uuencode.

Process control :

ps : (=print status) display the list of currently running processes with their process IDs (PID) numbers.
ps axu : see all processes currently running on your system (also those of other users or without a controlling terminal)
top : keep listing the processes currently running
fg PID : bring a background or stopped process to the foreground.
bg PID : send the process to the background. Opposite to fg. (same as Ctrl+z)
any_command& : run any command in the background (the symbol "&" means "run the proceeding command in the background").
batch any_command : run any command (usually one that is going to take more time)
at 17:00 : execute a command at a specified time.

You will be prompted for the command(s) to run, until you press Ctrl+d.

kill PID : force a process shutdown. (First determine the PID of the process to kill using ps.)

killall program_name : kill program(s) by name.

xkill : (in an X window terminal) kill a GUI-based program with mouse.

(Point with your mouse cursor at the window of the process you want to kill and click.)

lpc : (as root) check and control the printer(s). (Type ? to see the list of available commands.)

lpq : show the content of the printer queue.

lprm job_number : remove a printing job "job_number" from the queue.

nice program_name : run program_name adjusting its priority.

(Since the priority is not specified in this example, it will be adjusted by 10 (the process will run slower) from the default value (usually 0). The lower the number, the higher the priority.

The priority value may be in the range -20 to 19. Only root may specify negative values.

Use "top" to display the priorities of the running processes.

renice -1 PID ; (as root) change the priority of a running process to -1.

Normal users can only adjust processes they own, and only up from the current value (make them run slower).

Ctrl+c : stop the current command

Ctrl_z : send the current command to the background

Ctrl+s : stop the data transfer

Ctrl+q : resume the data transfer

Basic administration commands :

printtool : (as root in X-terminal) configuration tool for your printer(s). (Settings go to file /etc/printcap)

setup : (as root) configure mouse, soundcard, keyboard, X-windows, system services.

linuxconfig : (as root, either in text or graphical mode) access and change hundreds of setting from it.

xvidtune : (in X-terminal) adjust the settings of the graphical display for all resolutions so as to eliminate black bands, shift the display right/left/up/down, etc.

alias ls='ls --color=tty' : create an alias for the command "ls" to enhance its format with color.

adduser user_name : (as root) create a new account.

useradd user_name : same as the last one.

userdel user_name : (as root) remove an account.

(The user's home directory and the undelivered mail must be dealt with separately manually because you have to decide what to do with the files.)

groupadd group_name : create a new group on your system.

passwd : change the password on your current account.

passwd user_name : (as root) change the password for any user.

chmod perm filename : (=change mode) change the file access permission for the files you own. (or any file as root)

ls -l filename : check the current access permission.

eg :

chmod a+r junk : add the permission to read the file "junk" to all.

chmod o-x junk : remove the permission to execute the file junk from others.

umask : set the default file permissions for the new files that you create.

chown new_ownership filename : change the file owner.

chgrp new_groupname filename : change the file group.

su : (=substitute user id) assume the superuser (=root) identity (you will be prompted for the password).

su username : assume any user identity named username.

kernelcfg : (as root in X terminal) GUI to add or remove kernel modules.

insmod : same as the last one but less newbie-friendly.

lsmod : list currently loaded kernel modules.

(A module is like a device driver. It provides operating system kernel support for a particular piece of hardware or feature.)

modprobe -l | more : list all the modules available for your kernel.

(Every possible module/feature can be compiled on linux as either "hard wired" (fast, non-removable), "module" (maybe slower, but loaded/removable on demand), or "no" (no support for this feature at all).

insmod parport : (as root) insert modules into the kernel.

insmod ppa : (as root) insert modules into the kernel.

insert the modules for support of the external parallel port zip drive.
(A module is roughly an equivalent of a DOS device driver).

rmmod module_name : (as root, not essential) remove the module module-name from the kernel.

setserial /dev/cua0 port 0x03f8 irq 4 : (as root) set a serial port to a non-standard setting.

shows the standard setting for the first serial port (cua0 or ttyS0).

fdisk : (as root) Linux hard device partitioning utility

cd /usr/src/linux-2.0.36

make xconfig : (as root in X terminal) Nice GUI front-end for configuration of the kernel options in preparation for compilation of your customized kernel.

(The directory name contains the version of your Linux kernel so you may need to modify the directory name)

(You also need the Tk interpreter and the kernel source code installed.)

make config : runs a script that asks you questions in the text mode

make menuconfig : runs a text-based menu-driven configuration utility

less /usr/doc/HOWTO/Kernel-HOWTO : for more information on how to install the new kernel.

make dep

make zImage : produces the file "zImage", which is your new Linux kernel.

proceed with kernel compilation of the new kernel

make modules

make modules_install

man depmode : more information on how to install the new kernel.

(Compilation of a kernel is a good way to test your hardware, because it involves a massive amount of computing.)

depmod -a : (as root) build the module dependency table for the kernel.

modprobe -a : load the modules.

ldconfig : (as root) re-create the bindings and the cache for the loader of dynamic libraries ("ld").

mknod /dev/fd0 b 2 0 : (=make node, as root) create a device file.

fdformat /dev/fd0H1440

mkfs -c -t ext2 : (=floppy disk format, two commands, as root)

Perform a low-level formatting of a floppy in the first floppy drive (/dev/fd0), high density (1440 KB).

Then make a Linux filesystem (-t ext2), checking or marking bad blocks (-c). Making the file system is an equivalent to the high-level format.

badblocks /dev/fd0H1440 : (as root)

Check a high-density floppy for bad blocks and display the results on the screen.

The parameter "1440" specifies that 1440 blocks are to be checked.

fsck -t ext2 /dev/hda2 : (=file system check, as root)

Check and repair a filesystem.

dd if=/dev/fd0H1440 of=floppy_image

dd if=floppy_image of=/dev/fd0H1440

(two commands, dd=data duplicator)

Create an image of a floppy to the file called "floppy_image" in the current directory.

Then copy floppy_image(file_ to another floppy disk.

Program installation :

rpm -ivh filename.rpm : (=RedhatPackageManager, install, verbose, hashes displayed to show progress, as root.)

Install a content of RedHat rpm package(s) and print info on what happened.

rpm -qpi filename.pm : (=RedhatPackageManager, query, package, list.)

Read the info on the content of a yet uninstalled package filename.rpm.

rpm -qpl filename.rpm : (=RedhatPackageManager, query, package, information.)

List the files contained in a yet uninstalled package filename.rpm

rpm -qf filename : (=RedhatPackageManager, query, file.)

Find out the name of the *.rpm package to which the file filename (on your harddrive) belongs.

rpm -e packagename : (=RedhatPackageManager, erase=uninstall.)

Uninstall a package packagename.

kpackage

gnorpm

glint

(in X terminal, as root if you want to be able to install packages)

GUI fronts to the Red Hat Package Manager (rpm).

Use any of the three to view which software packages are installed on your system and the what not-yet-installed packages are available on your RedHat CD,

display the info about the packages, and install them if you want (installaion must be done as root).

Accessing drives/partitions :

mount : mount drives

eg :

mount -t auto /dev/fd0 /mnt/floppy : (as root) mount the floppy.

(The directory /mnt/floppy must exist, be empty and not be your current directory.)

mount -t auto /dev/cdrom /mnt/cdrom : (as root) mount the CD. You may need to create or modify the /dev/cdrom file depending where your CDROM is.

(The directory /mnt/cdrom must exist, be empty and not be your current directory.)

mount /mnt/floppy : (as user or root) mount a floppy as user. The file /etc/fstab must be set up to do this.

(The directory /mnt/floppy must not be your current directory.)

mount /mnt/cdrom : (as user or root) mount a CD as user. The file /etc/fstab must be set up to do this.

(The directory /mnt/cdrom must not be your current directory.)

umount /mnt/floppy : unmount the floppy. The directory /mnt/floppy must not be your (or anybody's) current working directory.

Network administration tools :

netconf : (as root) a very good menu-driven setup of your network.

pingmachine_name : check if you can contact another machine (give the machine's name or IP), press Ctrl+c when done (it keeps going).

route -n : show the kernel routing table.

nslookup host_to_find : query your default domain name server (DNS) for an Internet name (or IP number) host_to_find. check if your DNS works.

You can also find out the name of the host of which you only know the IP number.

traceroute host_to_trace : have a look how you messages trave to host_to_trace (which is either a host name or IP number).

ipfwadm -F -p m : set up the firewall IP forwarding policy to masquerading.

echo 1 > /proc/sys/net/ipv4/ip_forward

ipfwadm-wapper -F -p deny

ipfwadm-wapper -F -a m -S xxx.xxx.xxx.0/24 -D 0.0.0.0/0

(three commands, RH6.0) Does the smae as the previous command.

ifconfig : (as root) display info on the network interfaces currently active (ethernet, ppp, etc.).

ifup interface_name : startup a network interface.

/sbin/ifup : to run it as a user.

eg :

ifup eth0

ifup ppp0

ifdown interface_name : shutdown the network interface.

/sbin/ifdown : to run it as a user.

eg :

ifsown ppp0

netstat | more : displays a lot information on the status of your network.

Music-related commands :

cd play 1 : play the first track from an audio CD.

eject : eject the CD ROM tray.

play my_file.wav : play a wave file.

mpg123 mv_file.mp3 : play an mp3 file.

mpg123 -w my_file.wav my_file.mp3 : create a wave audio file from an mp3 audio file.

knapster : (in X terminal) start the program to download mp3 files that other users of napster have displayed for downloading.

cdparanoia -B "1-" : (CD ripper) read the contents of an audio CD and save it into wavefiles in the current directories, one track per wavefile.

The "1-" means "from track 1 to the last", -B forces putting each track into a separate file.

playmidi my_file.mid : play a midi file.

sox : convert from almost any audio file format to another

Graphics-related commands :

kghostview my_file.ps : display a postscript file on screen.

ps2pdf my_file.ps my_file.pdf : make a pdf file from a postscript file.

gimp : (in X terminal) a powerful image processor.

gphoto : (in X terminal) a powerful photo editor.

giftopnm my_file.giff > my_file.pnm

pnmtopng my_file.pnm > my_file.png

Convert the proprietary giff graphics into a raw, portable pnm file.

Then convert the pnm into a png file, which is a newer and better standard for Internet pictures.

