

Linux Command List v1.1 (last changes 10 Jan 2008 03.05 am)

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COMMAND	DESCRIPTION
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System information	
arch	show architecture of machine
uname -m	show architecture of machine(2)
uname -r	show used kernel version
dmidecode -q	show hardware system components - (SMBIOS / DMI)
hdparm -i /dev/hda	displays the characteristics of a hard-disk

hdparm -tT /dev/sda	perform test reading on a hard-disk
cat /proc/cpuinfo	show information CPU info
cat /proc/interrupts	show interrupts
cat /proc/meminfo	verify memory use
cat /proc/swaps	show file(s) swap
cat /proc/version	show version of the kernel
cat /proc/net/dev	show network adpters and statistics
cat /proc/mounts	show mounted file system(s)
lspci -tv	display PCI devices
lsusb -tv	show USB devices
date	show system date
cal 2007	show the timetable of 2007
date 041217002007.00	set date and time - MonthDayhoursMinutesYear.Seconds
clock -w	save date changes on BIOS

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Shutdown (Restart of a system and Logout)

shutdown -h now	shutdown system(1)
init 0	shutdown system(2)
telinit 0	shutdown system(3)
shutdown -h hours:minutes &	planned shutdown of the system
shutdown -c	cancel a planned shutdown of the system
shutdown -r now	reboot(1)
reboot	reboot(2)
logout	leaving session

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Files and Directory

cd /home	enter to directory '/' home'
cd ..	go back one level
cd ../../	go back two levels
cd	go to home directory
cd ~utente	go to home directory
cd -	go to previous directory
pwd	show the path of work directory
ls	view files of directory
ls -F	view files of directory
ls -l	show details of files and directory

<code>ls -a</code>	show hidden files
<code>ls *[0-9]*</code>	show files and directory containing numbers
<code>tree</code>	show files and directories in a tree starting from root(1)
<code>lstree</code>	show files and directories in a tree starting from root(2)
<code>mkdir dir1</code>	create a directory called 'dir1'
<code>mkdir dir1 dir2</code>	create two directories simultaneously
<code>mkdir -p /tmp/dir1/dir2</code>	create a directory tree
<code>rm -f file1</code>	delete file called 'file1'
<code>rmdir dir1</code>	delete directory called 'dir1'
<code>rm -rf dir1</code>	remove a directory called 'dir1' and contents recursively
<code>rm -rf dir1 dir2</code>	remove two directories and their contents recursively
<code>mv dir1 new_dir</code>	rename / move a file or directory
<code>cp file1 file2</code>	copying a file
<code>cp dir/* .</code>	copy all files of a directory within the current work directory
<code>cp -a /tmp/dir1 .</code>	copy a directory within the current work directory
<code>cp -a dir1 dir2</code>	copy a directory
<code>ln -s file1 lnk1</code>	create a symbolic link to file or directory
<code>ln file1 lnk1</code>	create a physical link to file or directory
<code>touch -t 0712250000 file1</code>	modify timestamp of a file or directory - (YYMMDDhhmm)

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File search

<code>find / -name file1</code>	search file and directory into root filesystem from '/'
<code>find / -user user1</code>	search files and directories belonging to 'user1'
<code>find /home/user1 -name "*.bin"</code>	search files with '. bin' extension within directory '/ home/user1'
<code>find /usr/bin -type f -atime +100</code>	search binary files are not used in the last 100 days
<code>find /usr/bin -type f -mtime -10</code>	search files created or changed within 10 days
<code>find / -name *.rpm -exec chmod 755 '{}' \;</code>	search files with '.rpm' extension and modify permits
<code>find / -xdev -name "*.rpm"</code>	search files with '.rpm' extension ignoring removable partitions as cdrom, pen-drive, etc....
<code>locate "*.ps"</code>	find files with the '.ps' extension - first run 'updatedb' command
<code>whereis halt</code>	show location of a binary file, source or man

which halt	show full path to a binary / executable
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Mounting a Filesystem	
mount /dev/hda2 /mnt/hda2	mount disk called hda2 - verify existence of the directory '/mnt/hda2'
umount /dev/hda2	unmount disk called hda2 - exit from mount point '/mnt/hda2' first
fuser -km /mnt/hda2	force umount when the device is busy
umount -n /mnt/hda2	run umount without writing the file /etc/mtab - useful when the file is read-only or the hard disk is full
mount /dev/fd0 /mnt/floppy	mount a floppy disk
mount /dev/cdrom /mnt/cdrom	mount a cdrom / dvdrom
mount /dev/hdc /mnt/cdrecorder	mount a cdrw / dvdrom
mount /dev/hdb /mnt/cdrecorder	mount a cdrw / dvdrom
mount -o loop file.iso /mnt/cdrom	mount a file or iso image
mount -t vfat /dev/hda5 /mnt/hda5	mount a Windows FAT32 file system
mount /dev/sda1 /mnt/usbdisk	mount a usb pen-drive or flash-drive
mount -t smbfs -o username=user,password=pass //winclient/share /mnt/share	mount a windows network share
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Disk Space	
df -h	show list of partitions mounted
ls -lSr more	show size of the files and directories ordered by size
du -sh dir1	estimate space used by directory 'dir1'
du -sk * sort -rn	show size of the files and directories sorted by size
rpm -q -a --qf '%10{SIZE}t%{NAME}n' sort -k1,1n	show space used by rpm packages installed sorted by size (fedora, redhat and like)
dpkg-query -W -f='\${Installed-Size;10}t\${Package}n' sort -k1,1n	show space used by deb packages installed sorted by size (ubuntu, debian and like)
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Users and Groups	
groupadd group_name	create a new group
groupdel group_name	delete a group
groupmod -n new_group_name old_group_name	rename a group
useradd -c "Name Surname " -g admin -d /home/user1 -s /bin/bash user1	create a new user belongs "admin" group
useradd user1	create a new user

<code>userdel -r user1</code>	delete a user ('-r' eliminates home directory)
<code>usermod -c "User FTP" -g system -d /ftp/user1 -s /bin/nologin user1</code>	change user attributes
<code>passwd</code>	change password
<code>passwd user1</code>	change a user password (only by root)
<code>chage -E 2005-12-31 user1</code>	set deadline for user password
<code>pwck</code>	check correct syntax and file format of '/etc/passwd' and users existence
<code>grpck</code>	check correct syntax and file format of '/etc/group' and groups existence
<code>newgrp group_name</code>	log in to a new group to change default group of newly created files

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Permits on Files (use "+" to set permissions and "-" to remove)

<code>ls -lh</code>	show permits
<code>ls /tmp pr -T5 -W\$COLUMNS</code>	divide terminal into 5 columns
<code>chmod ugo+rwx directory1</code>	set permissions reading (r), write (w) and (x) access to users owner (u) group (g) and others (o)
<code>chmod go-rwx directory1</code>	remove permits reading (r), write (w) and (x) access to users group (g) and others (o)
<code>chown user1 file1</code>	change owner of a file
<code>chown -R user1 directory1</code>	change user owner of a directory and all the files and directories contained inside
<code>chgrp gruppo1 file1</code>	change group of files
<code>chown user1:gruppo1 file1</code>	change user and group ownership of a file
<code>find / -perm -u+s</code>	view all files on the system with SUID configured
<code>chmod u+s /bin/binary_file</code>	set SUID bit on a binary file - the user that running that file gets same privileges as owner
<code>chmod u-s /bin/binary_file</code>	disable SUID bit on a binary file
<code>chmod g+s /home/public</code>	set SGID bit on a directory - similar to SUID but for directory
<code>chmod g-s /home/public</code>	disable SGID bit on a directory
<code>chmod o+t /home/public</code>	set STIKY bit on a directory - allows files deletion only to legitimate owners
<code>chmod o-t /home/public</code>	disable STIKY bit on a directory

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Special Attributes on files (use "+" to set permissions and "-" to remove)

chattr +a file1	allows write opening of a file only append mode
chattr +c file1	allows that a file is compressed / decompressed automatically by the kernel
chattr +d file1	makes sure that the program ignores Dump the files during backup
chattr +i file1	makes it an immutable file, which can not be removed, altered, renamed or linked
chattr +s file1	allows a file to be deleted safely
chattr +S file1	makes sure that if a file is modified changes are written in synchronous mode as with sync
chattr +u file1	allows you to recover the contents of a file even if it is canceled
lsattr	show specials attributes

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Archives and compressed files

bunzip2 file1.bz2	decompress a file called 'file1.bz2'
bzip2 file1	compress a file called 'file1'
gunzip file1.gz	decompress a file called 'file1.gz'
gzip file1	compress a file called 'file1'
gzip -9 file1	compress with maximum compression
rar a file1.rar test_file	create an archive rar called 'file1.rar'
rar a file1.rar file1 file2 dir1	compress 'file1', 'file2' and 'dir1' simultaneously
rar x file1.rar	decompress rar archive
unrar x file1.rar	decompress rar archive
tar -cvf archive.tar file1	create a uncompressed tarball
tar -cvf archive.tar file1 file2 dir1	create an archive containing 'file1', 'file2' and 'dir1'
tar -tf archive.tar	show contents of an archive
tar -xvf archive.tar	extract a tarball
tar -xvf archive.tar -C /tmp	extract a tarball into / tmp
tar -cvfj archive.tar.bz2 dir1	create a tarball compressed into bzip2
tar -xvfj archive.tar.bz2	decompress a compressed tar archive in bzip2
tar -cvfz archive.tar.gz dir1	create a tarball compressed into gzip
tar -xvfz archive.tar.gz	decompress a compressed tar archive in gzip
zip file1.zip file1	create an archive compressed in zip
zip -r file1.zip file1 file2 dir1	compress in zip several files and directories simultaneously

<code>unzip file1.zip</code>	decompress a zip archive
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RPM Packages (Fedora, Red Hat and like)	
<code>rpm -ivh package.rpm</code>	install a rpm package
<code>rpm -ivh --nodeeps package.rpm</code>	install a rpm package ignoring dependencies requests
<code>rpm -U package.rpm</code>	upgrade a rpm package without changing configuration files
<code>rpm -F package.rpm</code>	upgrade a rpm package only if it is already installed
<code>rpm -e package_name.rpm</code>	remove a rpm package
<code>rpm -qa</code>	show all rpm packages installed on the system
<code>rpm -qa grep httpd</code>	show all rpm packages with the name "httpd"
<code>rpm -qi package_name</code>	obtain information on a specific package installed
<code>rpm -qg "System Environment/Daemons"</code>	show rpm packages of a group software
<code>rpm -ql package_name</code>	show list of files provided by a rpm package installed
<code>rpm -qc package_name</code>	show list of configuration files provided by a rpm package installed
<code>rpm -q package_name --whatrequires</code>	show list of dependencies required for a rpm packet
<code>rpm -q package_name --whatprovides</code>	show capability provided by a rpm package
<code>rpm -q package_name --scripts</code>	show scripts started during installation / removal
<code>rpm -q package_name --changelog</code>	show history of revisions of a rpm package
<code>rpm -qf /etc/httpd/conf/httpd.conf</code>	verify which rpm package belongs to a given file
<code>rpm -qp package.rpm -l</code>	show list of files provided by a rpm package not yet installed
<code>rpm --import /media/cdrom/RPM-GPG-KEY</code>	import public-key digital signature
<code>rpm --checksig package.rpm</code>	verify the integrity of a rpm package
<code>rpm -qa gpg-pubkey</code>	verify integrity of all rpm packages installed
<code>rpm -V package_name</code>	check file size, permissions, type, owner, group, MD5 checksum and last modification
<code>rpm -Va</code>	check all rpm packages installed on the system - use with caution
<code>rpm -Vp package.rpm</code>	verify a rpm package not yet installed
<code>rpm2cpio package.rpm cpio --extract --make-directories *bin*</code>	extract executable file from a rpm package
<code>rpm -ivh /usr/src/redhat/RPMS/`arch`/package.rpm</code>	install a package built from a rpm source
<code>rpmbuild --rebuild package_name.src.rpm</code>	build a rpm package from a rpm source

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YUM packages updater (Fedora, RedHat and like)

yum install package_name	download and install a rpm package
yum update	update all rpm packages installed on the system
yum update package_name	upgrade a rpm package
yum remove package_name	remove a rpm package
yum list	list all packages installed on the system
yum search package_name	find a package on rpm repository
yum clean packages	clean up rpm cache erasing downloaded packages
yum clean headers	remove all files headers that the system uses to resolve dependency
yum clean all	remove from the cache packages and headers files

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DEB packages (Debian, Ubuntu and like)

dpkg -i package.deb	install / upgrade a deb package
dpkg -r package_name	remove a deb package from the system
dpkg -l	show all deb packages installed on the system
dpkg -l grep httpd	show all rpm packages with the name "httpd"
dpkg -s package_name	obtain information on a specific package installed on system
dpkg -L package_name	show list of files provided by a package installed on system
dpkg --contents package.deb	show list of files provided by a package not yet installed
dpkg -S /bin/ping	verify which package belongs to a given file

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APT packages updater (Debian, Ubuntu e like)

apt-get install package_name	install / upgrade a deb package
apt-cdrom install package_name	install / upgrade a deb package from cdrom
apt-get update	update all deb packages installed on system
apt-get remove package_name	remove a deb package from system
apt-get check	verify correct resolution of dependencies
apt-get clean	clean up cache from packages downloaded

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View file content

<code>cat file1</code>	view the contents of a file starting from the first row
<code>tac file1</code>	view the contents of a file starting from the last line
<code>more file1</code>	view content of a file along
<code>less file1</code>	similar to 'more' command but which allows backward movement in the file as well as forward movement
<code>head -2 file1</code>	view first two lines of a file
<code>tail -2 file1</code>	view last two lines of a file
<code>tail -f /var/log/messages</code>	view in real time what is added to a file

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Text Manipulation

<code>cat file_test [operation: sed, grep, awk, grep, etc] > result.txt</code>	syntax to elaborate the text of a file, and write result to a new file
<code>cat file_originale [operazione: sed, grep, awk, grep, etc] >> result.txt</code>	syntax to elaborate the text of a file and append result in existing file
<code>grep Aug /var/log/messages</code>	look up words "Aug" on file '/var/log/messages'
<code>grep ^Aug /var/log/messages</code>	look up words that begin with "Aug" on file '/var/log/messages'
<code>grep [0-9] /var/log/messages</code>	select from file '/var/log/messages' all lines that contain numbers
<code>grep Aug -R /var/log/*</code>	search string "Aug" at directory '/var/log' and below
<code>sed 's/stringal/stringa2/g' example.txt</code>	replace "string1" with "string2" in example.txt
<code>sed '/^\$/d' example.txt</code>	remove all blank lines from example.txt
<code>sed '/ *#/d; /^\$/d' example.txt</code>	remove comments and blank lines from example.txt
<code>echo 'esempio' tr '[:lower:]' '[:upper:]'</code>	convert from lower case in upper case
<code>sed -e '1d' result.txt</code>	eliminates the first line from file example.txt
<code>sed -n '/stringal/p'</code>	view only lines that contain the word "string1"
<code>sed -e 's/ *\$//' example.txt</code>	remove empty characters at the end of each row
<code>sed -e 's/stringal//g' example.txt</code>	remove only the word "string1" from text and leave intact all
<code>sed -n '1,5p;5q' example.txt</code>	view from 1th to 5th row
<code>sed -n '5p;5q' example.txt</code>	view row number 5
<code>sed -e 's/00*/0/g' example.txt</code>	replace more zeros with a single zero
<code>cat -n file1</code>	number row of a file
<code>cat example.txt awk 'NR%2==1'</code>	remove all even lines from example.txt
<code>echo a b c awk '{print \$1}'</code>	view the first column of a line

<code>echo a b c awk '{print \$1,\$3}'</code>	view the first and third column of a line
<code>paste file1 file2</code>	merging contents of two files for columns
<code>paste -d '+' file1 file2</code>	merging contents of two files for columns with '+' delimiter on the center
<code>sort file1 file2</code>	sort contents of two files
<code>sort file1 file2 uniq</code>	sort contents of two files omitting lines repeated
<code>sort file1 file2 uniq -u</code>	sort contents of two files by viewing only unique line
<code>sort file1 file2 uniq -d</code>	sort contents of two files by viewing only duplicate line
<code>comm -1 file1 file2</code>	compare contents of two files by deleting only unique lines from 'file1'
<code>comm -2 file1 file2</code>	compare contents of two files by deleting only unique lines from 'file2'
<code>comm -3 file1 file2</code>	compare contents of two files by deleting only the lines that appear on both files

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Character set and Format file conversion

<code>dos2unix filedos.txt fileunix.txt</code>	convert a text file format from MSDOS to UNIX
<code>unix2dos fileunix.txt filedos.txt</code>	convert a text file format from UNIX to MSDOS
<code>recode ..HTML < page.txt > page.html</code>	convert a text file to html
<code>recode -l more</code>	show all available formats conversion

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Filesystem Analysis

<code>badblocks -v /dev/hda1</code>	check bad blocks in disk hda1
<code>fsck /dev/hda1</code>	repair / check integrity of linux filesystem on disk hda1
<code>fsck.ext2 /dev/hda1</code>	repair / check integrity of ext2 filesystem on disk hda1
<code>e2fsck /dev/hda1</code>	repair / check integrity of ext2 filesystem on disk hda1
<code>e2fsck -j /dev/hda1</code>	repair / check integrity of ext3 filesystem on disk hda1
<code>fsck.ext3 /dev/hda1</code>	repair / check integrity of ext3 filesystem on disk hda1
<code>fsck.vfat /dev/hda1</code>	repair / check integrity of fat filesystem on disk hda1
<code>fsck.msdos /dev/hda1</code>	repair / check integrity of dos filesystem on disk hda1
<code>dosfsck /dev/hda1</code>	repair / check integrity of dos filesystems on disk hda1

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Format a Filesystem

<code>mkfs /dev/hda1</code>	create a filesystem type linux on hda1 partition
<code>mke2fs /dev/hda1</code>	create a filesystem type linux ext2 on hda1 partition
<code>mke2fs -j /dev/hda1</code>	create a filesystem type linux ext3 (journal) on hda1 partition
<code>mkfs -t vfat 32 -F /dev/hda1</code>	create a FAT32 filesystem
<code>fdformat -n /dev/fd0</code>	format a floppy disk
<code>mkswap /dev/hda3</code>	create a swap filesystem

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SWAP filesystem

<code>mkswap /dev/hda3</code>	create a swap filesystem
<code>swapon /dev/hda3</code>	activating a new swap partition
<code>swapon /dev/hda2 /dev/hdb3</code>	activate two swap partitions

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Backup

<code>dump -0aj -f /tmp/home0.bak /home</code>	make a full backup of directory '/home'
<code>dump -1aj -f /tmp/home0.bak /home</code>	make a incremental backup of directory '/home'
<code>restore -if /tmp/home0.bak</code>	restoring a backup interactively
<code>rsync -rogpav --delete /home /tmp</code>	synchronization between directories
<code>rsync -rogpav -e ssh --delete /home ip_address:/tmp</code>	rsync via SSH tunnel
<code>rsync -az -e ssh --delete ip_addr:/home/public /home/local</code>	synchronize a local directory with a remote directory via ssh and compression
<code>rsync -az -e ssh --delete /home/local ip_addr:/home/public</code>	synchronize a remote directory with a local directory via ssh and compression
<code>dd bs=1M if=/dev/hda gzip ssh user@ip_addr 'dd of=hda.gz'</code>	make a backup of a local hard disk on remote host via ssh
<code>tar -Puf backup.tar /home/user</code>	make a incremental backup of directory '/home/user'
<code>(cd /tmp/local/ && tar c .) ssh -C user@ip_addr 'cd /home/share/ && tar x -p'</code>	copy content of a directory on remote directory via ssh
<code>(tar c /home) ssh -C user@ip_addr 'cd /home/backup-home && tar x -p'</code>	copy a local directory on remote directory via ssh
<code>tar cf - . (cd /tmp/backup ; tar xf -)</code>	local copy preserving permits and links from a directory to another
<code>find /home/user1 -name '*.txt' xargs cp -av --target-directory=/home/backup/ --parents</code>	find and copy all files with '.txt' extension from a directory to another
<code>find /var/log -name '*.log' tar cv --files-from=- bzip2 > log.tar.bz2</code>	find all files with '.log' extension and make an bzip archive
<code>dd if=/dev/hda of=/dev/fd0 bs=512 count=1</code>	make a copy of MBR (Master Boot Record) to floppy

<code>dd if=/dev/fd0 of=/dev/hda bs=512 count=1</code>	restore MBR from backup copy saved to floppy
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CDROM	
<code>cdrecord -v gracetime=2 dev=/dev/cdrom -eject blank=fast -force</code>	clean a rewritable cdrom
<code>mkisofs /dev/cdrom > cd.iso</code>	create an iso image of cdrom on disk
<code>mkisofs /dev/cdrom gzip > cd_iso.gz</code>	create a compressed iso image of cdrom on disk
<code>mkisofs -J -allow-leading-dots -R -V "Label CD" -iso-level 4 -o ./cd.iso data_cd</code>	create an iso image of a directory
<code>cdrecord -v dev=/dev/cdrom cd.iso</code>	burn an ISO image
<code>gzip -dc cd_iso.gz cdrecord dev=/dev/cdrom -</code>	burn a compressed ISO image
<code>mount -o loop cd.iso /mnt/iso</code>	mount an ISO image
<code>cd-paranoia -B</code>	rip audio tracks from a CD to wav files
<code>cd-paranoia -- "-3"</code>	rip first three audio tracks from a CD to wav files
<code>cdrecord --scanbus</code>	scan bus to identify the channel scsi
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Networking (LAN and WiFi)	
<code>ifconfig eth0</code>	show configuration of an ethernet network card
<code>ifup eth0</code>	activate an interface 'eth0'
<code>ifdown eth0</code>	disable an interface 'eth0'
<code>ifconfig eth0 192.168.1.1 netmask 255.255.255.0</code>	configure IP Address
<code>ifconfig eth0 promisc</code>	configure 'eth0' in promiscuous mode to gather packets (sniffing)
<code>dhclient eth0</code>	active interface 'eth0' in dhcp mode
<code>route -n</code>	show routing table
<code>route add -net 0/0 gw IP_Gateway</code>	configura default gateway
<code>route add -net 192.168.0.0 netmask 255.255.0.0 gw 192.168.1.1</code>	configure static route to reach network '192.168.0.0/16'
<code>route del 0/0 gw IP_gateway</code>	remove static route
<code>echo "1" > /proc/sys/net/ipv4/ip_forward</code>	activate ip routing
<code>hostname</code>	show hostname
<code>host www.linuxguide.it</code>	lookup hostname to resolve name to ip address and viceversa
<code>ip link show</code>	show link status of all interfaces
<code>mii-tool eth0</code>	show link status of 'eth0'
<code>ethtool eth0</code>	show statistics of network card 'eth0'
<code>netstat -tup</code>	show all active network connections and their PID

netstat -tupl	show all network services listening on the system and their PID
tcpdump tcp port 80	show all HTTP traffic
iwlist scan	show wireless networks
iwconfig eth1	show configuration of a wireless network card
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Microsoft Windows networks (SAMBA)	
nbtscan ip_addr	netbios name resolution
nmblookup -A ip_addr	netbios name resolution
smbclient -L ip_addr/hostname	show remote shares of a windows host
smbget -Rr smb://ip_addr/share	like wget can download files from a host windows via smb
mount -t smbfs -o username=user,password=pass //winclient/share /mnt/share	mount a windows network share
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IPTABLES (firewall)	
iptables -t filter -L	show all chains of filtering table
iptables -t nat -L	show all chains of nat table
iptables -t filter -F	clear all rules from filtering table
iptables -t nat -F	clear all rules from table nat
iptables -t filter -X	delete any chains created by user
iptables -t filter -A INPUT -p tcp --dport telnet -j ACCEPT	allow telnet connections to input
iptables -t filter -A OUTPUT -p tcp --dport http -j DROP	block HTTP connections to output
iptables -t filter -A FORWARD -p tcp --dport pop3 -j ACCEPT	allow POP3 connections to forward chain
iptables -t filter -A INPUT -j LOG --log-prefix "DROP INPUT"	logging sulla chain di input Logging on chain input
iptables -t nat -A POSTROUTING -o eth0 -j MASQUERADE	configure a PAT (Port Address Traslation) on eth0 masking outbound packets
iptables -t nat -A PREROUTING -d 192.168.0.1 -p tcp -m tcp --dport 22 -j DNAT --to-destination 10.0.0.2:22	redirect packets addressed to a host to another host
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Monitoring and debugging	
top	display linux tasks using most cpu
ps -eafw	displays linux tasks
ps -e -o pid,args --forest	displays linux tasks in a hierarchical mode
pstree	mostra un albero dei processi sistema Shows a tree system processes
kill -9 ID_Processo	force closure of the process and finish it
kill -1 ID_Processo	force a process to reload

	configuration
<code>lsof -p \$\$</code>	display a list of files opened by processes
<code>lsof /home/user1</code>	displays a list of open files in a given path system
<code>strace -c ls >/dev/null</code>	display system calls made and received by a process
<code>strace -f -e open ls >/dev/null</code>	display library calls
<code>watch -n1 'cat /proc/interrupts'</code>	display interrupts in real-time
<code>last reboot</code>	show history reboot
<code>lsmod</code>	display kernel loaded
<code>free -m</code>	displays status of RAM in megabytes
<code>smartctl -A /dev/hda</code>	monitoring reliability of a hard-disk through SMART
<code>smartctl -i /dev/hda</code>	check if SMART is active on a hard-disk
<code>tail /var/log/dmesg</code>	show events inherent to the process of booting kernel
<code>tail /var/log/messages</code>	show system events

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Others useful commands

<code>apropos ...keyword</code>	display a list of commands that pertain to keywords of a program , useful when you know what your program does, but you don't know the name of the command
<code>man ping</code>	display the on-line manual pages for example on ping command
<code>whatis ...keyword</code>	displays description of what a program does
<code>mkbootdisk --device /dev/fd0 `uname -r`</code>	create a boot floppy
<code>gpg -c file1</code>	encrypt a file with GNU Privacy Guard
<code>gpg file1.gpg</code>	decrypt a file with GNU Privacy Guard
<code>wget -r www.example.com</code>	download an entire web site
<code>wget -c www.example.com/file.iso</code>	download a file with the ability to stop the download and resume later
<code>echo 'wget -c www.example.com/files.iso' at 09:00</code>	start a download at any given time
<code>ldd /usr/bin/ssh</code>	show shared libraries required by ssh program
<code>alias hh='history'</code>	set an alias for a command - hh = history

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