

System

GENERAL SYSTEM UTILITIES

ftp <i>hostname</i>	File Transfer Protocol (transfer file to/from remote host (name or TCPP))
man <i>command</i>	list manual information for a command
rlogin <i>hostname -l username</i>	Connect local terminal to a remote system
su <i>username</i>	change to another (super)user
telnet <i>hostname port</i>	Communicate with another remote host (as rlogin)

COMMAND LINE CONSOLE (KSH)

alias <i>name=value</i>	create a pseudonym 'name' for a command 'value'
Esc k,j	scroll the command history (-,+)
/	root directory
./	current directory
../	parent directory
-	last directory
~	home directory (as \$HOME)
clear	clear screen
Ctrl +c	exit from a shell program
exit	exit from the command line console
Esc Esc	command completion for long commands
stty -a	displays terminal settings
stty erase Ctrl Shift H	set erase to the shift BACKSPACE (^H)

SYSTEM INFORMATION

bdf grep dir	display disk allocation in % for a 'dir'
date options	display or set system date
df -k dir	display disk free space in kB and % for a 'dir'
du -ak dir	display directory usage in kB for a 'dir'
env	display environment variables
finger	users information lookup program
groups user	shows the groups to which the user belongs
netstat -a	show network status
pwd	prints working directory
tail -lines N /var/log/messages	display last N lines from the log-messages file

tail -f nohup.out	display periodically 10 last lines from the log-nohup.out file
top	display top CPU processes
vmstat 5	display process statistics, 5 sec. interv.
uname -a	print information about the current system
which program	locate a program path on the system
who	who is on the system?
whoami	print current user
users	print current users on the system

PROCESS HANDLING

ps -ef	complete process status report
ps -fu user (uid)	process status report for the user
kill (-9) pid	terminate job (brutal) 'pid'
killall programname	terminate job 'programname'
ipcs -a	displays all information about interprocess communication
ipcs grep user (uid)	displays information about ipcs for the 'user'
ipcrm -q <ipcID> -m <ipcID> -s <ipcID>	remove a message queue, semaphore set, or shared memory

FILE HANDLING

cat filename	display file 'filename' on terminal
cd path/directoryname	change directory
chgrp newgroup filename	change group ownership for a 'filename'
chmod mode filename	change permission mode
chown new-owner filename	change user ownership for a 'filename'
cksum filename	print file CRC checksum and sizes
cp filename1 filename2	copy 'filename1' to 'filename2'
diff filename1 filename2	list of changes between files
find / -name 'filename' -print	find 'filename' in the path /
grep string filename	search string in a file(s)
gunzip filename.gz	restore to an original 'filename'
gzip filename	compress to a compressed 'filename.gz'
less filename	display 'filename' on terminal

ln -s filename1 filename2	make symbolic links between files2 -> 1
ls -la	list all files in directory in long format
mkdir dirname	make directory 'dirname'
more filename	display 'filename' on terminal
mv filename1 filename2	rename 'filename1' to 'filename2'
od filename1 filename2	octal dump of 'filename1' 'filename2'
rm filename	remove 'filename'
rmdir -rf dirname	remove directory 'dirname'
touch filename	create or update 'filename'
tar	create tape archives and add or extract files
tee some-command tee file	write command output to the 'tee file'
xd filename1 filename2	hex dump of 'filename1' 'filename2'

POWER TOOLS

find . -type f -print xargs grep -l string	Search <i>string</i> in files in subdirectories
ll -aR dir	List all files in <i>dir</i> and subdirs recursively
ll -rt dir	List all files in <i>dir</i> , the newest file last
ls grep -E '[Aa]+[0-9]+.txt'	list all files, grep with reg ex.
rm -i `ls grep fl`	Delete all files with name contains <i>fl</i>
find `perl -e 'print "@INC" ` -name '*.pm' -print	List all installed Perl modules
cat /etc/passwd sort	List users on the system

IMPORTANT DIRECTORIES

(FILESYSTEM HIERARCHY STANDARD)	
/	root directory, begin of directory tree
/bin	important commands (also for system boot)
/boot	files used during booting
/dev	system device files
/etc	system configuration files
/etc/init.d	boot scripts
/etc/rc.d	boot scripts for different run level
/etc/X11	X Window configuration files
/home	user private directories
/lib	standard shared library files

/lib/modules loadable kernel modules
/mnt mount point for mounting a filesystem
/opt add-on application software packages
/root home directory for the root user
/sbin essential system binaries
/tmp temporary files
/usr secondary hierarchy
/usr/bin user commands
/usr/include C header files
/usr/lib libraries
/usr/local local hierarchy
/usr/local/bin local binaries
/usr/local/games local games
/usr/local/lib local libraries
/usr/local/man local online manuals
/usr/local/sbin local systems binaries
/usr/local/share local architecture-independent data
/usr/sbin non-vital system binaries
/usr/share architecture-independent data
/var variable data
/var/log variable data
 see also www.pathname.com

STANDARD INSTALLATION OF A PACKAGE

- Preparation of the installation files:

```

tar cvf filename.tar dir
    put all files from the 'dir' to the 'filename.tar' file.
tar tvf filename.tar
    list files in the archive 'filename.tar' file.
gzip filename.tar
    compress archive 'filename.tar' to the
    'filename.tar.gz'
    
```

- Installation into a place holder directory 'place_holder':

```

cp filename.tar.gz .../place_holder
cd .../place_holder
gunzip filename.tar.gz
    uncompress archive 'filename.tar.gz' to
    the 'filename.tar'
tar xvf filename.tar
    extract files from the archive
    'filename.tar'
    
```

ftp

FTP COMMANDS

!	debug	mget	put	size
\$	dir	mkdir	pwd	status
account	disconnect	mls	quit	struct
append	form	mode	quote	system
ascii	get	modtime	recv	sunique
bell	glob	mput	reget	tenex
binary	hash	newer	rstatus	trace
bye	help	nmap	rhel	type
case	idle	nlist	rename	user
cd	image	ntrans	reset	umask
cdup	lcd	open	restart	verbose
chmod	ls	prompt	rmdir	?
close	macdef	proxy	runique	
cr	mdelete	sendport	send	
delete	mdir	passive	site	

help command print 'command' description

telnet

TELNET COMMANDS

close	close current connection
display	display operating parameters
mode	try to enter line-by-line or character-at-a-time mode
open	connect to a site
quit	exit telnet
send	transmit special characters ('send ?' for more)
set	set operating parameters ('set ?' for more)
status	print status information
toggle	toggle operating parameters ('toggle ?' for more)
z	suspend telnet
!	shell escape
?	print help information

UNIX

REFERENCE and ADMINISTRATION CARD

(Keep It Simple&Stupid!)

Useful links:

<http://www.unixguide.net>

Unix Guide (all systems)

<http://en.wikipedia.org/wiki/Unix>

Unix Wikipedia encyclopedia

<http://www.unix.com>

Unix Forums

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