

Unix Refcard- kom.aau.dk

Basic Unix

If you ever need help in unix type:

man topic

and you will get a on-line help on the topic

If you know the command you can often type:

bash -help, where bash is the command.

cd dir	Change directory
pwd	Print working directory
mkdir dir	Create directory
mv oldfile newfile	Rename file or dir
rm file1 [file2]	Remove file(s)
rmdir dir	Remove directory
ls	List directory
ls -a	Display hidden files
ls -l	Display in long format
du -k dir	Disk usage
bc	Simple console calc

Process managment

w	Check who is doing what
top	Process list
who	Who is on-line on this machine
ps -Af	Print all processes on this machine
kill PID	Terminate a process
pkill processname	Terminate a process name
nice	Set priority of process. i.e. nice -n 20 matlab &

Running programs

To start a program i the current folder type: **./myprogram**
or **sh ./myprogram**.

To send a running program to the background, press **CTRL + Z**.
The program will stop. If you type **bg** the program will be sent to
background, otherwise type **fg** to continue.

To recall the program type **fg**.

Screen

screen	Create multiple screens one a physical screen
screen -ls	List screens
screen -r number	Reattach screen

Keybindings

Ctrl + A & C	Create new screen
Ctrl + A & Space	Navigate to next screen
Ctrl + A & A	Jump to last screen
Ctrl + A & X	Lock Screen
Ctrl + A & K	Kill Screen
Ctrl + A & Z	Detach screen
Ctrl + A & “	List active screens

Advanced Unix

cat filename	Display content of a file
less filename	Browse og page through a text file
uname -a	Print system name
last -n 10	Print 10 last logins
type commandname	show the location of commandname
grep	search for a string in a file
tail	display the last few lines of a file
head	display first few lines of files
tee	read fom stdin and write stdout + file
awk	pattern scanning and processing language
sed	stream editor
perl	practical Extraction and Report Language
sort	sort, merge, or sequence check text files

Bash

.bash_profile	Script that execuress once at login
.bashrc	Script that executes by every shell start
.bash_history	Console history

Shortcuts:

Ctrl + R	Reverse search in history
Ctrl + A	Jump to start of line
Ctrl + E	Jump to end of line
Ctrl + K	Cut line
Ctrl + Y	Paste line
Ctrl + L	Clear screen

Printing

selectprinter	Select a default printer
lpr [-Pprintername] filename	Print a filename
lpq [Pprintername]	Query printer queue
lprm [-Pprintername] jobnr	Remove printing job
a2ps -P<printername>	
-P(printername)	(printername) = name of the printer
-1	One page on one side
-2	Two pages on one side
-(N)	N pages on one side (1.2.4.9...NxN)
-sides=2	Duplex printing
-landscape	Print in landscape mode
-portrait	Print in portrait mode

File archive and compression

Create compressed

tar cvf file.tar file1 [file2 ...]	Wrap files
tar jcvf file.tar.bz2 file1 [file2 ...]	with bzip2
tar zcvf file.tar.gz file1 [file2 ...]	with gzip
zip file.zip	Create zip file
bzip2 file.bz2 file1 [file2 ...]	Slow & effective
gzip file.gz file 1 [fiel2 ...]	Fast
<i>Note: On solaris tar is gtar</i>	

Extract compressed

tar xvf file.tar
tar jxvf file.tar.bz2
tar zxvf file.tar.gz2
unzip file.zip
bunzip file.bz2
gunzip file.gz

Text editors

vi Advanced console editor
pico A simple texteditor
emacs Extensive interactive text editor
xemacs Alternative emacs

Office

soffice MS Office clone (Star office)
abiword MS Word clone
gnumeric MS Excell clone

Project tools

latex Document preparation system
xfig Nice tool for illustrations
dia Diagram drawing
convert in.jpg out.ps Convert graphics
make Compiles source code from Makefile script
gcc GNU C-compiler
dos2unix file1 file2 strips CR's out of dos text files (Linux only)
unix2dos file1 file2 adds CR's to unix text files (Linux only)
matlab Matrix laboratory
maple Interactive computer algebra system
xmaple X11 version of maple
labview Development environment for test,
measurement, and control applications
a2ps infile.jpg -o outfile.ps Convert any file to postscript

Internet

mozilla Browser, News, Email, IRC, etc.
ssh host -l user Secure shell
pine Console mail reader
irc Console irc client
lftp Console ftp program
gaim ICQ, Messenger client
lynx Text based WWW browser
rsync Synchronise files

AFS

klog username Login to AFS
tokens Show you afs tokens
fs ls alias for: fs list acl
fs sa aliss for: fs setacl
fs listacl dir Show permissions of dir
fs listacl file Show permissions of files
fs setacl dir user perms Set permissions
fs setacl doc pnto03 rlidwk fs setacl doc pnto03:friends
fs setacl dir user:group perm Set permissions user/group
pts help Get help to fs
pts help Get help to pts
pts membership user:group List group members
pts membership user List which groups user are memer of
pts creategroup user:newgroup Create group
pts adduser username group Add user to a group
e.g. pts adduser pnto03 pnto03:friends
pts removeuser user group Remove user from group
e.g. pts removeuser pnto03 pnto03:friends
pts delete group Delete group
e.g. pts delete pnto03:friends

Access control rights

r	read	list, read files
l	lookup	list files
i	insert	add/copy/move new files and subdirectories
d	delete	remove files and subdirectories
w	write	modify
k	lock	run programs that require file-locking
a	admin	change the ACL for the dir & files
	Access package: write read all none	Permissions: rlidwk rl rlidwka none