

UNIX / LINUX CHEAT SHEET

presented by the Student Computing Association

FILE COMMANDS

ls	Directory listing
ls -al	Formatted listing with hidden files
cd dir	Change directory to dir
cd	Change to home
pwd	Show current directory
mkdir dir	Create a directory dir
rm file	Delete file
rm -r dir	Delete directory dir
rm -f file	Force remove file
rm -rf dir	Force remove directory dir
cp file1 file2	Copy file1 to file2
cp -r dir1 dir2	Copy dir1 to dir2; create if doesn't exist
mv file1 file2	Rename or move file1 to file2
ln -s file link	Create symbolic link to file
touch file	Create or update file
cat > file	Places standard input into file
more file	Output the contents of file
head file	Output the first 10 lines of file
tail file	Output the last 10 lines of file
tail -f file	Output contents as it grows

PROCESS MANAGEMENT

ps	Display all active processes
top	Display all running processes
kill pid	Kill process id pid
killall proc	Kill all processes named proc
bg	List stopped/background jobs; resume stopped job in background
fg	Brings most recent job to foreground
fg a	Brings job a to the foreground

FILE PERMISSIONS

chmod octal file	Change permissions of file. 4=read, 2=write, 1=execute. e.g. chmod 777 (rwx all), chmod 755 (rwx owner, rx group/world)
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SSH

ssh user@host	Connect to host as user
ssh -p port user@host	Connect on port as user
ssh-copy-id user@host	Add your key to host for passwordless login

SEARCHING

grep pattern files	Search for pattern in files
grep -r pattern dir	Search recursively for pattern in dir
command grep pattern	Search for pattern in command output
locate file	Find all instances of file

SYSTEM INFO

date	Show the current date and time
cal	Show this month's calendar
uptime	Show current uptime
w	Display who is online
whoami	Who you are logged in as
finger user	Display information about user
uname -a	Show kernel information
cat /proc/cpuinfo	CPU information
cat /proc/meminfo	Memory information
man command	Show the manual for command
df	Show disk usage
du	Show directory space usage
free	Show memory and swap usage
whereis app	Show possible locations of app
which app	Show which app will be run by default

COMPRESSION

tar cf file.tar files	Create a tar named file.tar containing files
tar xf file.tar	Extract the files from file.tar
tar czf file.tar.gz files	Create a tar with Gzip compression
tar xzf file.tar.gz	Extract a tar using Gzip
tar cjf file.tar.bz2	Create a tar with Bzip2 compression
tar xjf file.tar.bz2	Extract a tar using Bzip2
gzip file	Compresses file and renames it to file.gz
gzip -d file.gz	Decompresses file.gz back to file

NETWORK

ping host	Ping host and output results
whois domain	Get whois information for domain
dig domain	Get DNS information for domain
dig -x host	Reverse lookup host
wget file	Download file
wget -c file	Continue a stopped download

INSTALLATION

./configure	Install from source (step 1)
make	Install from source (step 2)
make install	Install from source (step 3)
dpkg -i pkg.deb	Install a package (Debian)
rpm -Uvh pkg.rpm	Install a package (RPM)

SHORTCUTS

Ctrl+C	Halts the current command
Ctrl+Z	Stops the current command; resume with fg/bg
Ctrl+D	Log out of current session, similar to exit
Ctrl+W	Erases one word in the current line
Ctrl+U	Erases the whole line
Ctrl+R	Type to bring up a recent command
!!	Repeats the last command
exit	Log out of current session
*	Use with extreme caution