

Command	Description(s)	Example(s)
Connections		
Solaris	sf3.comp.nus.edu.sg sunfire.comp.nus.edu.sg sunfire-r.comp.nus.edu.sg [from home without VPN]	
Linux	tembusu2.comp.nus.edu.sg	
Useful Commands		
clear	Clear the screen	
history	Display a list of index and commands previously used. !cd - execute the last cd command	!682 !!s !gcc
General Help		
man	Find and display reference manual man [OPTIONS]... [name]... OPTIONS: ▪ -a : All manual page matching name ▪ -l: List all manual pages found matching name	man signal man -a signal
whatis	Gives a short description of the command	whatis ls
--help	Give syntax of command [command] --help	du --help
help	Gives a list of commands Gives extra information of the command	help help pwd
General/System Commands		
su	Become super user or another user su [-] [username [arg ...]]	su
date	Shows the server date/time	date
df	Display the disk space in file system df [OPTION]... [FILE]...	df -k CS2106
du	Summarise disk usage by user du [OPTION]... [FILE]...	du
uname	Print system information	uname -a

Command	Description(s)	Example(s)
exit	Terminate the session	exit
File System Commands		
mount	Connect filesystem mount [-fnrww] [-t vfstype] [-o options] device dir	mount /mnt/thumb
umount	Disconnect filesystem	umount /mnt/thumb
ls	List files and directories ls -lRaAdCxmlogrtucpFbqisfL [files] Options: ▪ -a Show all files include '.' Starters ▪ -l long format ▪ -d Show directories	ls -al ls -l ls -l ~/cs1101
cd	Change directory	cd cs1101 cd ~
pwd	Print work directory	
rm	Delete a file rm [OPTION]... FILE... Options: ▪ -f never prompt ▪ -v verbose mode ▪ -R recursive removal of folders / files	rm -R foldername rm -v index.txt
mv	Move/ Rename files mv [-f] [-i] f1 ... fn d1	mv a.txt b.txt mv a.txt cs1101
cp	Copy files and directories cp [-f] [-i] [-p] f1 ... fn d1 Options: ▪ -R recursive copy of folders ▪ -f remove existing dest files	cp a.txt ~

Command	Description(s)	Example(s)
	▪ -v verbose	
mkdir	Create directory	mkdir folder1
rmdir	Remove directory	rmdir folder1
Permissions Settings		
chmod	<p>Change the access permission of file/directory.</p> <p><u>Type One</u></p> <p>3 types of users: owner, group, others</p> <p>Full Access: 7(Owner)7(Group)7(Others)</p> <p>execute permission = 1</p> <p>write permission = 2</p> <p>write and execute (1+2) = 3</p> <p>read permission = 4</p> <p>read and execute (4+1) = 5</p> <p>read and write (4+2) = 6</p> <p>read, write and execute (4+2+1) = 7</p> <p><u>Type Two</u></p> <p>u = owner, g = group, a = others</p> <p>r = read, w = write, x = execute</p>	<p>chmod 755 cs1101</p> <p>chmod a+rx cs1101</p>
groups	Shows what group user belongs to	groups username
id	Shows user identity (uid, gid etc)	id username
	id [-ap] [user]	
Create/Edit/View Files		
pico	PICO editor	pico mytext.txt
emacs	EMACS editor	emacs newlist.txt
vi	<p>VI text editor</p> <p>(when inside vi)</p> <p>- using 'i' inserts</p> <p>- pressing 'escape' and then ':' goes back to</p>	vi name.bat

Command	Description(s)	Example(s)
	<p>command mode.</p> <p>- '/searchstring' searches for 'searchstring' using regular expressions.</p> <p>- ':' followed by 'w' writes</p> <p>- ':' followed by 'wq' writes then quits</p> <p>- ':' followed by 'q' quits.</p> <p>- ':' followed by 'q!' quits regardless of whether changes are made.</p> <p>- ':' followed by 'z' undos.</p>	
cat	Concatenate and display content of file	cat manual.txt
	cat [-usvtebn] [- file] ...	cat manual.txt more
more	Show one screen of content	More manual.txt
less	Similar to more	
head	Show the first 10 lines of content	
tail	Show the last 10 lines of content	
Compressing/tarring Commands		
gzip	Compress or decompress a file	gzip -v bbs.exe
	gzip [-cdfhLnNrtvV19] [-S suffix] [file ...]	gzip -d bbs.exe.gz
Search Commands		
locate	Search the system using an indexed database of files.	locate tmp
	locate [-d path] [--database=path] [--help] pattern...	locate tmp sort
whereis	Locate an application	whereis bash
	whereis [-sbmu] [- -SBM dir ... -f] name...	
find	Search the system without the used of database, slower	find tmp
	Find [path-list] [predicate-list]	find /dev -atime +30 -print
Print Utilities Command		
pusage	Check the printer quota	pusage
lpq	Check the printer queue	lpq -Ppst815

Command	Description(s)	Example(s)
	lpq [-l] [-Pprinter] [user ...] [job ...]	
lpr	Send a Document to print queue lpr [-Pprinter] [file ...]	lpr -Ppst815 tmp.txt
lprm	Remove print request from print queue Lprm [-] [-Pprinter] [[job #] [user] ...]	lprm -Ppst815 yourunixid
Network Commands		
whois	Internet user name directory service Whois [-h host] identifier	
finger	Display information about local and remote users. finger [-bfhilmqsw] [-t l h l,h] [name1 [name2 ...]]	finger username
Mail Commands		
pine	Internet Mail and News	
messages	Display number of messages in INBOX	
Search for staff members		
staff	Provide search for a staff member's email address, room number, tel number.	staff staff username

Metacharacter Description

*	A wild card character that matches any group of characters of any length, allowing a user to specify a large group of items with a short string. For example, to specify all the files that start with 'abc', you use abc*.
?	A wild card character that matches any single character. Thus ls ??? lists files in the current directory whose names are only three characters long, while ls ???.* lists those files with a three letter main name and any extension.
[..]	A set of characters that can be matched. Thus ls [a-c]*.???

Metacharacter	Description
	lists all files that begin with a, b, or c and have a three letter extension and lpr [ad]* prints all files that begin with a or d.
\$	Indicates that the following text is the name of a shell (environment) variable whose value is to be used.
	Separates commands to form a pipe.
<	Redirect the standard input.
>	Redirect the standard output, replace current contents.
>>	Redirect the standard output, appends to current contents.
>&	Redirect the standard output and standard error, replace current contents.
>>&	Redirect the standard output and standard error, appends to current contents.
%	Introduces a job name.
&	Place a process into the background.
()	Encloses a sequence of commands or pipes to be executed as a single command.
!	Precedes a history substitution (see "man history")
;	Separates sequences of commands (or pipes) that are on one line.
&&	Separates two sequences of commands or pipes the second of which is executed only if the first succeeds.
	Separates two sequences of commands or pipes the second of which is executed only if the first fails.
\	Used to "quote" the following metacharacter so it is treated as a plain character, as in *.