

Lab 4

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I emailed Raymond to get my username and password for BC's Web Lab server. I used *ssh username@146.245.252.31* to login to BC server, and it asked me password. I wrote down my username and password in my note so that I can re-connect to the server later.

The followings are some useful commands to find out where programs are located on the machine and access manual pages.

whoami: returns the username of the owner of the current login session.

whatis: provides very brief descriptions of command line programs and other topics related to Unix-like operating systems.

whereis: locates the binary, source code and man page for any specified program.

man: formats and displays the built-in manual pages.

Here are some sample programs:

1. *curl* - transfer a URL.

curl is a tool to transfer data from or to a server, using one of the supported protocols (DICT, FILE, FTP, FTPS, GOPHER, HTTP, HTTPS, IMAP, IMAPS, LDAP, LDAPS, POP3, POP3S, RTMP, RTSP, SCP, SFTP, SMB, SMBS, SMTP, SMTPS, TELNET and TFTP).

2. *wget* - The non-interactive network downloader.

Wget is a command-line utility for downloading files from the web. With Wget, you can download files using HTTP, HTTPS, and FTP protocols. Wget provides a number of options allowing you to download multiple files, resume downloads, limit the bandwidth, recursive downloads, download in the background, mirror a website, and much more.

3. *subversion*

svn is the official command-line client of Subversion. Its functionality is offered via a collection of task-specific subcommands, most of which accept a number of options for fine-grained control of the program's behavior.

4. *awk* - pattern-directed scanning and processing language

5. *Git* - the stupid content tracker.

Git is a fast, scalable, distributed revision control system with an unusually rich command set that provides both high-level operations and full access to internals.

6. *Guile* - The GNU Project Extension Language.

7. *gimp* - an image manipulation and paint program.

8. *Inkscape* - an SVG (Scalable Vector Graphics) editing program.

9. *Ffmpeg* - ffmpeg video converter

10. *Vim/nano/emacs* – text editors

11. *mysql* - the MySQL command-line tool.

12. *sqlite* - SQLite is a relational database management system contained in a C library.

13. *gzip* - compress or expand files.

14. *zip* - package and compress (archive) files.

15. *make* - maintain, update, and regenerate groups of programs.

16. *head* - copy the first part of files.

17. *tail* - copy the last part of a file.

18. *libreoffice* - LibreOffice office suite.

19. *convert* - convert between image formats as well as resize an image.

Here are some useful keyboard shortcuts for text editor:

(From Vim Cheat Sheet - <https://vim.rtorr.com/>)

i - to insert text before the cursor

esc - to exit insert mode

h - move cursor left

j - move cursor down

k - move cursor up

I - move cursor right

H - move to top of screen

M - move to middle of screen

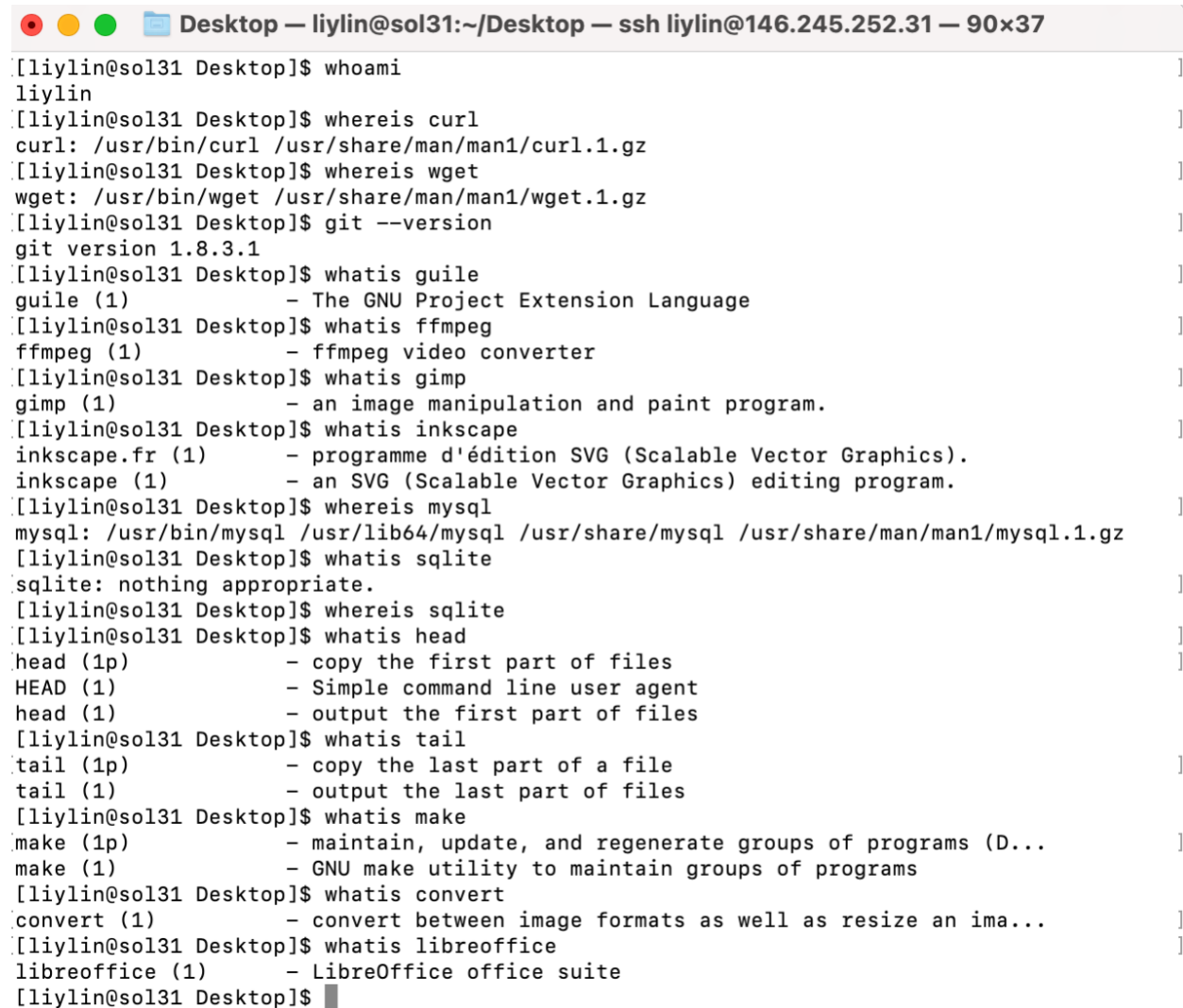
:sav[eas] file - save file as

:clo[se] - close current pane

:ter[minal] - open a terminal window

:wq - Write to file and quit

:q! - Quit without saving changes



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Desktop — liylin@sol31:~/Desktop — ssh liylin@146.245.252.31 — 90x37
[liylin@sol31 Desktop]$ whoami
liylin
[liylin@sol31 Desktop]$ whereis curl
curl: /usr/bin/curl /usr/share/man/man1/curl.1.gz
[liylin@sol31 Desktop]$ whereis wget
wget: /usr/bin/wget /usr/share/man/man1/wget.1.gz
[liylin@sol31 Desktop]$ git --version
git version 1.8.3.1
[liylin@sol31 Desktop]$ whatis guile
guile (1)          - The GNU Project Extension Language
[liylin@sol31 Desktop]$ whatis ffmpeg
ffmpeg (1)         - ffmpeg video converter
[liylin@sol31 Desktop]$ whatis gimp
gimp (1)           - an image manipulation and paint program.
[liylin@sol31 Desktop]$ whatis inkscape
inkscape.fr (1)    - programme d'édition SVG (Scalable Vector Graphics).
inkscape (1)       - an SVG (Scalable Vector Graphics) editing program.
[liylin@sol31 Desktop]$ whereis mysql
mysql: /usr/bin/mysql /usr/lib64/mysql /usr/share/mysql /usr/share/man/man1/mysql.1.gz
[liylin@sol31 Desktop]$ whatis sqlite
sqlite: nothing appropriate.
[liylin@sol31 Desktop]$ whereis sqlite
[liylin@sol31 Desktop]$ whatis head
head (1p)          - copy the first part of files
HEAD (1)           - Simple command line user agent
head (1)           - output the first part of files
[liylin@sol31 Desktop]$ whatis tail
tail (1p)          - copy the last part of a file
tail (1)           - output the last part of files
[liylin@sol31 Desktop]$ whatis make
make (1p)          - maintain, update, and regenerate groups of programs (D...
make (1)           - GNU make utility to maintain groups of programs
[liylin@sol31 Desktop]$ whatis convert
convert (1)        - convert between image formats as well as resize an ima...
[liylin@sol31 Desktop]$ whatis libreoffice
libreoffice (1)    - LibreOffice office suite
[liylin@sol31 Desktop]$
```

Part 1: Connect to BC's Web Lab Linux Server using SSH

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: wq