

- Connect to Lab231
- Basic commands in Unix/Linux
- File editors
- FTP

Outline

- **Connect to Lab231**
- Basic commands in Unix/Linux
- File editors
- FTP

Lab 231 workstation list

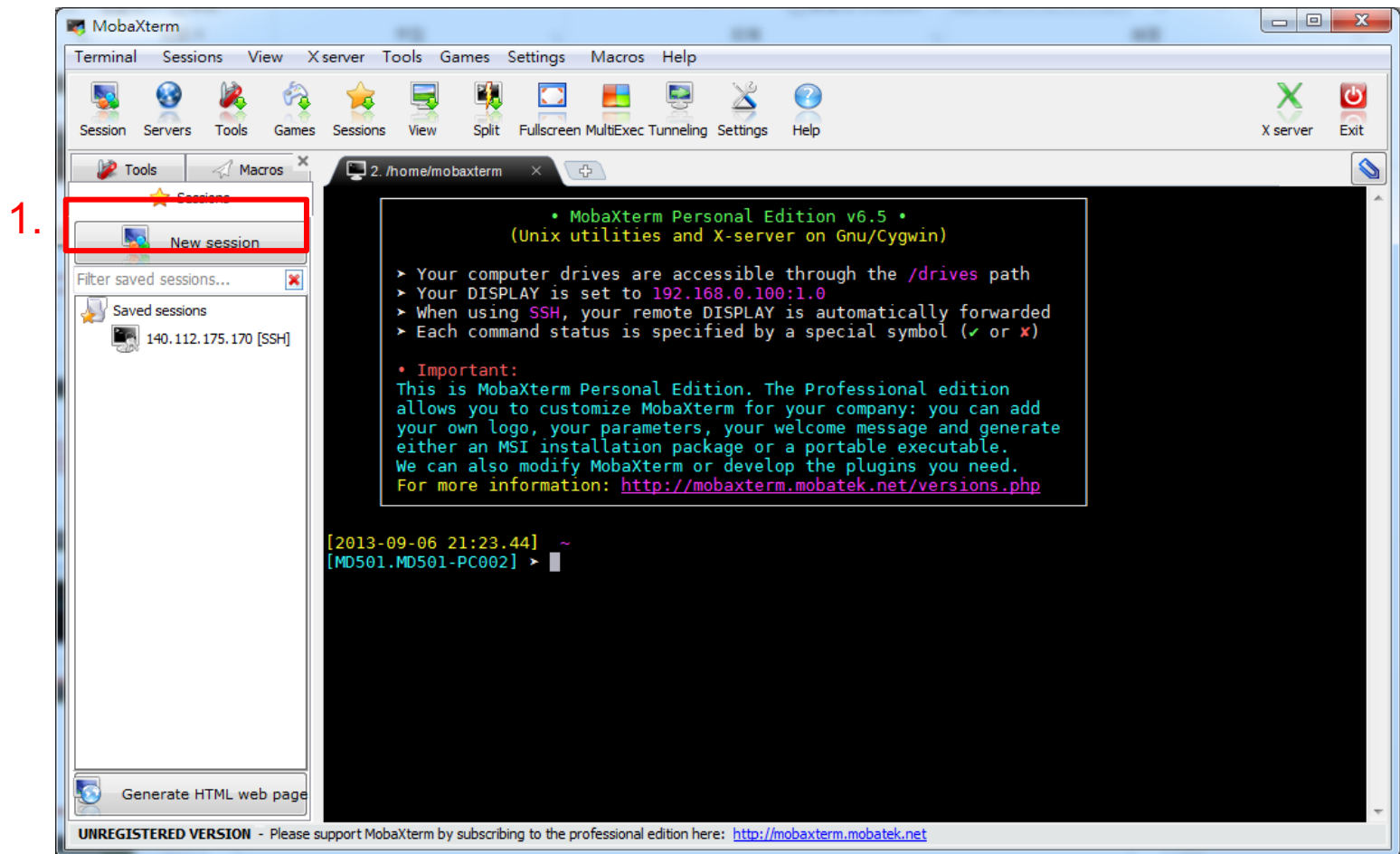
■ <http://cad.ee.ntu.edu.tw>

* IP	Name	Type	CPU	CPU Clock	Memory	OS
59	cad16	IBM X3500	Intel Xeon 64	1.2 GHz * 24	40 GB	CentOS 6.10
60	cad17	IBM x260	Intel Xeon 64	1.2 GHz * 24	32 GB	CentOS 6.10
64	cad21	DELL R620	Intel Xeon 64	2 GHz * 32	48 GB	CentOS 6.9
66	cad23	DELL R620	Intel Xeon 64	2 GHz * 16	96 GB	CentOS 6.9
70	cad27	DELL R640	Intel Xeon Silver 4110	2.1 GHz * 32	128 GB	CentOS 6.10
71	cad28	IBM x336	Intel Xeon 64	3.2 GHz	5 GB	
72	cad29	Dell R730	Intel Xeon 64	2.3GHz * 40	336 GB	CentOS 6.10
73	cad30		Intel Xeon 64	1.6GHz * 16	12 GB	CentOS 6.9
74	cad31	DELL R620	Intel Xeon 64	2.2 GHz * 32	48 GB	CentOS 6.9
76	cad33	IBM X3400	Intel Xeon 64	2.4 GHz * 16	100 GB	CentOS 6.9
77	cad34	IBM X3650	Intel Xeon 64	1.6 GHz * 16	16 GB	CentOS 6.9

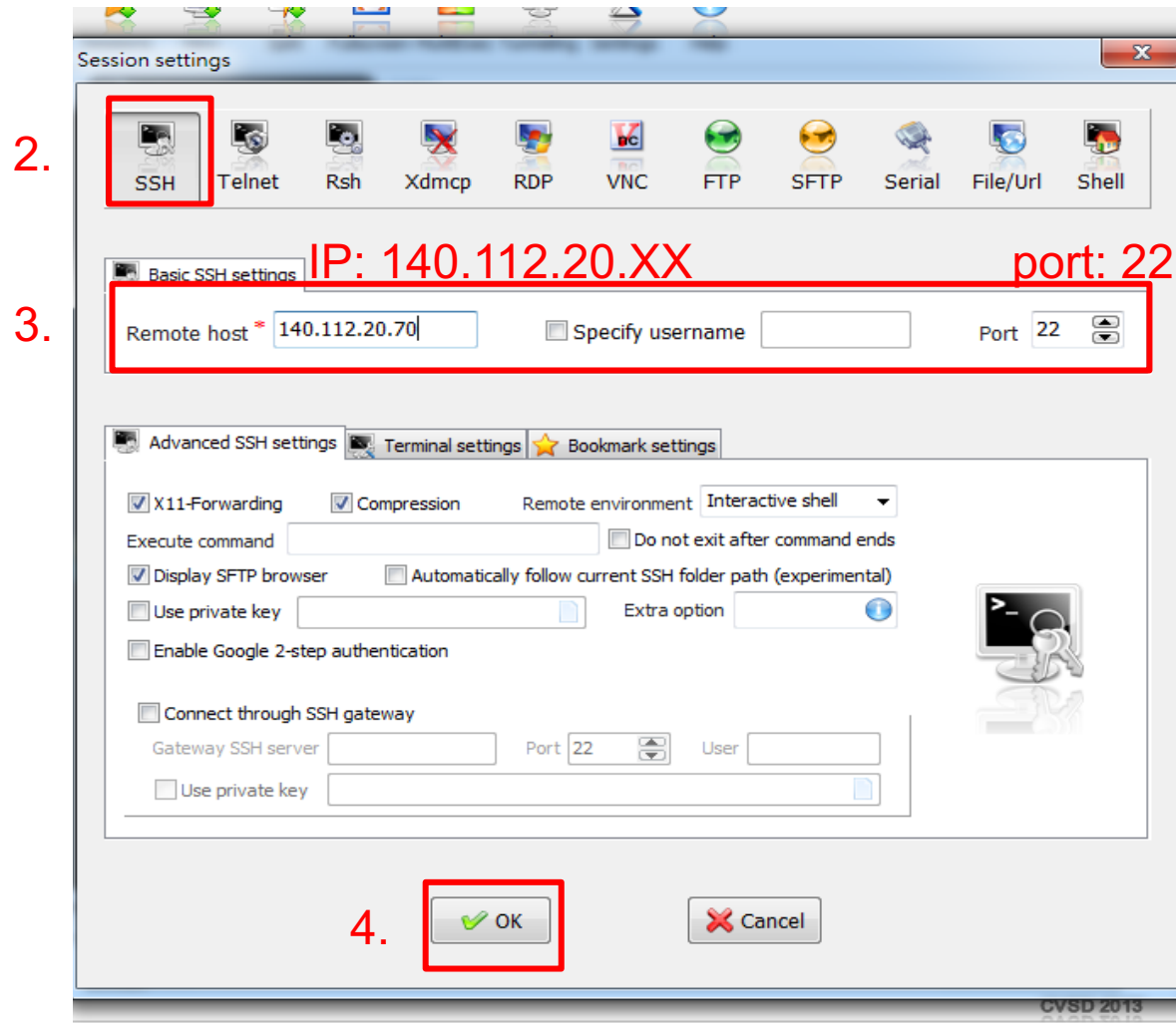
81	cad38	IBM X3650	Intel Xeon 64	2.4 GHz * 16	96 GB	RHEL 5
82	cad39	IBM X3650	Intel Xeon 64	1.2 GHz * 24	40 GB	CentOS 6.9
83	cad40	IBM X3550	Intel Xeon 64	2 GHz * 24	132 GB	CentOS 6.9
84	cad41	IBM X3550	Intel Xeon 64	2.1 GHz * 24	132 GB	CentOS 6
85	cad42	IBM X3500	Intel Xeon 64	2 GHz * 24	32 GB	CentOS 7
86	cad43	IBM X3550	Intel Xeon 64	2.6GHz * 32	148 GB	CentOS 5.11

MobaXterm (1/4)

- MobaXterm = SFTP + SSH + X-server
- New Session

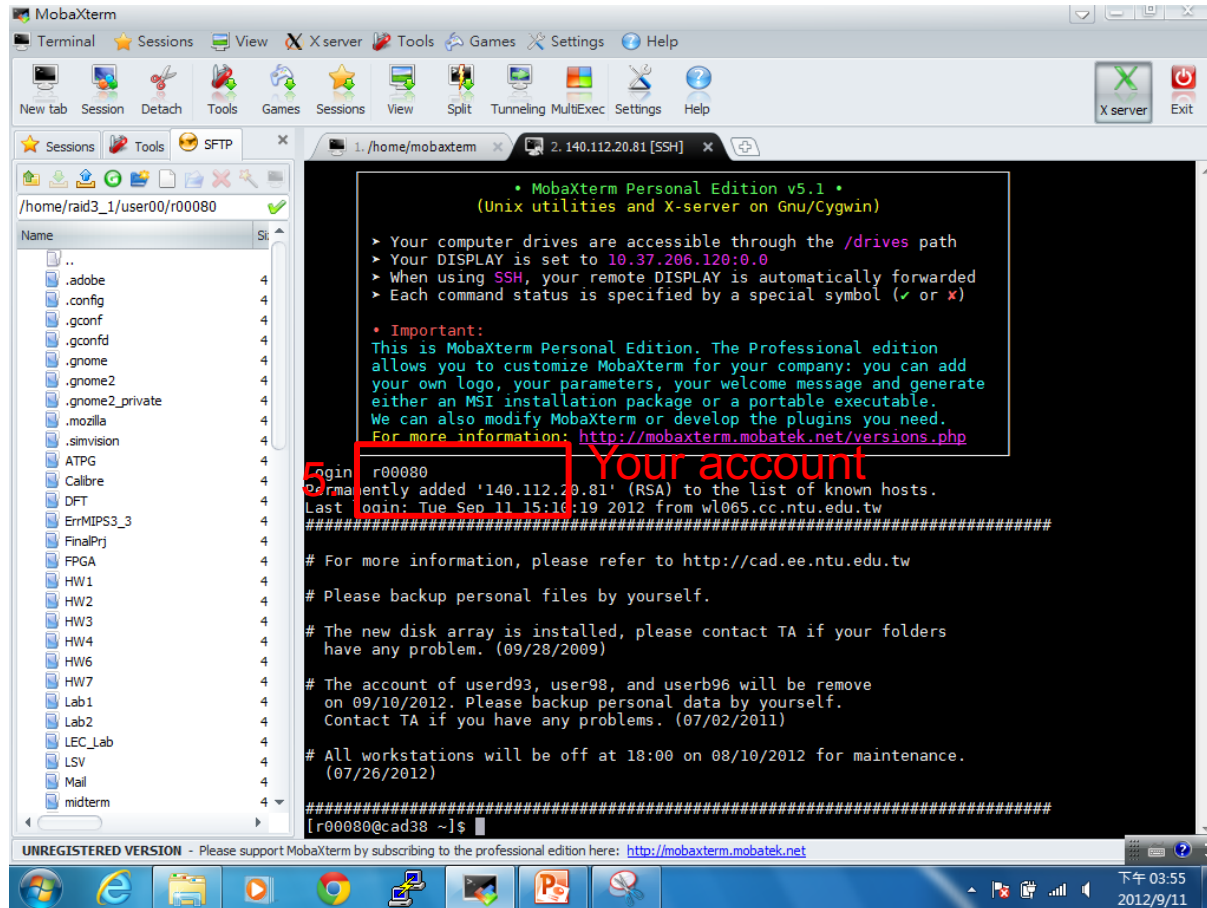


MobaXterm (2/4)



MobaXterm (3/4)

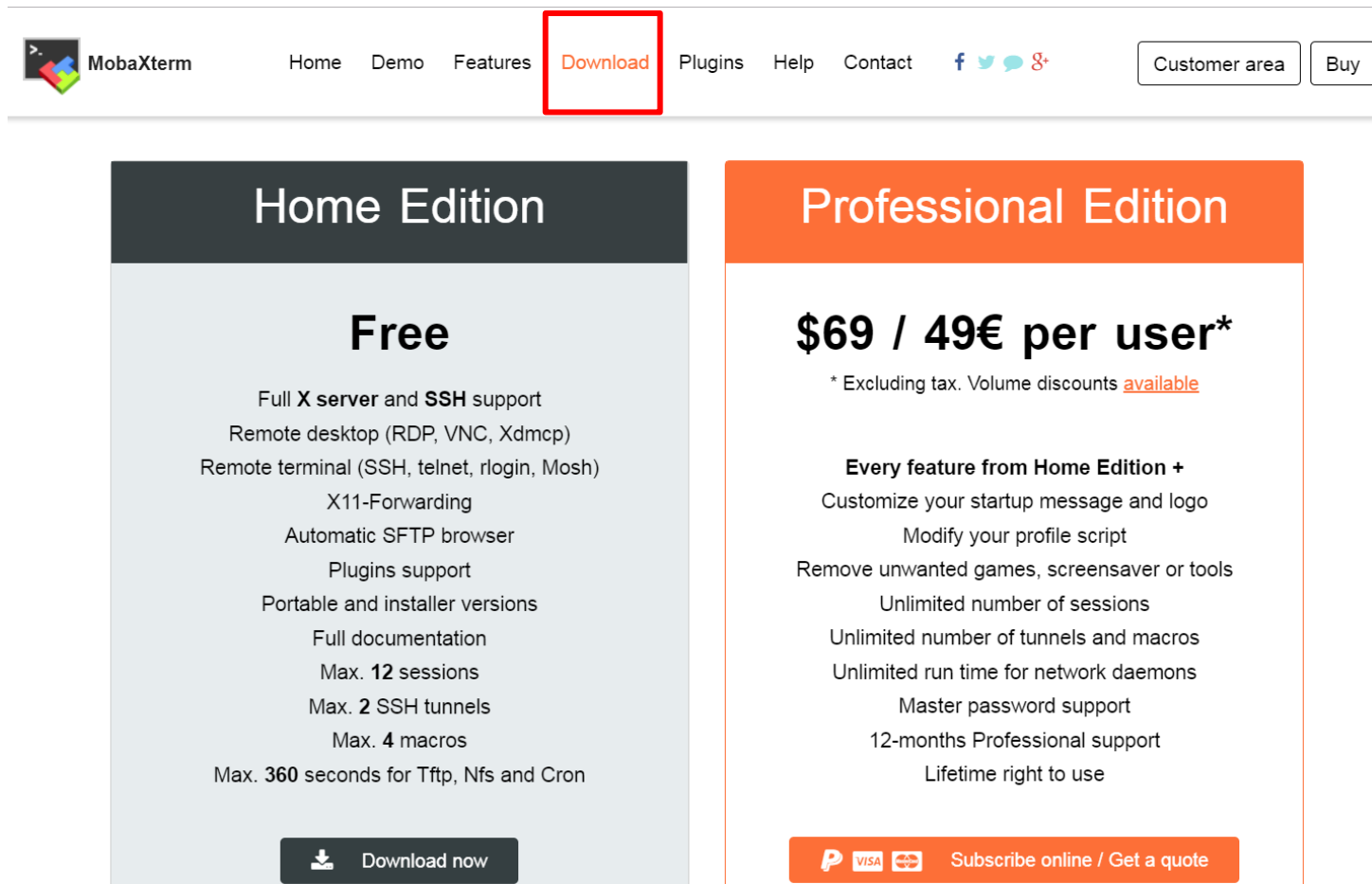
- or enter “ *ssh b02000@140.112.20.70* ” to connect



MobaXterm (4/4)

■ Download :

- ◆ <http://mobaxterm.mobatek.net/>



The screenshot shows the MobaXterm website. The navigation bar at the top includes links for Home, Demo, Features, Download (highlighted with a red box), Plugins, Help, and Contact. There are also social media icons and buttons for Customer area and Buy. Below the navigation bar, there are two main sections: Home Edition and Professional Edition.

Home Edition

Free

- Full X server and SSH support
- Remote desktop (RDP, VNC, Xdmcp)
- Remote terminal (SSH, telnet, rlogin, Mosh)
- X11-Forwarding
- Automatic SFTP browser
- Plugins support
- Portable and installer versions
- Full documentation
- Max. 12 sessions
- Max. 2 SSH tunnels
- Max. 4 macros
- Max. 360 seconds for Tftp, Nfs and Cron

[Download now](#)

Professional Edition

\$69 / 49€ per user*

* Excluding tax. Volume discounts [available](#)

Every feature from Home Edition +

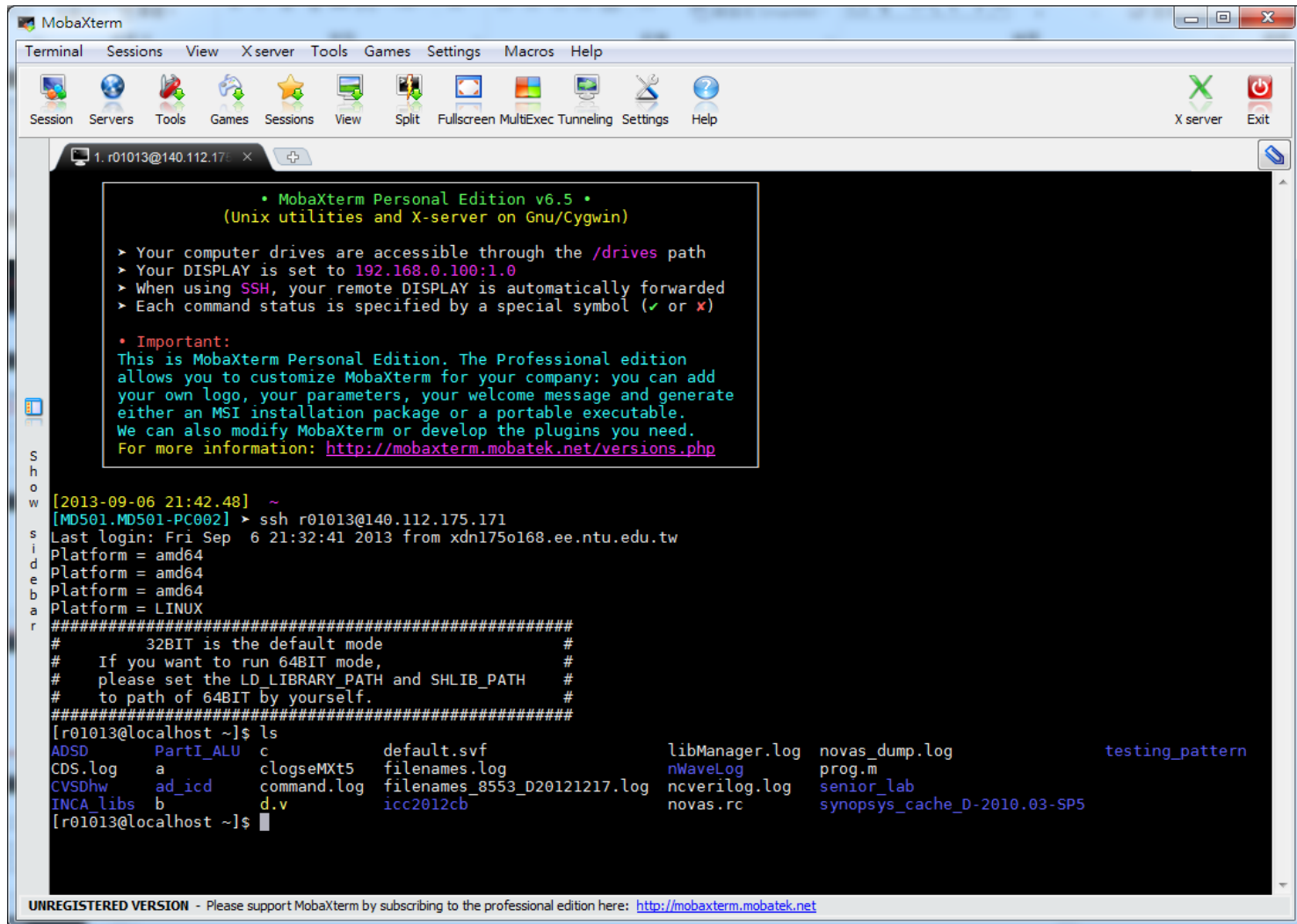
- Customize your startup message and logo
- Modify your profile script
- Remove unwanted games, screensaver or tools
- Unlimited number of sessions
- Unlimited number of tunnels and macros
- Unlimited run time for network daemons
- Master password support
- 12-months Professional support
- Lifetime right to use

[Subscribe online / Get a quote](#)

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Environment



The screenshot displays the MobaXterm Personal Edition v6.5 window. The title bar reads "MobaXterm". The menu bar includes "Terminal", "Sessions", "View", "X server", "Tools", "Games", "Settings", "Macros", and "Help". The toolbar contains icons for Session, Servers, Tools, Games, Sessions, View, Split, Fullscreen, MultiExec, Tunneling, Settings, Help, X server, and Exit. The terminal window shows a session with the user "r01013" on host "140.112.175.171". The terminal output includes a welcome message for MobaXterm, a list of configuration details (drives, DISPLAY, SSH forwarding), and a list of files in the current directory. The files listed are: ADSD, CDS.log, CVSDhw, INCA_libs, PartI_ALU, a, ad_icd, b, c, clogseMXt5, command.log, d.v, default.svf, filenames.log, filenames_8553_D20121217.log, icc2012cb, libManager.log, nWaveLog, ncverilog.log, novas.rc, novas_dump.log, prog.m, senior_lab, and synopsys_cache_D-2010.03-SP5. The terminal prompt is "[r01013@localhost ~]\$".

```
• MobaXterm Personal Edition v6.5 •
(Unix utilities and X-server on Gnu/Cygwin)

> Your computer drives are accessible through the /drives path
> Your DISPLAY is set to 192.168.0.100:1.0
> When using SSH, your remote DISPLAY is automatically forwarded
> Each command status is specified by a special symbol (✓ or ✗)

• Important:
This is MobaXterm Personal Edition. The Professional edition
allows you to customize MobaXterm for your company: you can add
your own logo, your parameters, your welcome message and generate
either an MSI installation package or a portable executable.
We can also modify MobaXterm or develop the plugins you need.
For more information: http://mobaxterm.mobatek.net/versions.php

[2013-09-06 21:42:48] ~
[MD501.MD501-PC002] > ssh r01013@140.112.175.171
Last login: Fri Sep 6 21:32:41 2013 from xdn175o168.ee.ntu.edu.tw
Platform = amd64
Platform = amd64
Platform = amd64
Platform = LINUX
#####
# 32BIT is the default mode #
# If you want to run 64BIT mode, #
# please set the LD_LIBRARY_PATH and SHLIB_PATH #
# to path of 64BIT by yourself. #
#####
[r01013@localhost ~]$ ls
ADSD      PartI_ALU  c          default.svf      libManager.log  novas_dump.log      testing_pattern
CDS.log   a          clogseMXt5  filenames.log    nWaveLog        prog.m
CVSDhw    ad_icd     command.log filenames_8553_D20121217.log ncverilog.log  senior_lab
INCA_libs b          d.v         icc2012cb        novas.rc        synopsys_cache_D-2010.03-SP5
[r01013@localhost ~]$
```

UNREGISTERED VERSION - Please support MobaXterm by subscribing to the professional edition here: <http://mobaxterm.mobatek.net>

Basic commands (1/5)

■ Files

- ◆ `ls` : lists your files
- ◆ `ls -l` : lists your files in long format
- ◆ `ls -a` : lists all files, including the ones whose filename beginning in a dot
- ◆ `cp src-filename dest-filename` : copy files
- ◆ `mv src-filename dest-filename` : move/rename files
- ◆ `rm filename` : delete this file
- ◆ `more filename` : show the content of the file
- ◆ `less filename` : show the content of the file

Basic commands (2/5)

■ Directories

- ◆ `mkdir dirname` : make a new directory
- ◆ `cd dirname` : change directory
- ◆ `cd ..` : go up one directory level from here
- ◆ `cd ~` : go to user's home directory
- ◆ `rm -rf dirname` : remove a directory
- ◆ `mv src-dirname dest-dirname` : move/rename directories

Basic commands (3/5)

■ Compress

- ◆ `tar cvf filename.tar filename/dirname`
- ◆ `tar czvf filename.tar.gz filename/dirname`

■ Decompress

- ◆ `tar xvf filename.tar`
- ◆ `tar xzvf filename.tar.gz`

Basic commands (4/5)

■ Processes

- ◆ `ctrl +c` : kill foreground process
- ◆ `ps` : report processes and their pid numbers
- ◆ `kill pid#`: kill the process with the *pid#*

■ Logout

- ◆ `exit`

■ More options about command

- ◆ `man command-name`: display on-line manual pages

Basic commands (5/5)

■ Reference

◆ Chinese

- http://boson4.phys.tku.edu.tw/UNIX/Unix%20Command/index_basic.htm
- <http://www.lib.cgu.edu.tw/instruction/basiccmd.html>

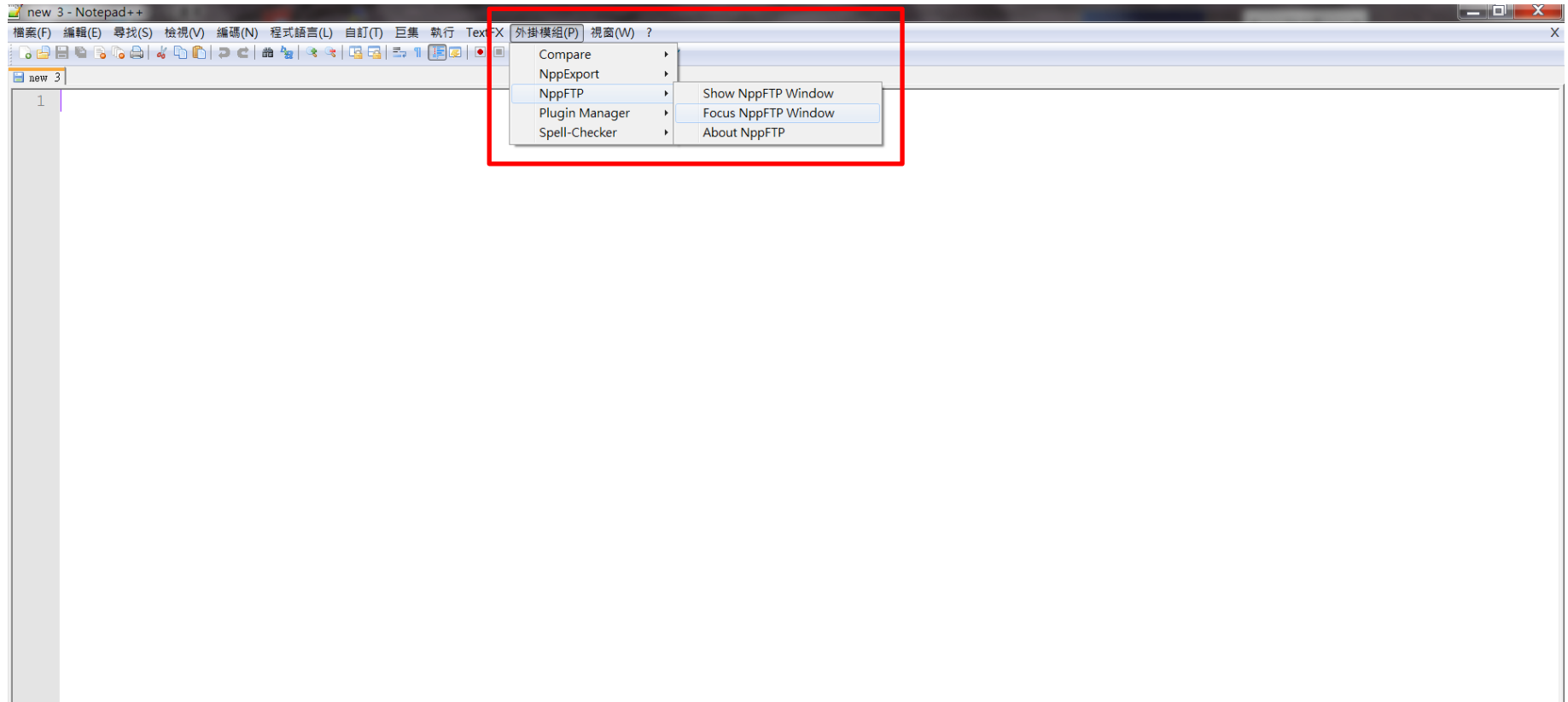
◆ English

- <http://mally.stanford.edu/~sr/computing/basic-unix.html>
- <http://www.math.utah.edu/lab/unix/unix-commands.html>
- <http://www.computerhope.com/unix/overview.htm>

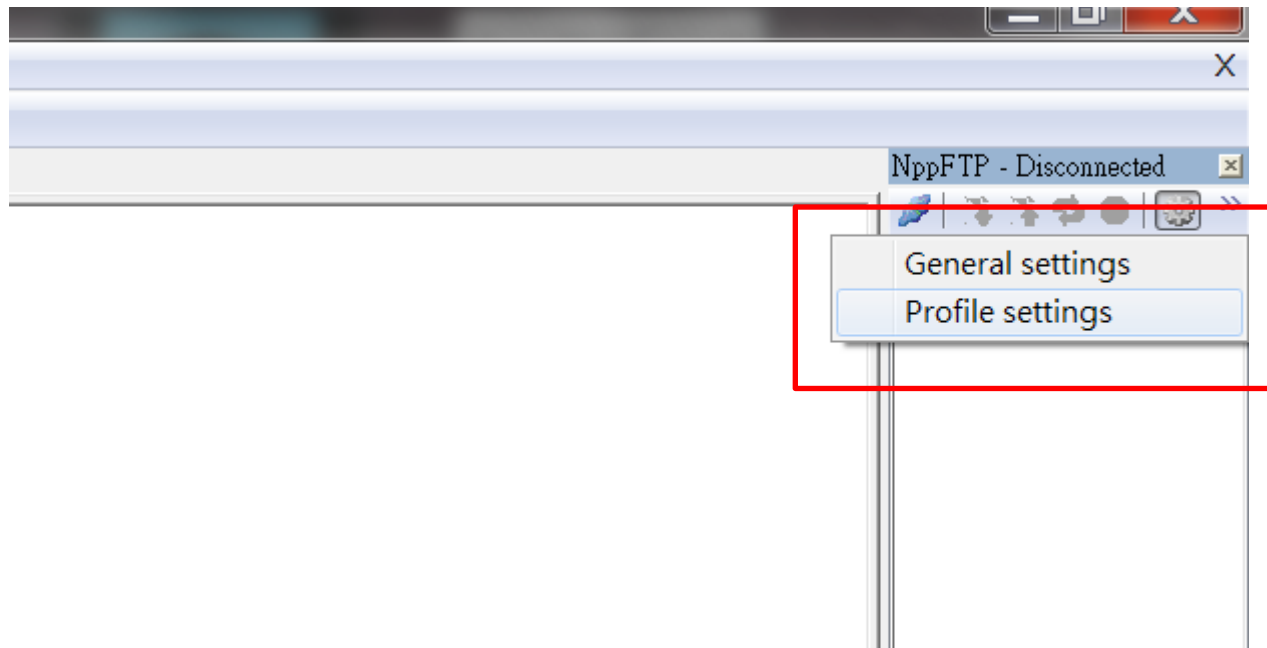
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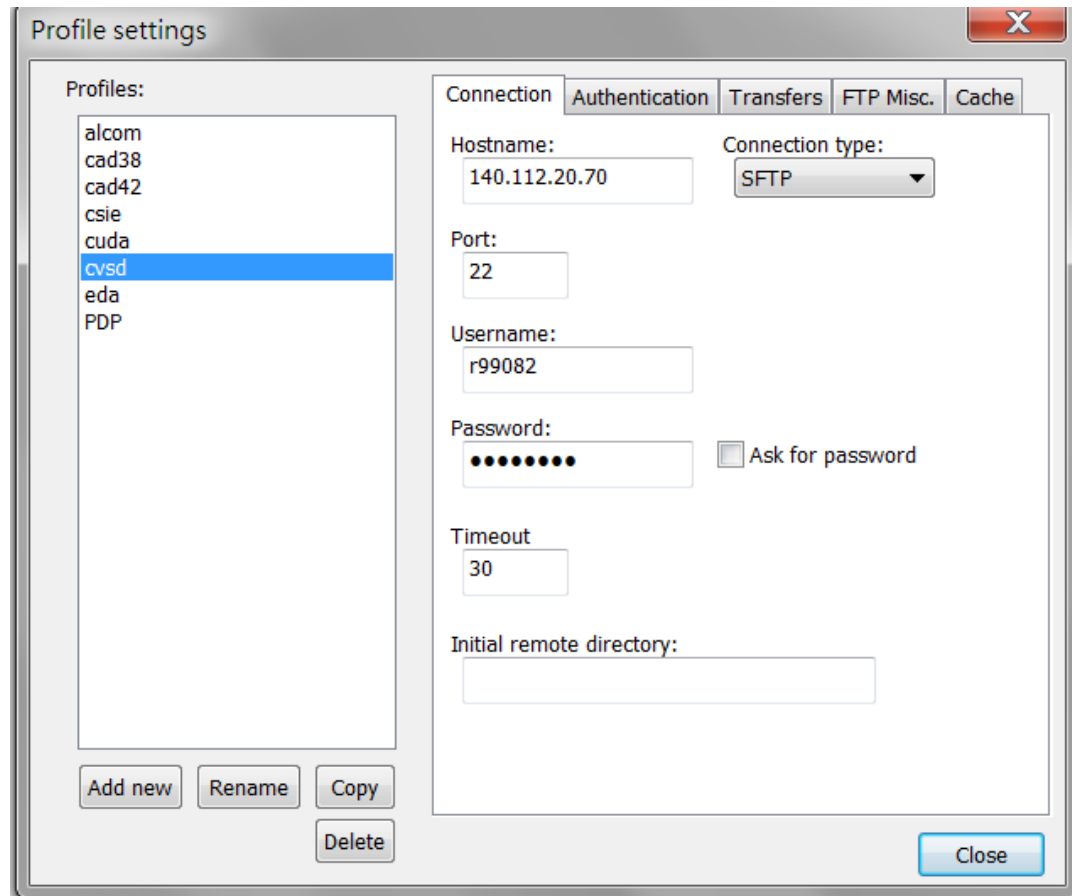
Notepad++ (1/4)



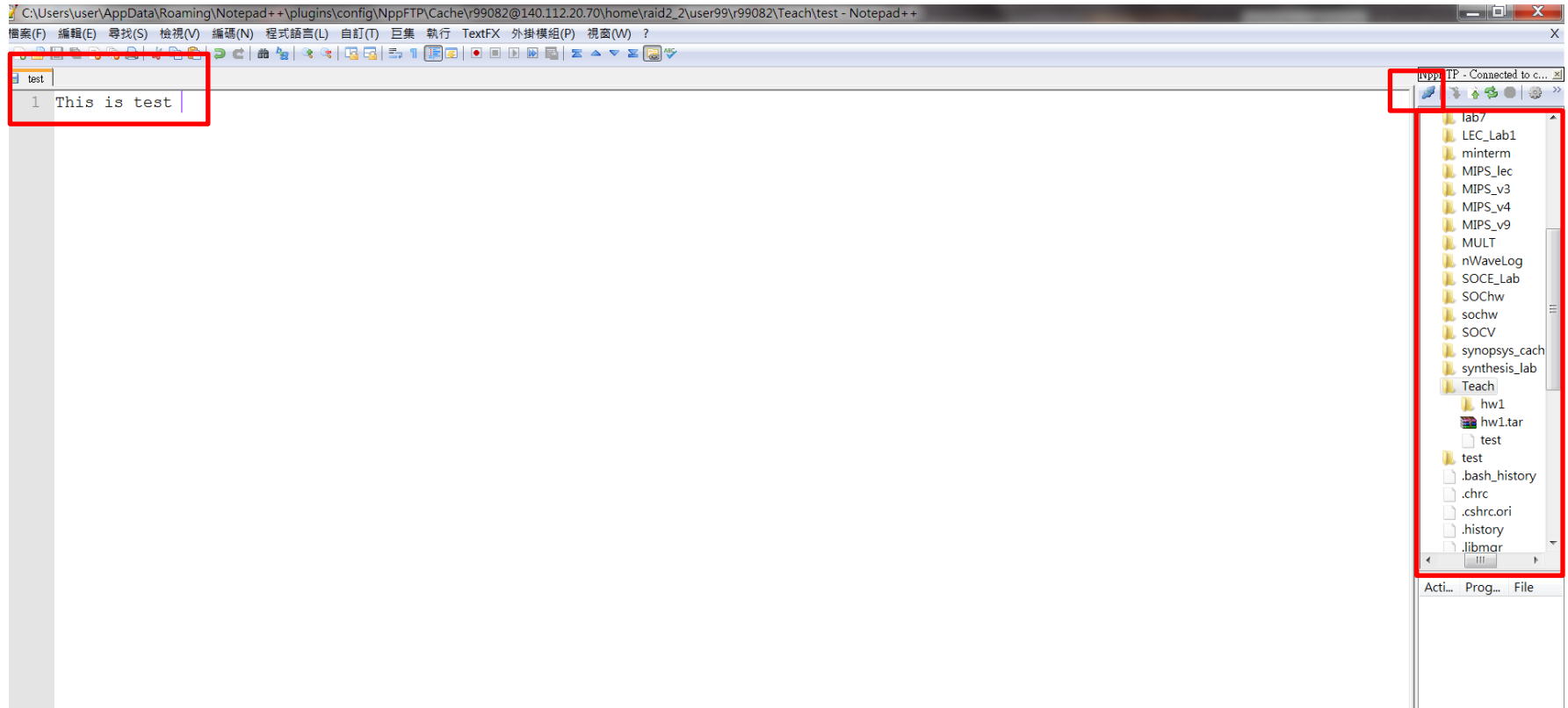
Notepad++ (2/4)



Notepad++ (3/4)



Notepad++ (4/4)



Vim (1/5)

- Vim (Vi IMproved)
 - ◆ An extended version of vi editor
 - ◆ Additional features designed to be helpful in editing program source code
 - ◆ Free and open source software

Vim (2/5)

- Three major modes

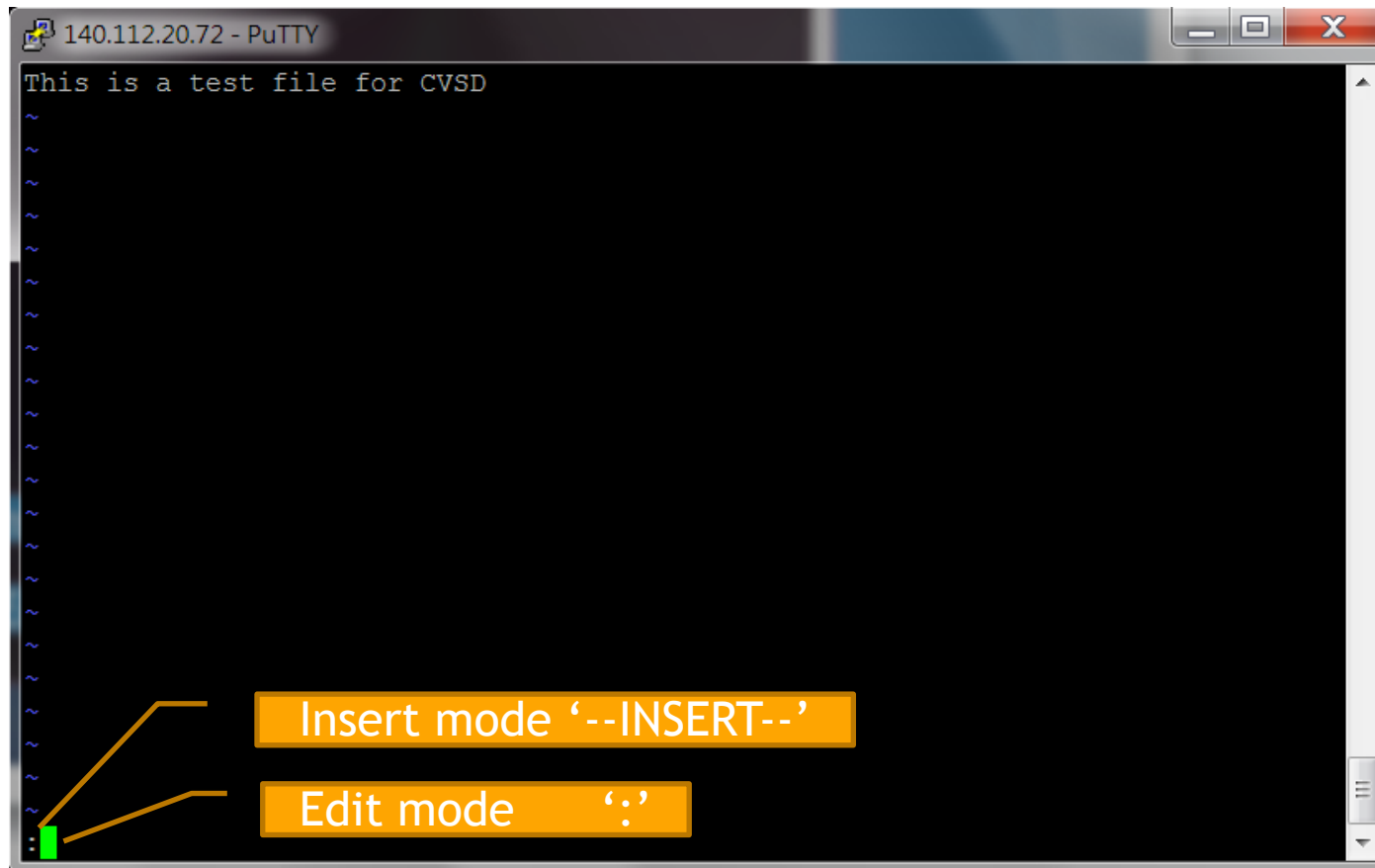
- ◆ common mode (c-mode)
- ◆ Insert mode (i-mode)
- ◆ Edit mode (e-mode)

- Change modes

- ◆ i-mode <----- c-mode -----> e-mode
(key: 'i') (key: ':')
- ◆ i-mode -----> c-mode <----- e-mode
(key: esc) (key: esc)

Vim (3/5)

■ vim test.txt



Vim (4/5)

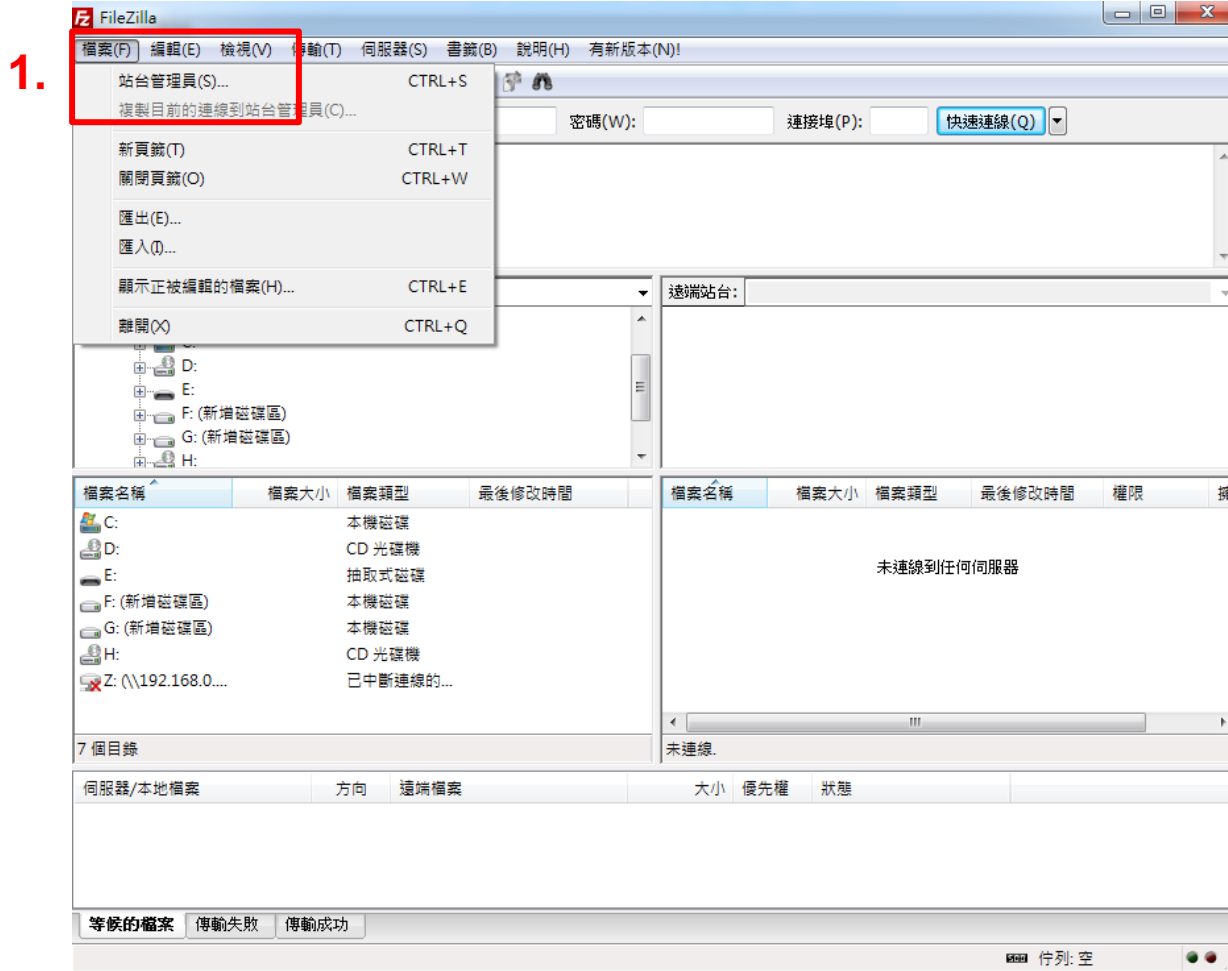
- Basic command in c-mode
 - ◆ Key 'dd' : delete the whole line
 - ◆ Key 'u' : undo
 - ◆ Key 'i' : enter insert-mode
 - ◆ Key ':w' + enter : save a document
 - ◆ Key ':q' + enter : quit without saving
 - ◆ Key ':wq' + enter : save and quit at the same time
 - ◆ Key ':q!' + enter : discard changes and quit
 - ◆ Key ':w *new_filename*' + enter : save as new-filename

Outline

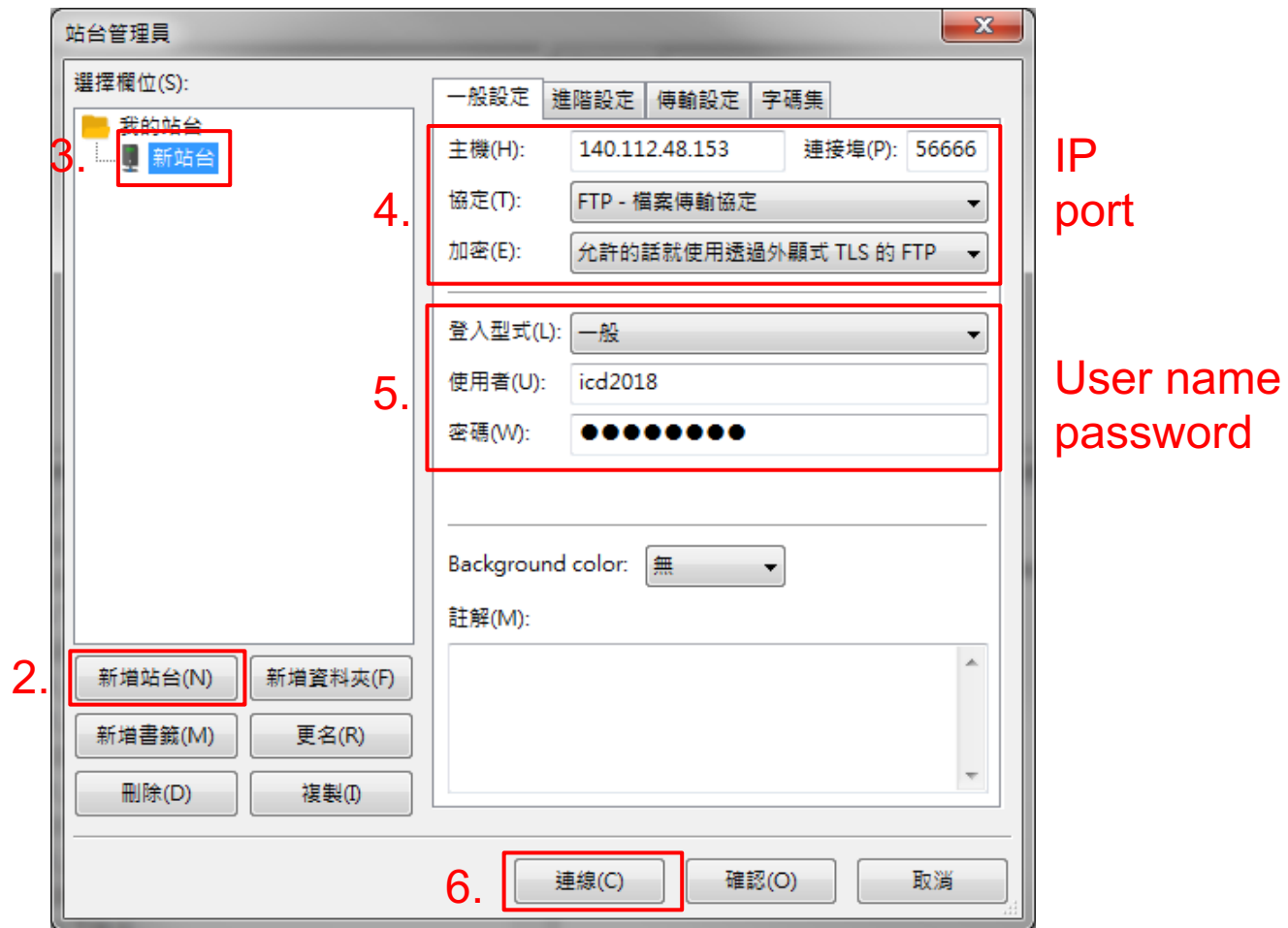
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FileZilla (1/5)

- Choose 檔案 → 站台管理員

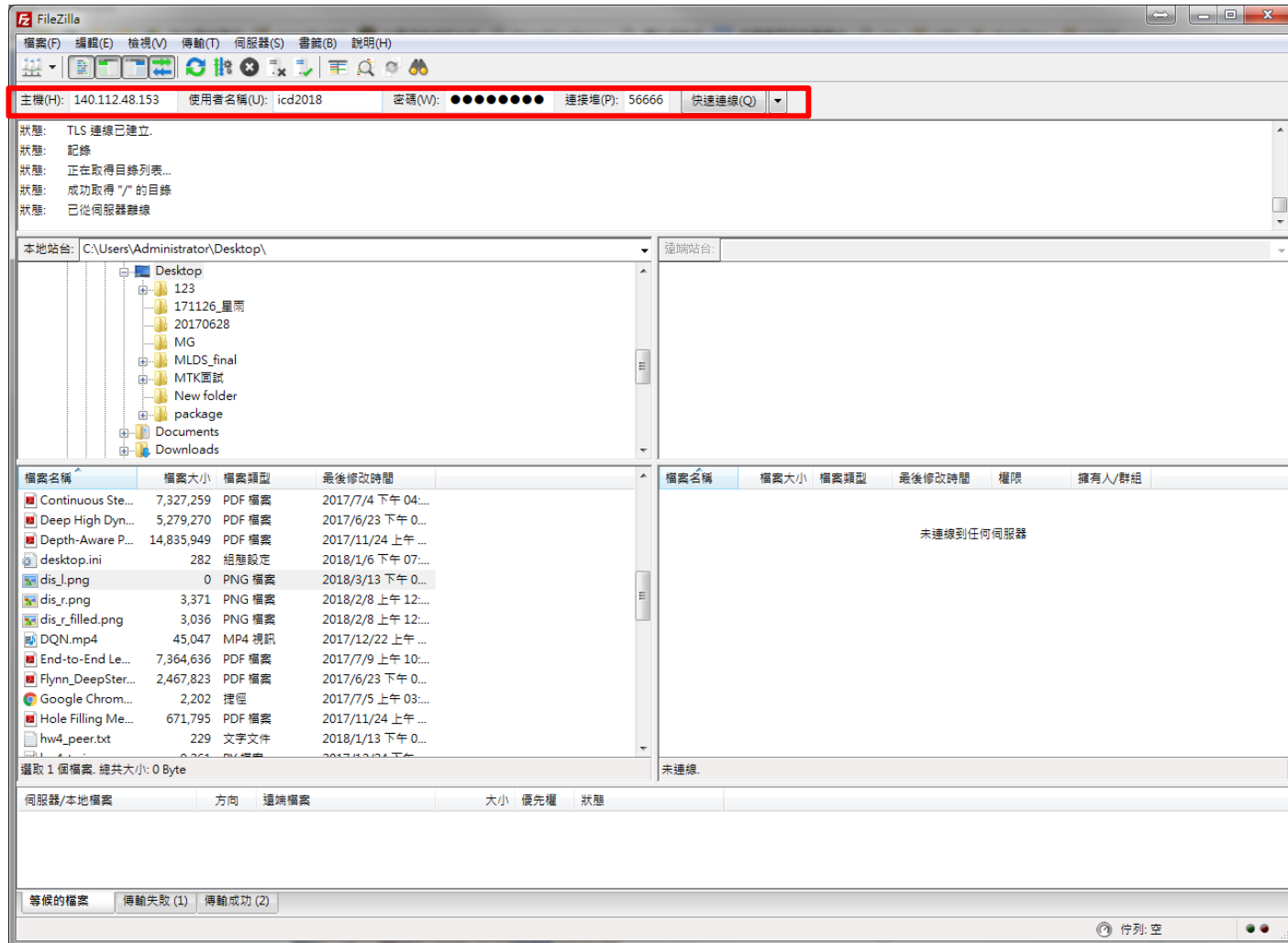


FileZilla (2/5)



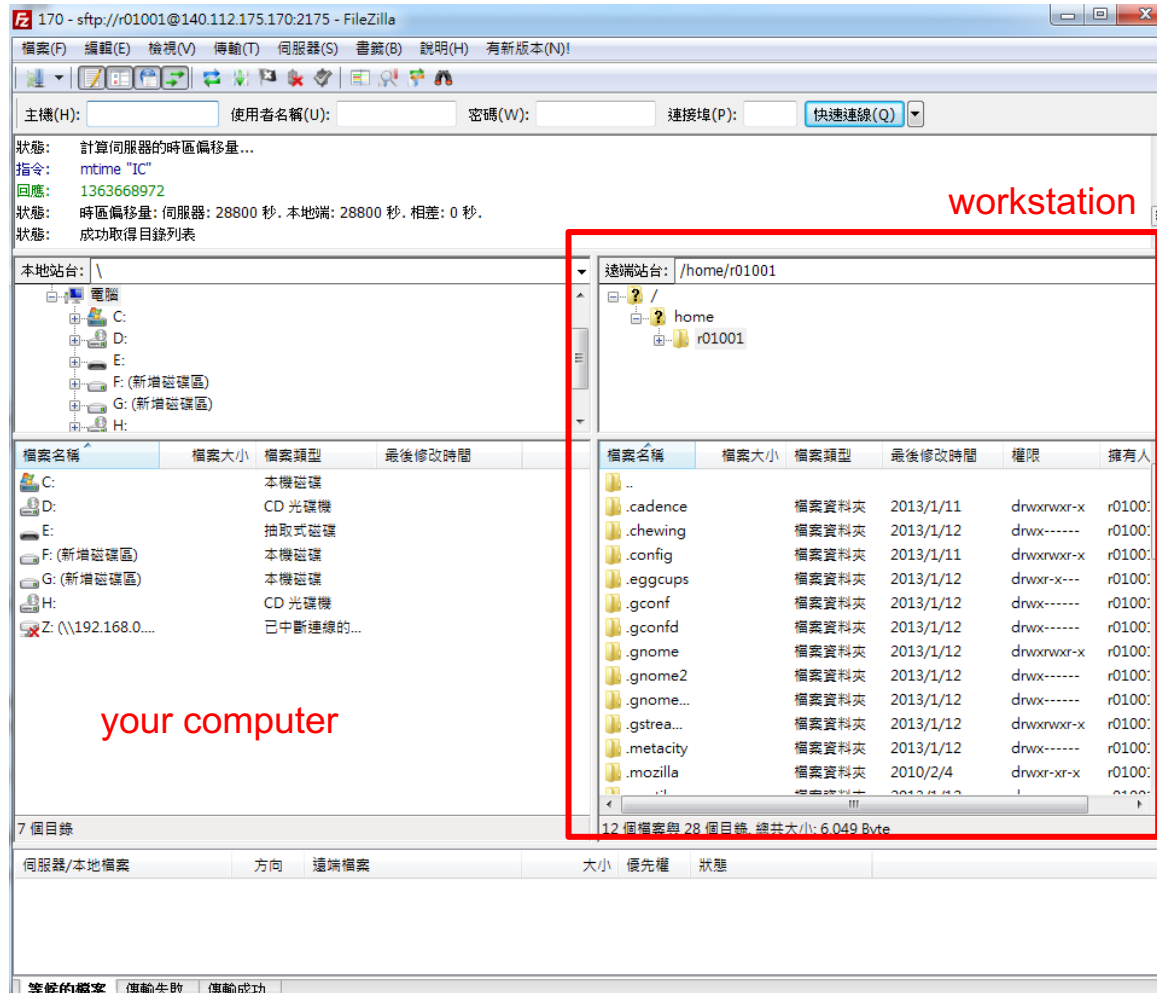
FileZilla (3/5)

Fast login



FileZilla (4/5)

- You will see your file in the window



FileZilla (5/5)

- Download :

<http://sourceforge.net/projects/filezilla/files/>