95-1 Under-Graduate Project
Workstation Connection

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3rd version by Genius Shi
Workstation (WS)

- Multiple Users
- Stable Operation
- OS: Unix-like
  - Solaris OS
  - Linux OS

limitations
Note

License
- A. 申請帳號 - WS Manager
- B. 開/關機 - WS Manager (no way for users)

Basic instruction
- 1. 更改密碼: passwd
- 2. 登出: logout (not shut down power)
- 3. 查看程序: ps (process) to check process ID (PID)
- 4. 刪除程序: kill –9 PID
Connect to WorkStation

- **Host**: (系上工作站)
  - [http://cad.ee.ntu.edu.tw/](http://cad.ee.ntu.edu.tw/)
  - cadxx.ee.ntu.edu.tw (xx : 16~40)

- **Host**: (our lab)
  - dinosaur : 140.112.20.136
  - hawk : 140.112.20.135
  - whale : 140.112.20.131

- **Client**:
  - Physical IP: 140.112.xxx.xxx
  - Visual IP: Sharing the same real IP address
    - 192.168.xxx.xxx
Getting Start (X-window)

- 申請帳號
- 下載x-window
- 安裝x-window
  - MS-Windows 本身並不提供遠距離的圖形或視窗交換。需要另外安裝一個 MS-Windows 環境中的 X 伺服軟體
For Physical IP: X-Window Setup (1)

- Step(1): 開啟 X-config，按下 Add...
X-Window Setup (II)

step(2):
- 填入 Session name (可隨意命名)
- Connecting using 選擇 XDMCP
X-Window Setup (III)

- step(3):
  - XDMCP欄選Query
  - Hostname填入位址
  - 按下save
Run X-Win32

開啓 X-Win32，隨即就會常駐在螢幕右下方
Connect to Workstations

- 右鍵 → Session → cad33
For **Visual IP Address** & Physical IP

- Run **X-WIN32**. Then use the connection software “putty”

  ![Putty.exe](image)

- You don’t need to create a session in XWin32

http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html
Putty Setting (1/5)

- Adjust the setting in Putty Configuration.
- **Session**: Create a Host Name with port 22. The protocol is set **SSH**, then choose save.

- **Available workstation**:  
  - dinosaur: 140.112.20.136  
  - hawk: 140.112.20.135
Putty Setting (2/5)

- Connection->SSH->Auth. Click the “Allow agent forwarding” option.
Putty Setting (3/5)

- Connection->SSH->Tunnels. Click “Enable X11 forwarding”
Putty Setting (4/5)

- Press load “white” in session window. And click open to start to remote. You will see a console login window. Then the remote control is work.
Putty Setting (5/5)

PuTTY Security Alert

The server's host key is not cached in the registry. You have no guarantee that the server is the computer you think it is.

The server's rsa2 key fingerprint is:

If you trust this host, hit Yes to add the key to PuTTY's cache and carry on connecting.
If you want to carry on connecting just once, without adding the key to the cache, hit No.
If you do not trust this host, hit Cancel to abandon the connection.

是(Y) 否(N) 取消
Examine If You Can Open Window

nWave: a waveform viewer software & run in background mode
Useful UNIX Commands (I)

- **man**: manual page
- **ls**: List a directory’s contents
- **ls –a**: list the hidden files
- **ls –aux**: list all files with detailed information
- **cp**: Copy files from one directory to another
  - `cp filename1 filename2`
- **cp –r**: Copy directory from one directory to another
- **mkdir**: Make a new directory
- **pwd**: Display your current path
Useful UNIX Commands (II)

- cd: Change directory
- ps: Display process status by process identification number and name
- kill –9 process_number: Terminate a running process
  - kill -9 1234
- rm: delete files
- rm -r: remove directory
- quota –v: show disk space. If space is not enough, you cannot do homework.
- tar: compress files
  - -cvf: for creating compressed file
  - -xvf: for extracting compressed file
- mv: move or rename file
- exit: turn the terminal off
- logout
Summary

- 開/關機: Only WS Manager (root)
- 使用完畢，利用ps指令來查看process
- 不使用或暫時離開請logout
- 不可存無關研究資料在WS上
- 請勿使用中文或是空白字元作爲檔名