

Lab: 以SSH方式登入到伺服器不需要需入密碼

目的: **Server1**使用者user3 以及 user4

以SSH方式以使用者max身份登入到**Server2** 不需要輸入密碼驗證

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請於**Server2**

#su - max -c "mkdir /home/max/.ssh" <建立.ssh資料夾存放金鑰>

=====

請於**Server1**

#useradd -m user3 <新增使用者>

#useradd -m user4 <新增使用者>

server1:~ # su - user3 <切換為使用者user3>

user3@server1:~> ssh-keygen -t dsa <以DSA方式建立ssh 金鑰>

Generating public/private dsa key pair.

Enter file in which to save the key (/home/user3/.ssh/id\_dsa): <儲存位置:請輸入Enter>

Created directory '/home/user3/.ssh'.

Enter passphrase (empty for no passphrase): <金鑰密碼:請輸入Enter>

Enter same passphrase again: <金鑰密碼:請輸入Enter>

Your identification has been saved in /home/user3/.ssh/id\_dsa.

Your public key has been saved in /home/user3/.ssh/id\_dsa.pub.

The key fingerprint is:

8d:e5:24:eb:98:71:f4:c6:01:96:fc:78:23:f8:d0:02 user3@server1

user3@server1:~> cd /home/user3/.ssh <切換到使用者家目錄下.ssh目錄>

user3@server1:~/.ssh> ls <應該會看到公鑰及私鑰>

id\_dsa id\_dsa.pub

將公鑰複製到 **Server2**

user3@server1:~/.ssh> scp id\_dsa.pub max@主機的IP:/home/max/.ssh/authorized\_keys

The authenticity of host '192.168.235.129 (192.168.235.129)' can't be established.

RSA key fingerprint is 10:a4:50:0f:00:06:98:e3:c2:56:d4:0e:3f:03:d1:65.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added '192.168.235.129' (RSA) to the list of known hosts.

Password: <請輸入 max 的密碼>

id\_dsa.pub 100% 1115 1.1KB/s 00:00

user3@server1:~/.ssh> logout <登出>

接下來針對使用者 user4 來建立金鑰

```
server1:~ # su - user4
```

<切換為使用者user4>

```
user4@server1:~> ssh-keygen -t dsa
```

<以DSA方式建立ssh 金鑰

>

Generating public/private dsa key pair.

Enter file in which to save the key (/home/user4/.ssh/id\_dsa):

<儲存位置:請輸入Enter>

Created directory '/home/user4/.ssh'.

Enter passphrase (empty for no passphrase):

<金鑰密碼:請輸入Enter>

Enter same passphrase again:

<金鑰密碼:請輸入Enter>

Your identification has been saved in /home/user4/.ssh/id\_dsa.

Your public key has been saved in /home/user4/.ssh/id\_dsa.pub.

The key fingerprint is:

c8:0c:56:cb:6c:7a:1f:1d:5f:e8:6e:09:83:f0:0b:81 user4@server1

```
user4@server1:~> cd /home/user4/.ssh/
```

<切換到使用者家目錄下.ssh目錄>

將公鑰複製到 Server2

```
user4@server1:~/.ssh> ssh-copy-id -i /home/user4/.ssh/id_dsa.pub max@主機的IP
```

The authenticity of host '192.168.3.128 (192.168.3.128)' can't be established.

RSA key fingerprint is 4e:52:bf:ad:59:bf:59:33:af:62:d2:c7:72:40:78:e0.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added '192.168.3.128' (RSA) to the list of known hosts.

Password:

<請輸入 max 的密碼>

Now try logging into the machine, with "ssh 'max@192.168.3.128'", and check in:

```
./ssh/authorized_keys
```

to make sure we haven't added extra keys that you weren't expecting.

測試:

請於 Server2 上面觀察

```
#cat /home/max/.ssh/authorized_keys
```

請於Server1 上面

以user3 及 user4身份

```
ssh max@主機的IP
```

或是

```
ssh -l max 主機的IP
```

**Optional Lab:** ssh 只接受key驗證, 不接受密碼驗證, 並只接受SSH Version2 連線



Client ( **Server1** ):

之前練習已經有做過key驗證

```
#su - user4
```

```
>ssh -l max 遠端主機的IP
```

```
遠端> exit
```

<切換使用者 user4>

<當初有交換max的key驗證,故不要求提供密碼>

<登出遠端,回到本機>

```
>ssh -l root 遠端主機的IP
```

<此時除了key驗證還有密碼驗證>

<當初沒有交換root的key驗證,故要求提供密碼>

請於Server ( **Server2** ):

修改相關設定

```
#vi /etc/ssh/sshd_config
```

```
UsePAM no
```

```
PasswordAuthentication no
```

```
Protocol 2
```

```
#rcsshd restart
```

<修改相關設定>

<重新啟動sshd>

測試

請於Client端

```
#su - user4
```

```
>ssh -l root 遠端主機的IP
```

<切換使用者 user4>

<當初沒有交換root的key驗證, 直接拒絕>

請將設定回復預設值

```
#vi /etc/ssh/sshd_config
```

<修改相關設定>

UsePAM yes

PasswordAuthentication no

Protocol 2

#rcsshd restart

<重新啟動sshd>