

07. FTP Server架設

1. 安裝vsftpd server

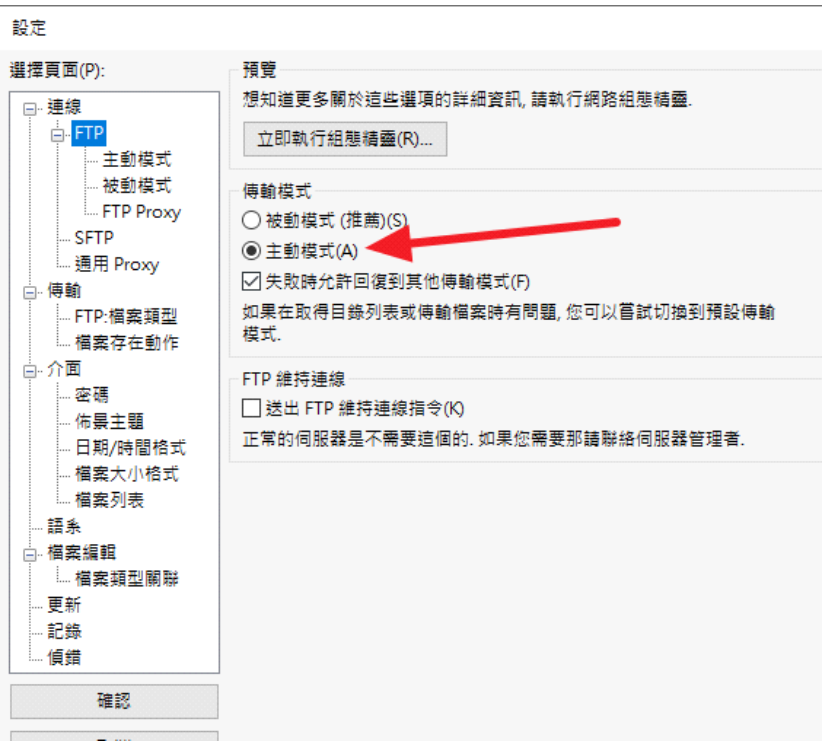
```
owner@owner-VirtualBox:~$ sudo apt-get install vsftpd
正在讀取套件清單... 完成
正在重建相依關係
正在讀取狀態資料... 完成
vsftpd 已是最新版本 (3.0.3-12)。
升級 0 個，新安裝 0 個，移除 0 個，有 345 個未被升級。
owner@owner-VirtualBox:~$
```

2. 設定防火牆將ftp加入規則中

```
owner@owner-VirtualBox:~$ sudo ufw allow ftp
跳過添加已經存在的規則
跳過添加已經存在的規則 (v6)
owner@owner-VirtualBox:~$ sudo ufw status
狀態： 啟用
```

至	動作	來自
-	--	--
22/tcp	ALLOW	Anywhere
21/tcp	ALLOW	Anywhere
22/tcp (v6)	ALLOW	Anywhere (v6)
21/tcp (v6)	ALLOW	Anywhere (v6)

3. 設定允許外部登入設定完後重啟服務
此時還是無法登入ftp server 需修改 主動模式



write_enable 允許外部寫入資料

```

owner@owner-VirtualBox: ~
20 # addresses) then you must run two copies of vsftpd with two configuration
21 # files.
22 listen_ipv6=YES
23 #
24 # Allow anonymous FTP? (Disabled by default).
25 anonymous_enable=NO
26 #
27 # Uncomment this to allow local users to log in.
28 local_enable=YES
29 #
30 # Uncomment this to enable any form of FTP write command.
31 write_enable=YES
32 #
33 # Default umask for local users is 077. You may wish to change this to 022,
34 # if your users expect that (022 is used by most other ftpd's)
35 local_umask=022
36 #
37 # Uncomment this to allow the anonymous FTP user to upload files. This only
38 # has an effect if the above global write enable is activated. Also, you will
39 # obviously need to create a directory writable by the FTP user.
40 anon_upload_enable=YES
41 #

```

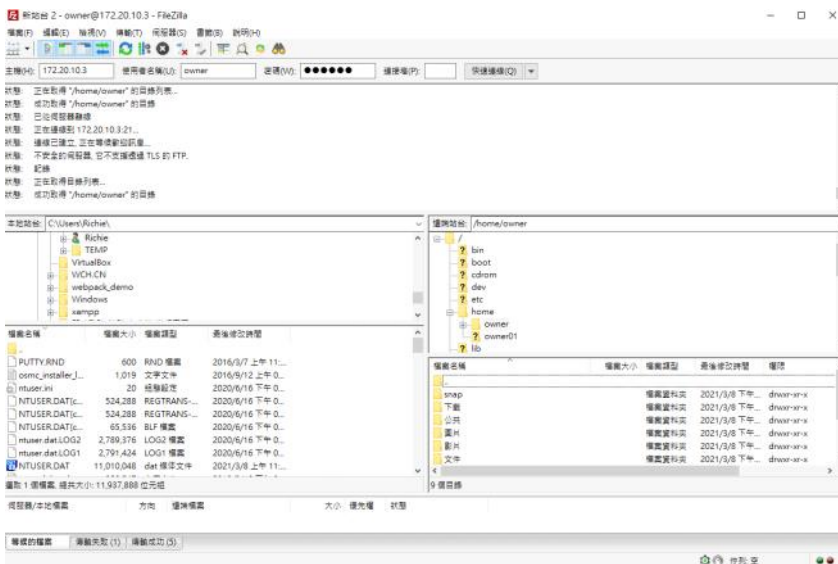
```

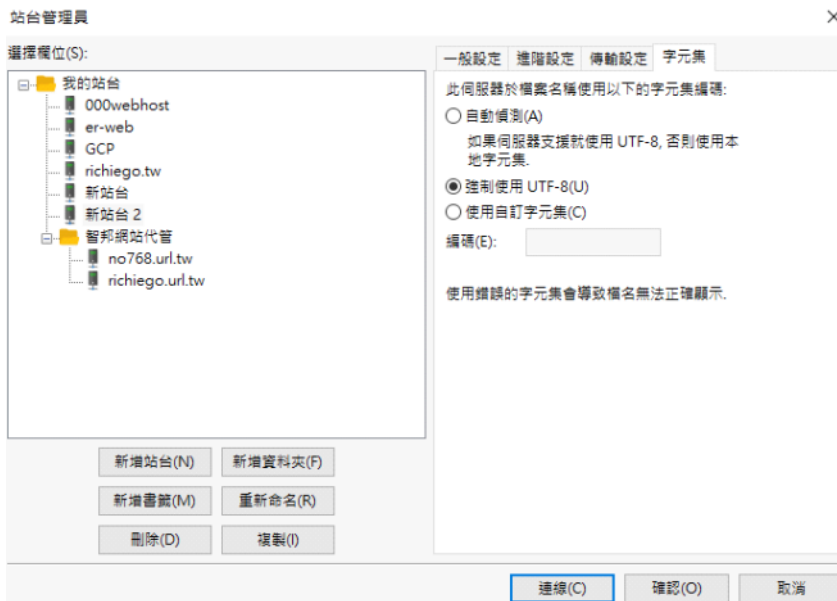
owner@owner-VirtualBox:~$ sudo service vsftpd restart
owner@owner-VirtualBox:~$ sudo service vsftpd status
● vsftpd.service - vsftpd FTP server
   Loaded: loaded (/lib/systemd/system/vsftpd.service; enabled; vendor preset:
   Active: active (running) since Mon 2021-03-08 15:39:23 CST; 7s ago
   Process: 17002 ExecStartPre=/bin/mkdir -p /var/run/vsftpd/empty (code=exite
   Main PID: 17003 (vsftpd)
     Tasks: 1 (limit: 2316)
    Memory: 588.0K
    CGroup: /system.slice/vsftpd.service
            └─17003 /usr/sbin/vsftpd /etc/vsftpd.conf

3月 08 15:39:23 owner-VirtualBox systemd[1]: Starting vsftpd FTP server...
3月 08 15:39:23 owner-VirtualBox systemd[1]: Started vsftpd FTP server.

```

4. Filezilla連線(設定UTF-8避免中文亂碼)





5. 指定登入後預設的目錄

設定帳號owner登入後自動跳轉到/tmp/zowner 目錄
/tmp/zowner 目錄權限為 owner:owner 777

新增目錄/tmp/zowner 並設定權限

```
drwxrwxrwx 2 owner owner 4096 3月 8 15:47 zowner
```

將使用者登入後的目錄設定設定在/var/ftp 每一個使用者使用同名的檔案，/var/ftp 該資料夾不存在必須以最高權限自行新增

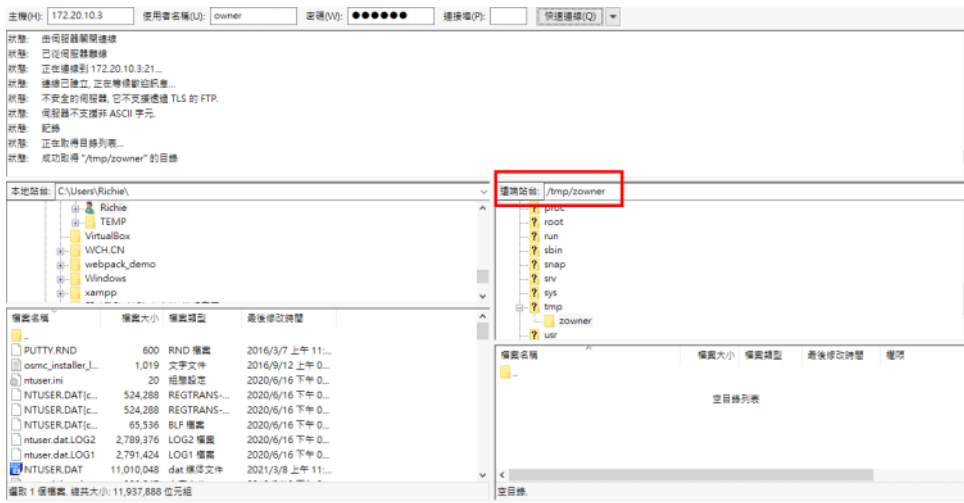
```
135 #
136 # Some of vsftpd's settings don't fit the filesystem layout by
137 # default.
138 #
139 # This option should be the name of a directory which is empty. Also, the
140 # directory should not be writable by the ftp user. This directory is used
141 # as a secure chroot() jail at times vsftpd does not require filesystem
142 # access.
143 secure_chroot_dir=/var/run/vsftpd/empty
144 #
145 # This string is the name of the PAM service vsftpd will use.
146 pam_service_name=vsftpd
147 #
148 # This option specifies the location of the RSA certificate to use for SSL
149 # encrypted connections.
150 rsa_cert_file=/etc/ssl/certs/ssl-cert-snakeoil.pem
151 rsa_private_key_file=/etc/ssl/private/ssl-cert-snakeoil.key
152 ssl_enable=NO
153
154 #
155 # Uncomment this to indicate that vsftpd use a utf8 filesystem.
156 #utf8_filesystem=YES
157 user_config_dir=/var/ftp
```

新增同名稱的檔案並設定路徑，完成後存檔並重啟服務!

```
owner@owner-VirtualBox:/var/ftp$ sudo vim /var/ftp/owner
```

```
local_root=/tmp/owner
```

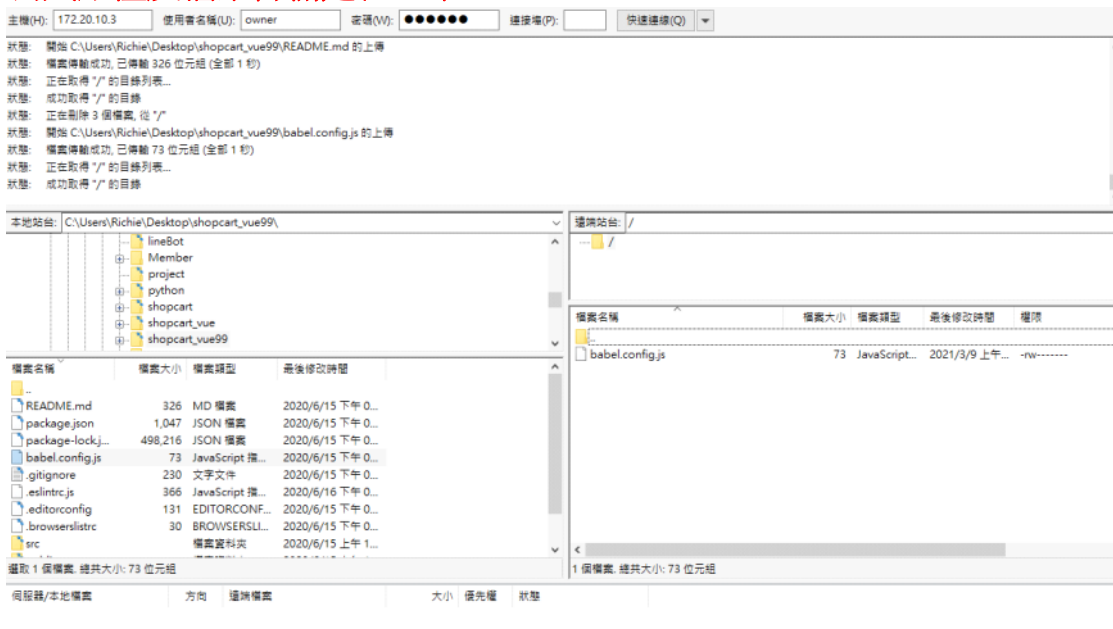
重新登入檢查是否轉換成新路徑!



隱藏除了指定目錄以外的目錄，完成後存檔並重啟服務!

```
owner@owner-VirtualBox:/tmp/owner
107 #deny_email enable=YES
108 # (default follows)
109 #banned_email_file=/etc/vsftpd.banned_emails
110 #
111 # You may restrict local users to their home directories. See the FAQ for
112 # the possible risks in this before using chroot_local_user or
113 # chroot_list enable below.
114 #chroot_local_user=YES
115 #
116 # You may specify an explicit list of local users to chroot() to their home
117 # directory. If chroot_local_user is YES, then this list becomes a list of
118 # users to NOT chroot().
119 # (Warning! chroot'ing can be very dangerous. If using chroot, make sure the
120 # the user does not have write access to the top level directory within the
121 # chroot)
122 chroot_local_user=YES
123 allow_writeable_chroot=YES
124 #chroot_list enable=YES
125 # (default follows)
126 #chroot_list_file=/etc/vsftpd.chroot_list
127 #
128 # You may activate the "-R" option to the builtin ls. This is disabled by
```

測試路徑及檔案傳輸是否正確!



6. 新增使用者來測試ftp功能

```
owner@owner-VirtualBox:/home$ sudo adduser owner03
正在新增使用者 `owner03' ...
增加新群組 `owner03' (1004) ...
正在新增新使用者 `owner03' (UID 1004) 到群組 `owner03' ...
正在新增家目錄 `/home/owner03' ...
正在從 `/etc/skel'複製檔案 ...
新 密碼:
再次輸入新的 密碼:
passwd: 密碼成功變更
正在變更 owner03 的使用者資訊
請輸入新值，或直接按 ENTER 鍵使用預設值
  全名 []:
  房間號碼 []:
  工作電話 []:
  家用電話 []:
```

練習題:

帳號: owner001 -----> /tmp/owner001(owner001:owner 755)
帳號: owner002 -----> /tmp/owner002(owner002:owner 755)
帳號: owner003 -----> /tmp/owner003(owner003:owner 755)
帳號: owner004 -----> /tmp/owner004(owner004:owner 755)
帳號: owner005 -----> /tmp/owner005(owner005:owner 755)