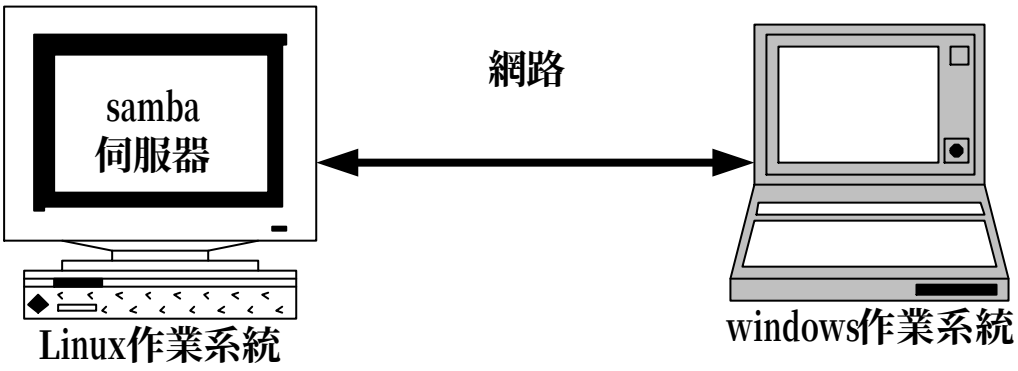
SAMBA

1- 1samba 的設定

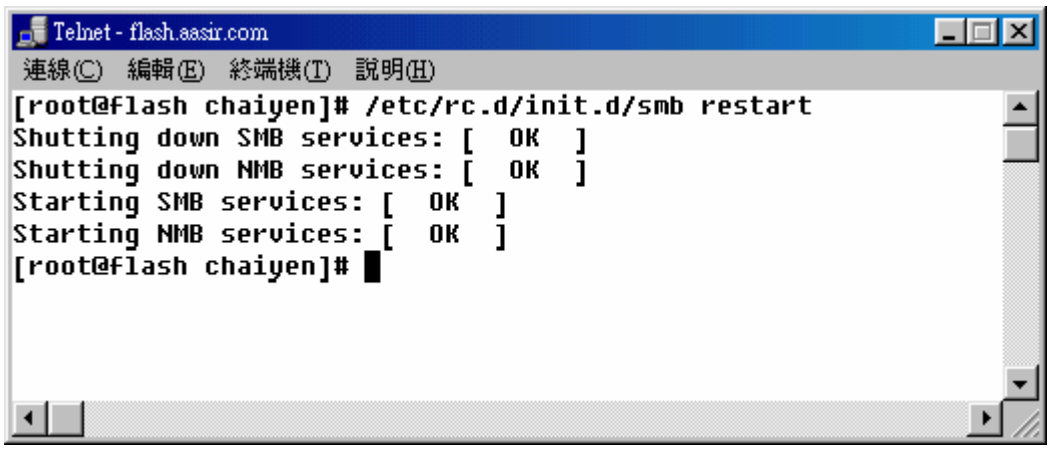
Samba 伺服器可以讓我們 Linux 上的檔案在各個不同作業系統平台上作分享，例如我們可以在 Windows 的作業系統上透過網路來讀取 Linux 作業系統上的檔案。Samba 伺服器也可以提供我們印表機的服務，而且我們可以使用 smb 來和其它 Unix-like 的作業系統作檔案的溝通。



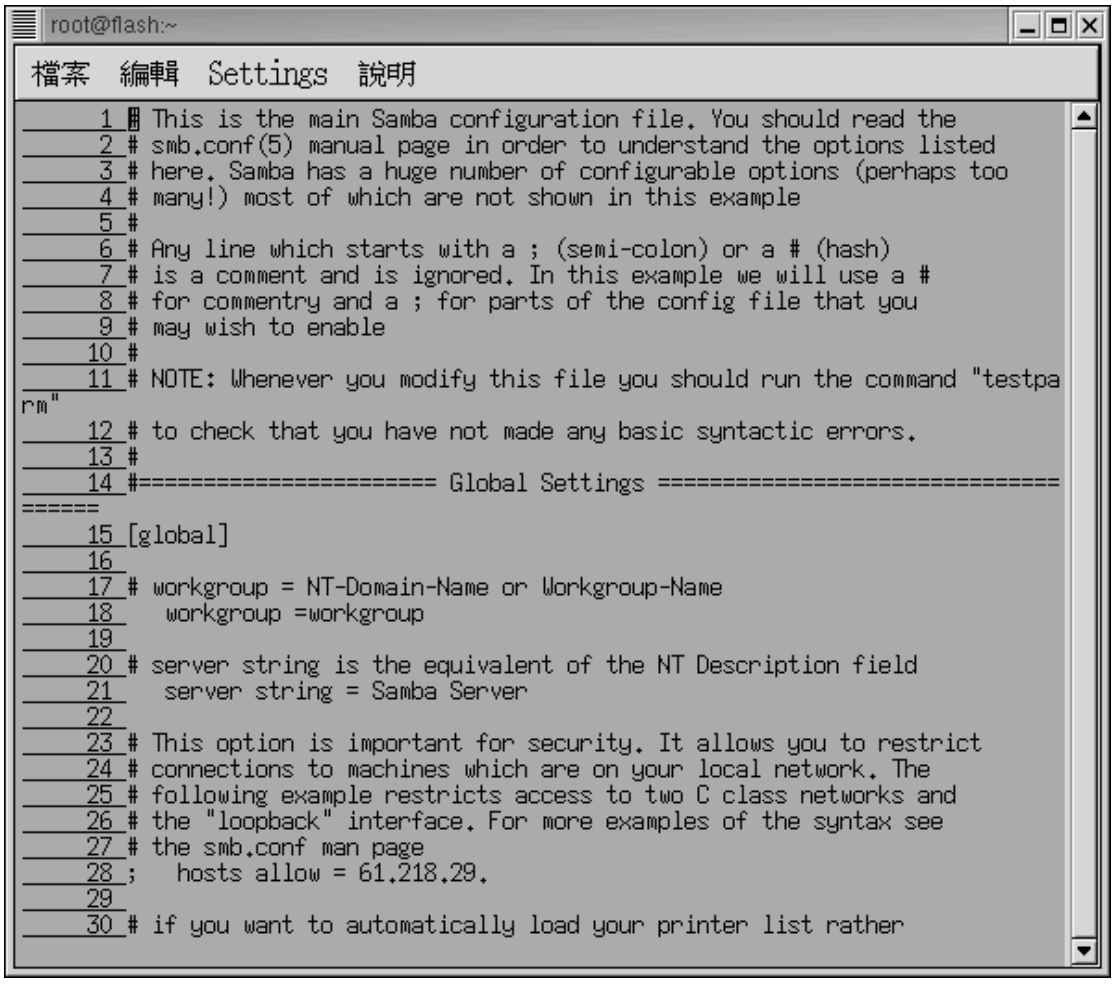
安裝 samba 是方便我們將在 windows 上面做好的檔案用 samba 的介面，將他傳到 linux 上，samba 伺服器就是一種溝通 linux 和 windows 的介面。

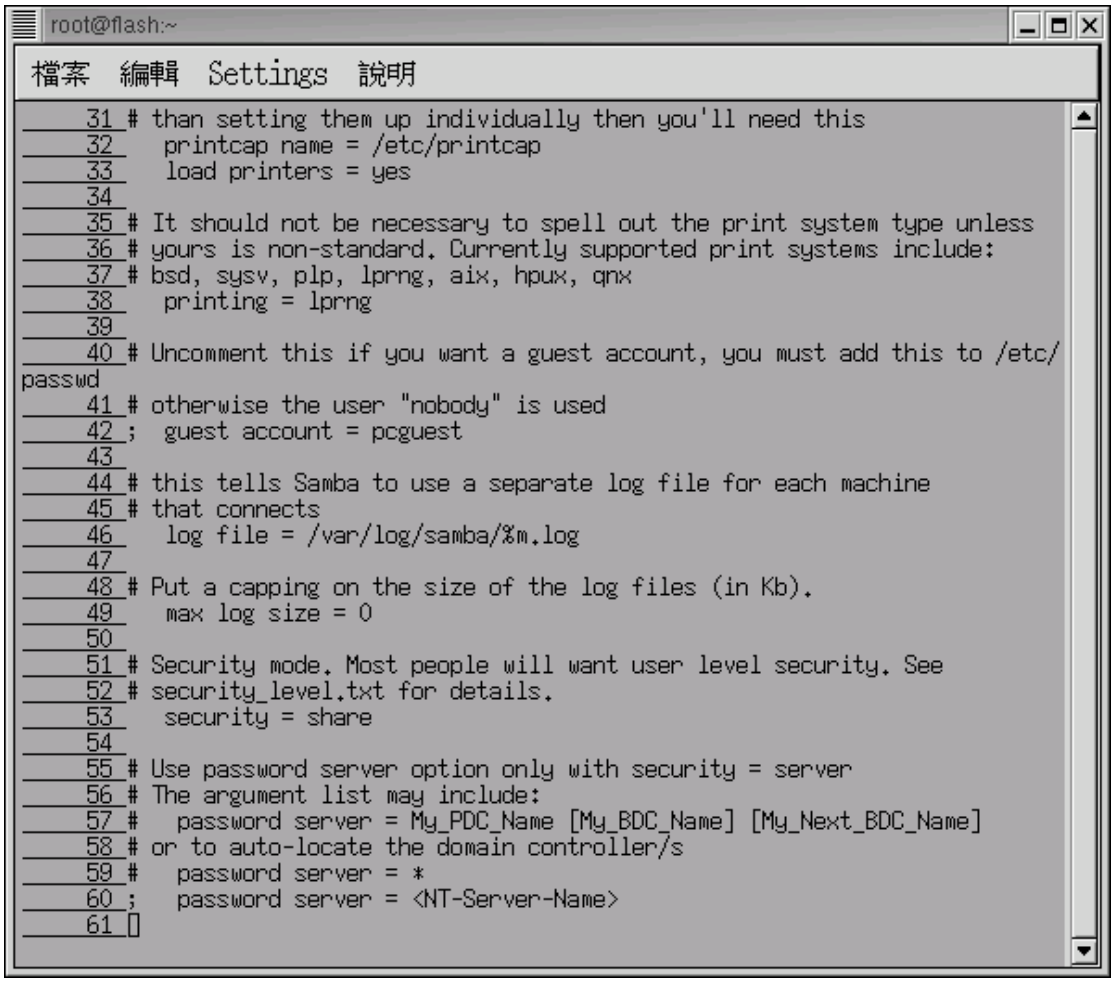
我們可以啟動 samba 伺服器

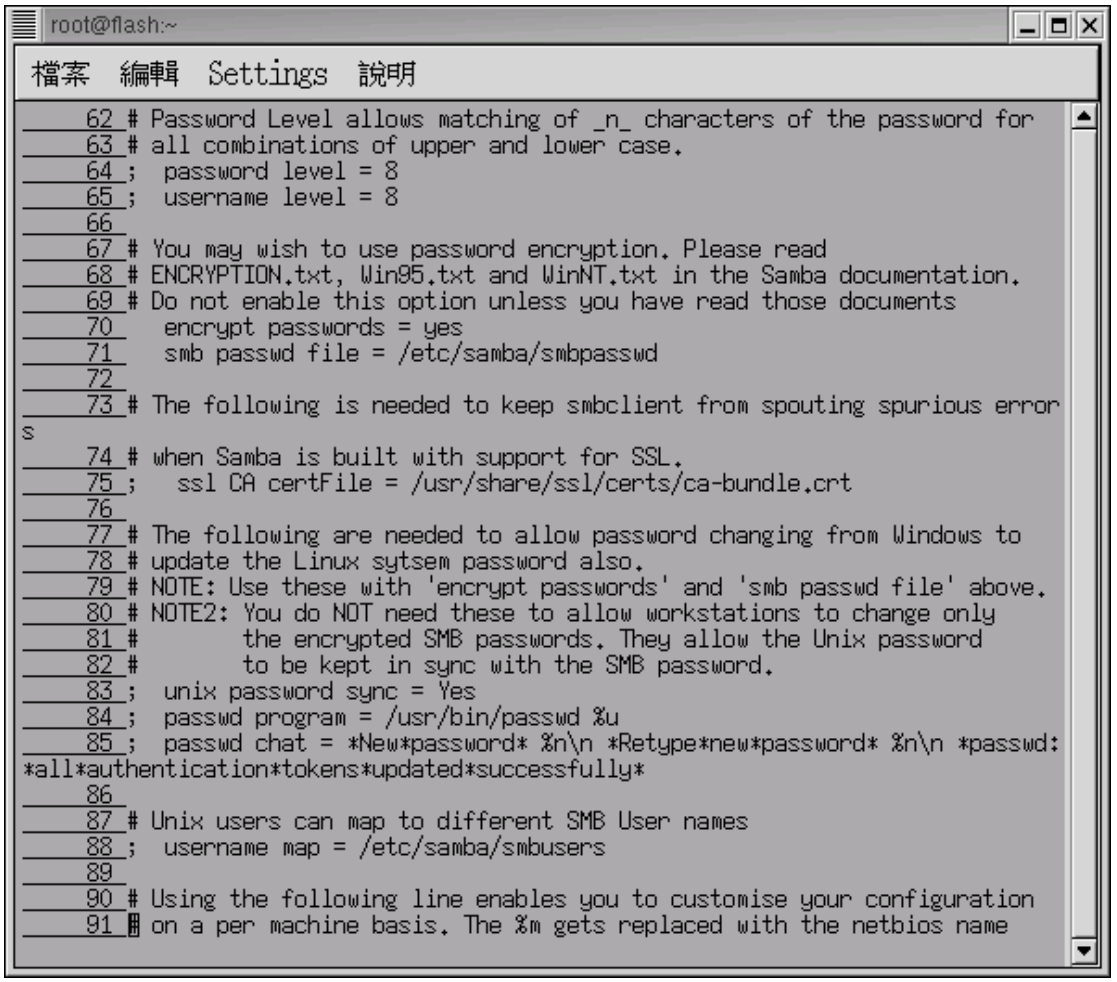
#/etc/rc.d/init.d/smb start

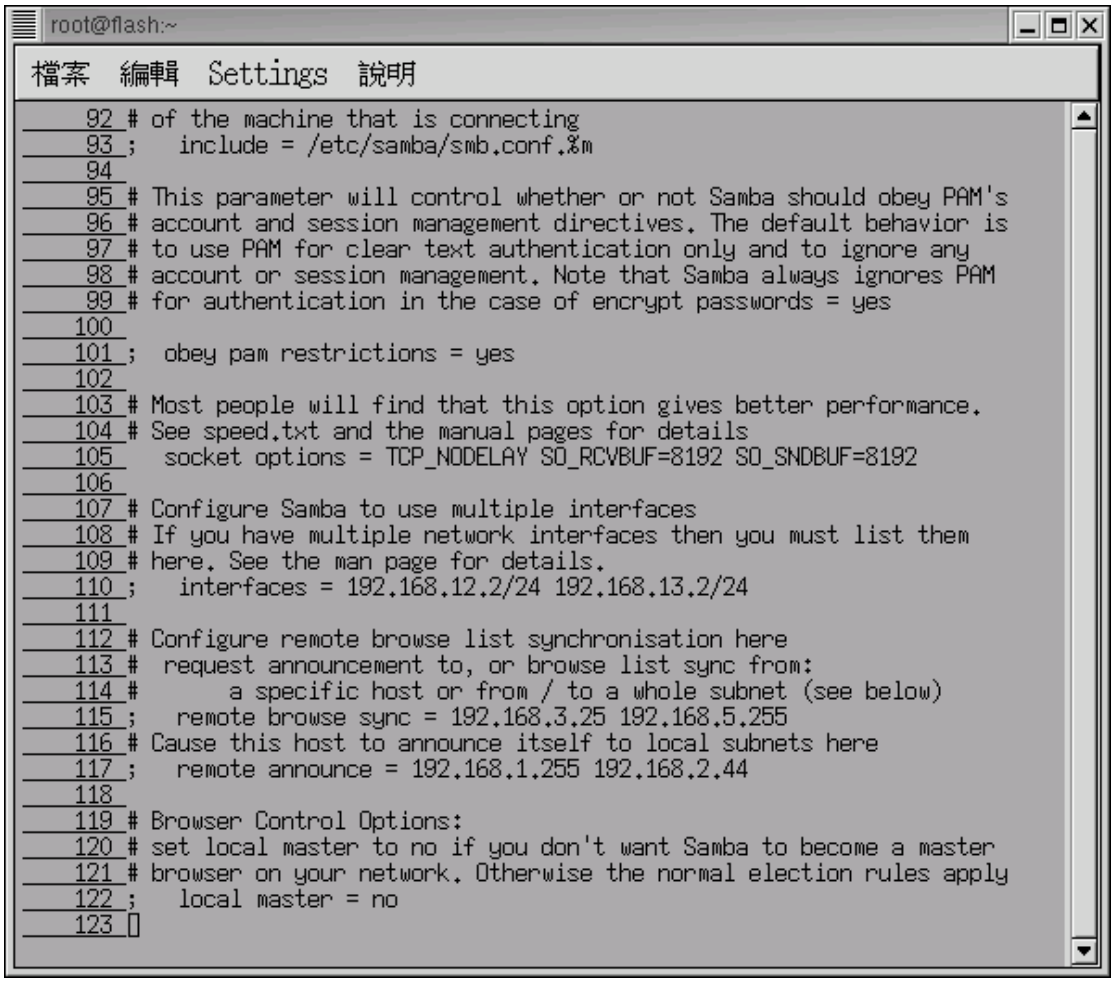


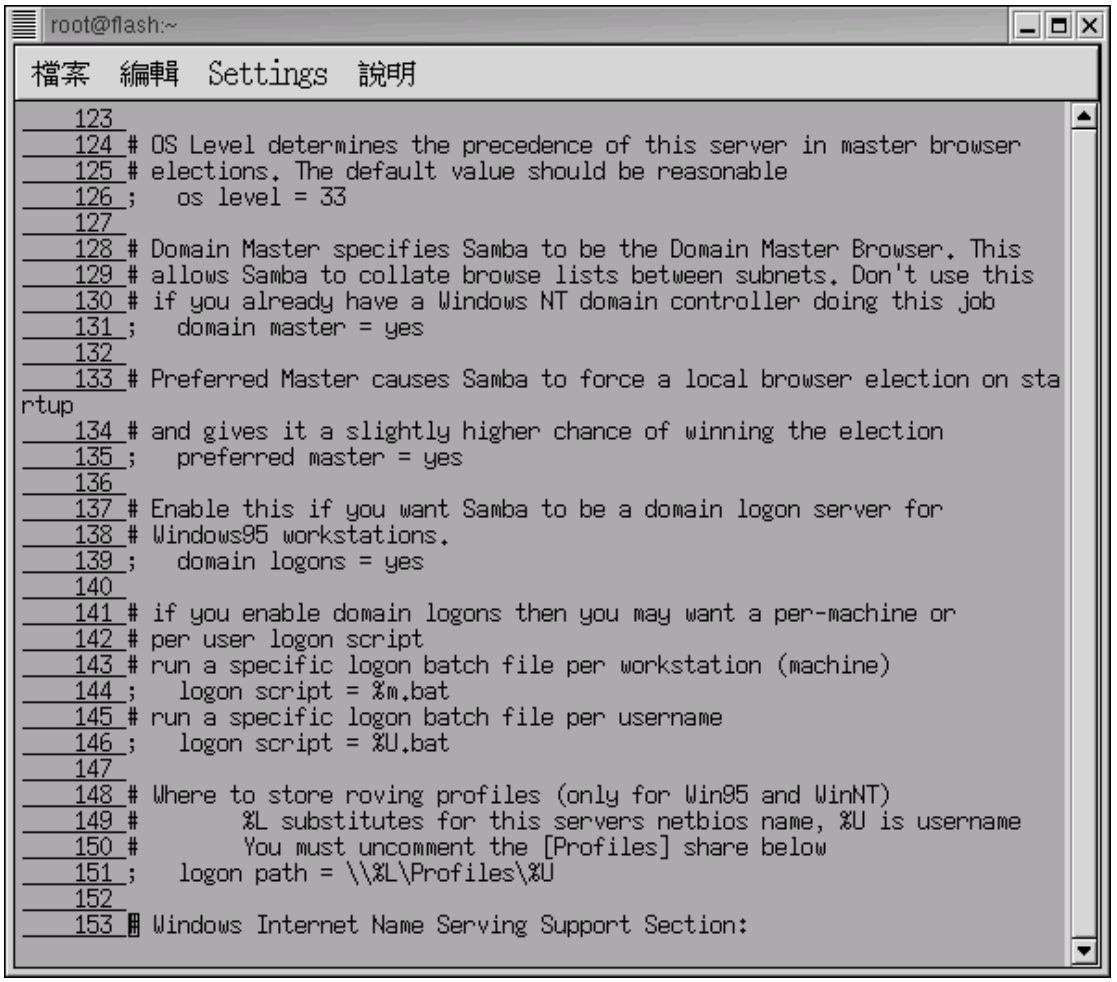
編輯 samba 伺服器的設定

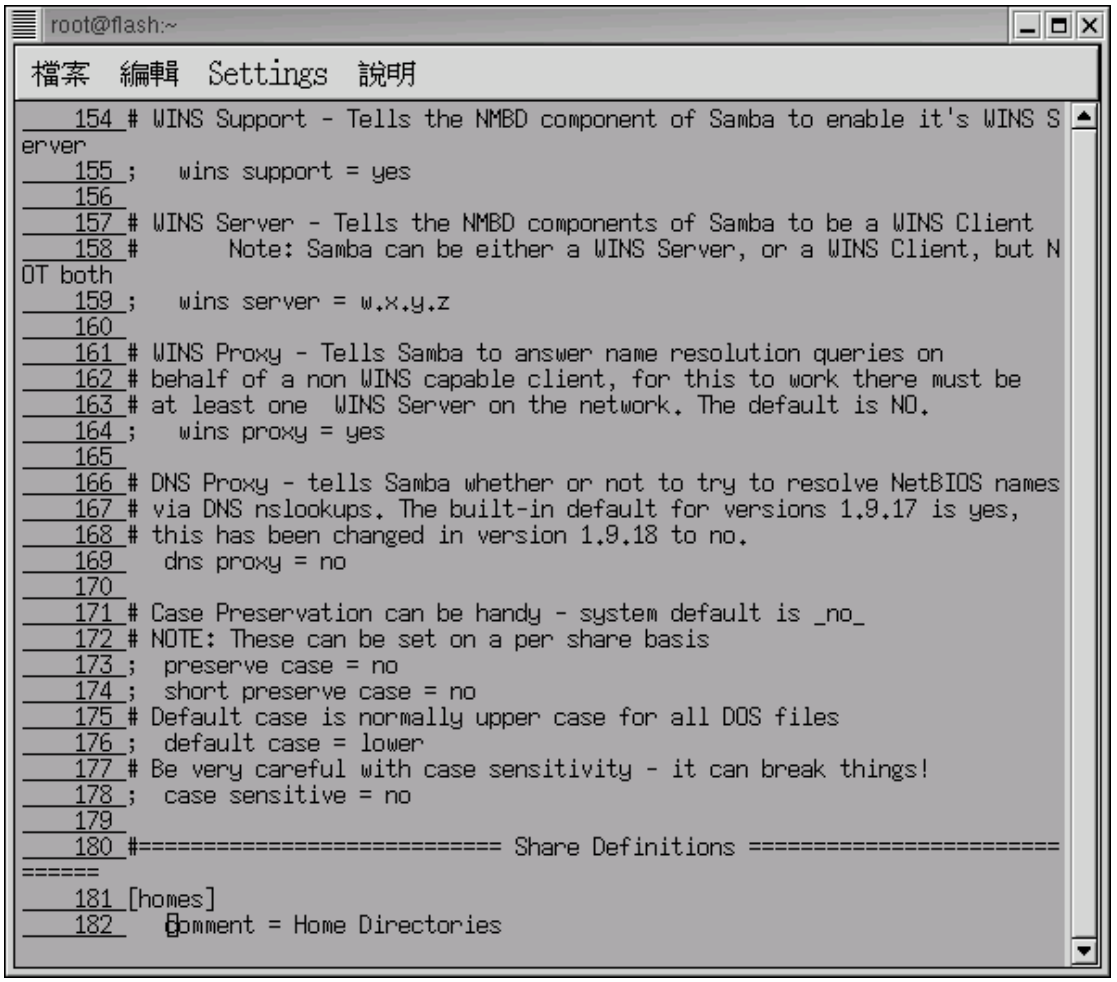


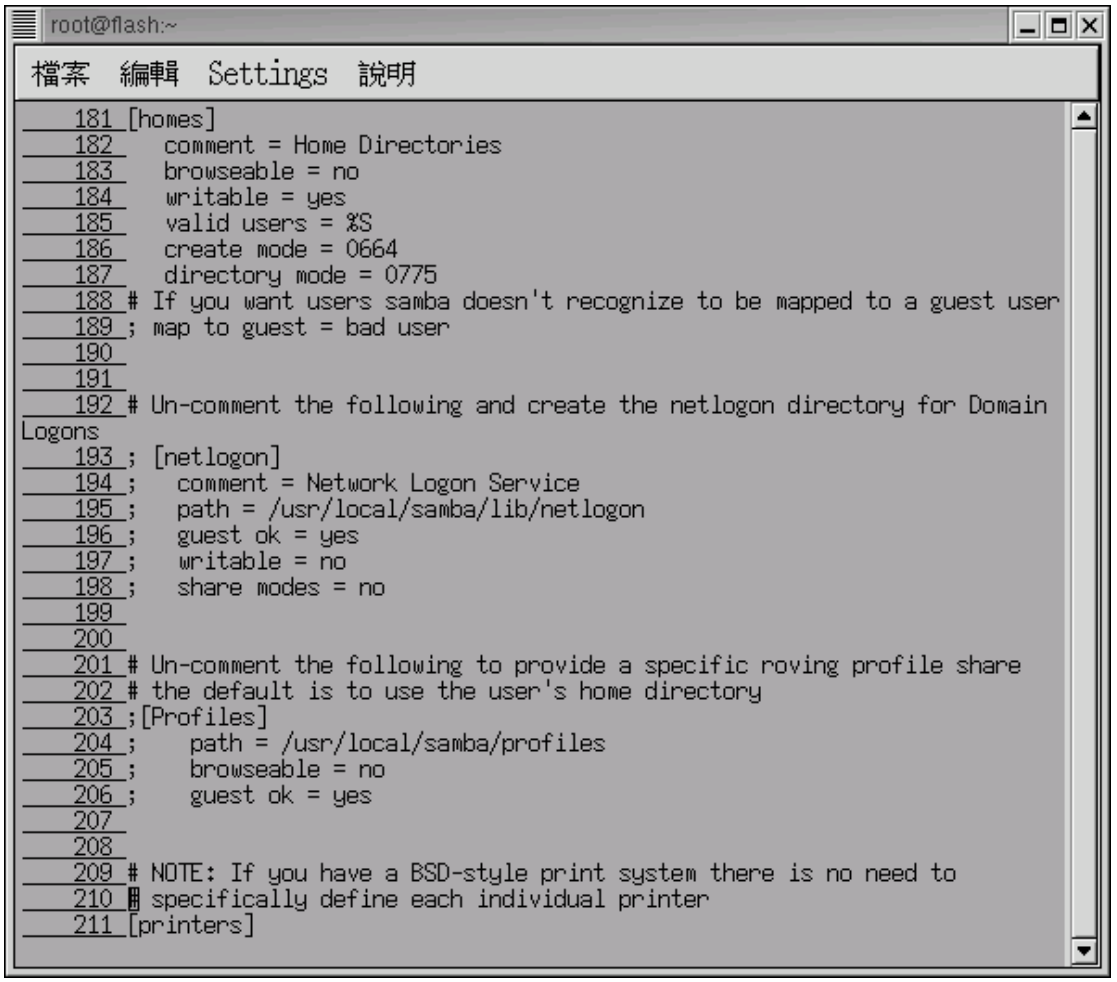

root@flash:~
檔案 編輯 Settings 說明
31 # than setting them up individually then you'll need this
32 printcap name = /etc/printcap
33 load printers = yes
34
35 # It should not be necessary to spell out the print system type unless
36 # yours is non-standard. Currently supported print systems include:
37 # bsd, sysv, plp, lprng, aix, hpux, qnx
38 printing = lprng
39
40 # Uncomment this if you want a guest account, you must add this to /etc/
passwd
41 # otherwise the user "nobody" is used
42 ; guest account = pcguest
43
44 # this tells Samba to use a separate log file for each machine
45 # that connects
46 log file = /var/log/samba/%m.log
47
48 # Put a capping on the size of the log files (in Kb).
49 max log size = 0
50
51 # Security mode. Most people will want user level security. See
52 # security_level.txt for details.
53 security = share
54
55 # Use password server option only with security = server
56 # The argument list may include:
57 # password server = My_PDC_Name [My_BDC_Name] [My_Next_BDC_Name]
58 # or to auto-locate the domain controller/s
59 # password server = *
60 ; password server = <NT-Server-Name>
61

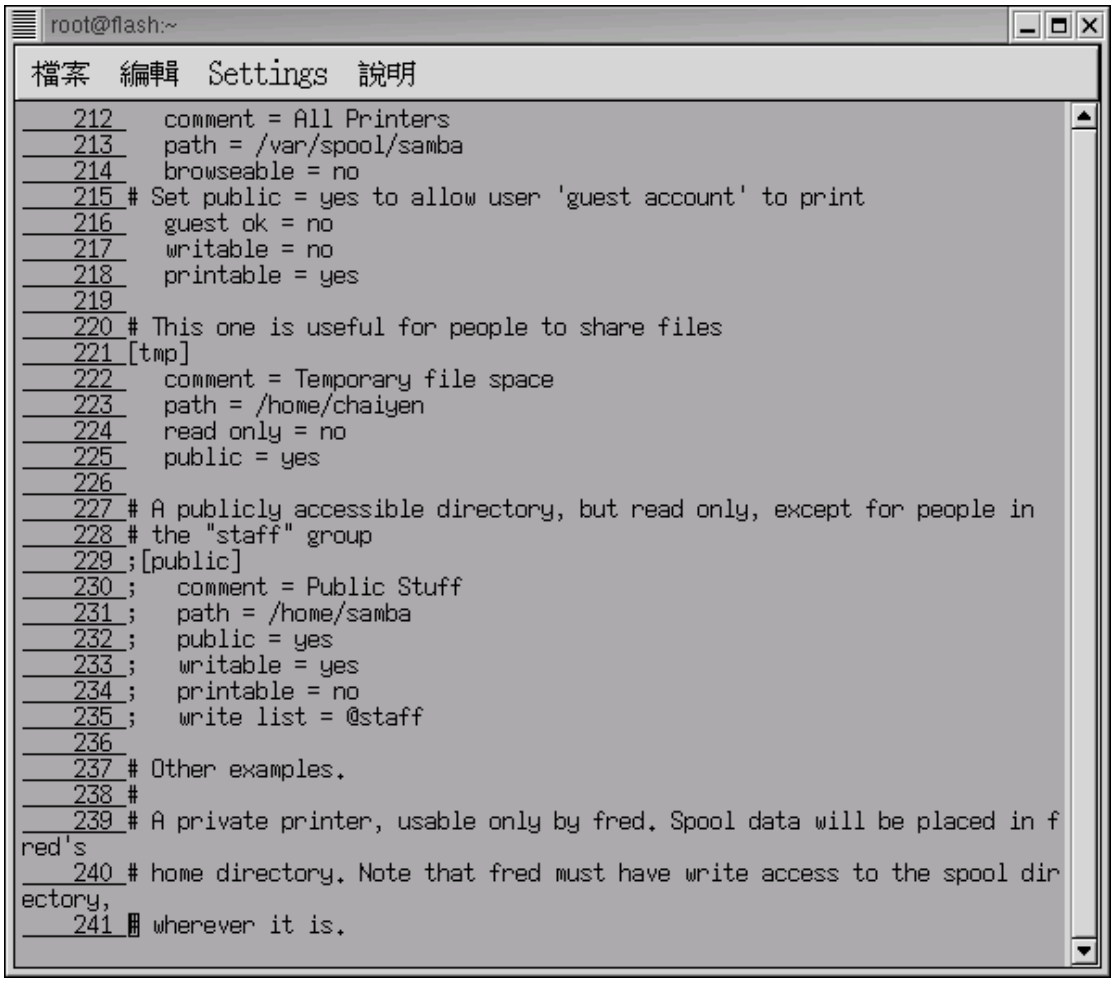

root@flash:~
檔案 編輯 Settings 說明
62 # Password Level allows matching of _n_ characters of the password for
63 # all combinations of upper and lower case.
64 ; password level = 8
65 ; username level = 8
66
67 # You may wish to use password encryption. Please read
68 # ENCRYPTION.txt, Win95.txt and WinNT.txt in the Samba documentation.
69 # Do not enable this option unless you have read those documents
70 encrypt passwords = yes
71 smb passwd file = /etc/samba/smbpasswd
72
73 # The following is needed to keep smbclient from spouting spurious error
s
74 # when Samba is built with support for SSL.
75 ; ssl CA certFile = /usr/share/ssl/certs/ca-bundle.crt
76
77 # The following are needed to allow password changing from Windows to
78 # update the Linux sytsem password also.
79 # NOTE: Use these with 'encrypt passwords' and 'smb passwd file' above.
80 # NOTE2: You do NOT need these to allow workstations to change only
81 # the encrypted SMB passwords. They allow the Unix password
82 # to be kept in sync with the SMB password.
83 ; unix password sync = Yes
84 ; passwd program = /usr/bin/passwd %u
85 ; passwd chat = *New*password* %n\n *Retype*new*password* %n\n *passwd:
*all*authentication*tokens*updated*successfully*
86
87 # Unix users can map to different SMB User names
88 ; username map = /etc/samba/smbusers
89
90 # Using the following line enables you to customise your configuration
91 # on a per machine basis. The %m gets replaced with the netbios name

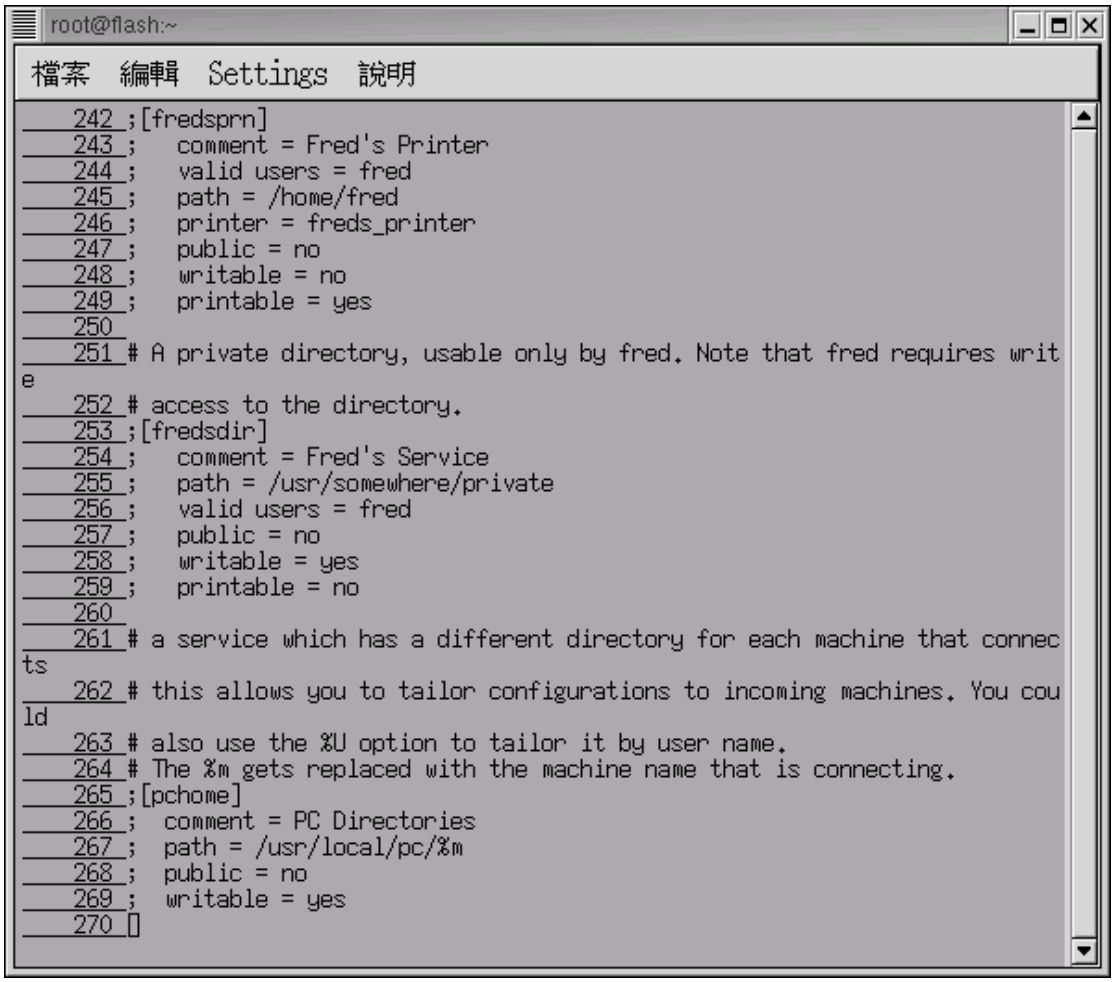

root@flash:~
檔案 編輯 Settings 說明
92 # of the machine that is connecting
93 ; include = /etc/samba/smb.conf.%m
94
95 # This parameter will control whether or not Samba should obey PAM's
96 # account and session management directives. The default behavior is
97 # to use PAM for clear text authentication only and to ignore any
98 # account or session management. Note that Samba always ignores PAM
99 # for authentication in the case of encrypt passwords = yes
100
101 ; obey pam restrictions = yes
102
103 # Most people will find that this option gives better performance.
104 # See speed.txt and the manual pages for details
105 socket options = TCP_NODELAY SO_RCVBUF=8192 SO_SNDBUF=8192
106
107 # Configure Samba to use multiple interfaces
108 # If you have multiple network interfaces then you must list them
109 # here. See the man page for details.
110 ; interfaces = 192.168.12.2/24 192.168.13.2/24
111
112 # Configure remote browse list synchronisation here
113 # request announcement to, or browse list sync from:
114 # a specific host or from / to a whole subnet (see below)
115 ; remote browse sync = 192.168.3.25 192.168.5.255
116 # Cause this host to announce itself to local subnets here
117 ; remote announce = 192.168.1.255 192.168.2.44
118
119 # Browser Control Options:
120 # set local master to no if you don't want Samba to become a master
121 # browser on your network. Otherwise the normal election rules apply
122 ; local master = no
123

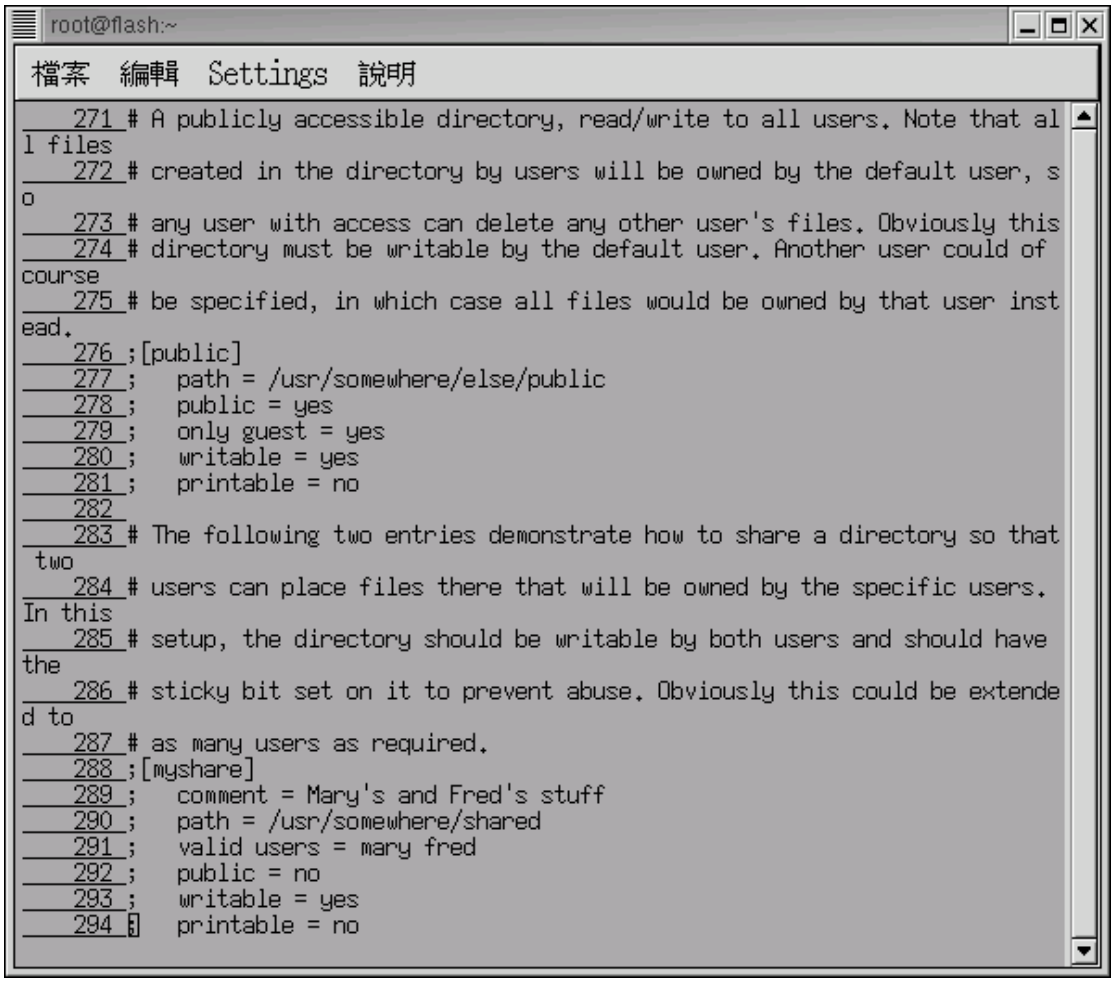

root@flash:~
檔案 編輯 Settings 說明
123
124 # OS Level determines the precedence of this server in master browser
125 # elections. The default value should be reasonable
126 ; os level = 33
127
128 # Domain Master specifies Samba to be the Domain Master Browser. This
129 # allows Samba to collate browse lists between subnets. Don't use this
130 # if you already have a Windows NT domain controller doing this job
131 ; domain master = yes
132
133 # Preferred Master causes Samba to force a local browser election on sta
rtup
134 # and gives it a slightly higher chance of winning the election
135 ; preferred master = yes
136
137 # Enable this if you want Samba to be a domain logon server for
138 # Windows95 workstations.
139 ; domain logons = yes
140
141 # if you enable domain logons then you may want a per-machine or
142 # per user logon script
143 # run a specific logon batch file per workstation (machine)
144 ; logon script = %m.bat
145 # run a specific logon batch file per username
146 ; logon script = %U.bat
147
148 # Where to store roving profiles (only for Win95 and WinNT)
149 # %L substitutes for this servers netbios name, %U is username
150 # You must uncomment the [Profiles] share below
151 ; logon path = \\%L\Profiles\%U
152
153 # Windows Internet Name Serving Support Section:

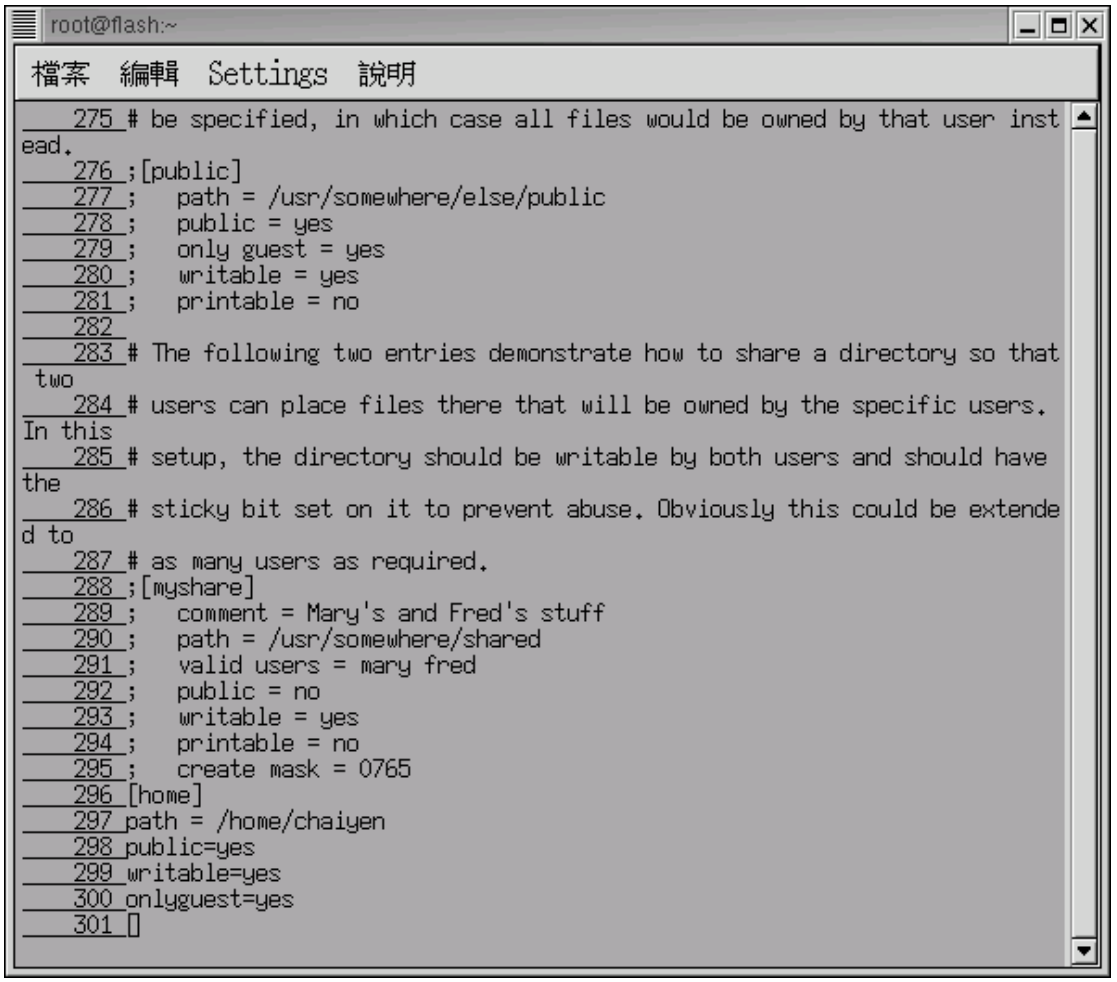

root@flash:~
檔案 編輯 Settings 說明
154 # WINS Support - Tells the NMBD component of Samba to enable it's WINS S
erver
155 ; wins support = yes
156
157 # WINS Server - Tells the NMBD components of Samba to be a WINS Client
158 # Note: Samba can be either a WINS Server, or a WINS Client, but N
OT both
159 ; wins server = w.x.y.z
160
161 # WINS Proxy - Tells Samba to answer name resolution queries on
162 # behalf of a non WINS capable client, for this to work there must be
163 # at least one WINS Server on the network. The default is NO.
164 ; wins proxy = yes
165
166 # DNS Proxy - tells Samba whether or not to try to resolve NetBIOS names
167 # via DNS nslookups. The built-in default for versions 1.9.17 is yes,
168 # this has been changed in version 1.9.18 to no.
169 dns proxy = no
170
171 # Case Preservation can be handy - system default is _no_
172 # NOTE: These can be set on a per share basis
173 ; preserve case = no
174 ; short preserve case = no
175 # Default case is normally upper case for all DOS files
176 ; default case = lower
177 # Be very careful with case sensitivity - it can break things!
178 ; case sensitive = no
179
180 #============================ Share Definitions ========================
======
181 [homes]
182 comment = Home Directories


root@flash:~
檔案 編輯 Settings 說明
181 [homes]
182 comment = Home Directories
183 browseable = no
184 writable = yes
185 valid users = %S
186 create mode = 0664
187 directory mode = 0775
188 # If you want users samba doesn't recognize to be mapped to a guest user
189 ; map to guest = bad user
190
191
192 # Un-comment the following and create the netlogon directory for Domain
Logons
193 ; [netlogon]
194 ; comment = Network Logon Service
195 ; path = /usr/local/samba/lib/netlogon
196 ; guest ok = yes
197 ; writable = no
198 ; share modes = no
199
200
201 # Un-comment the following to provide a specific roving profile share
202 # the default is to use the user's home directory
203 ;[Profiles]
204 ; path = /usr/local/samba/profiles
205 ; browseable = no
206 ; guest ok = yes
207
208
209 # NOTE: If you have a BSD-style print system there is no need to
210 # specifically define each individual printer
211 [printers]


root@flash:~
檔案 編輯 Settings 說明
212 comment = All Printers
213 path = /var/spool/samba
214 browseable = no
215 # Set public = yes to allow user 'guest account' to print
216 guest ok = no
217 writable = no
218 printable = yes
219
220 # This one is useful for people to share files
221 [tmp]
222 comment = Temporary file space
223 path = /home/chaiyen
224 read only = no
225 public = yes
226
227 # A publicly accessible directory, but read only, except for people in
228 # the "staff" group
229 ;[public]
230 ; comment = Public Stuff
231 ; path = /home/samba
232 ; public = yes
233 ; writable = yes
234 ; printable = no
235 ; write list = @staff
236
237 # Other examples.
238 #
239 # A private printer, usable only by fred. Spool data will be placed in f
red's
240 # home directory. Note that fred must have write access to the spool dir
ectory,
241 # wherever it is.


root@flash:~
檔案 編輯 Settings 說明
242 ;[fredsprn]
243 ; comment = Fred's Printer
244 ; valid users = fred
245 ; path = /home/fred
246 ; printer = freds_printer
247 ; public = no
248 ; writable = no
249 ; printable = yes
250
251 # A private directory, usable only by fred. Note that fred requires write
252 # access to the directory.
253 ;[fredsdir]
254 ; comment = Fred's Service
255 ; path = /usr/somewhere/private
256 ; valid users = fred
257 ; public = no
258 ; writable = yes
259 ; printable = no
260
261 # a service which has a different directory for each machine that connects
262 # this allows you to tailor configurations to incoming machines. You could
263 # also use the %U option to tailor it by user name.
264 # The %m gets replaced with the machine name that is connecting.
265 ;[pchome]
266 ; comment = PC Directories
267 ; path = /usr/local/pc/%m
268 ; public = no
269 ; writable = yes
270


root@flash:~
檔案 編輯 Settings 說明
271 # A publicly accessible directory, read/write to all users. Note that al
l files
272 # created in the directory by users will be owned by the default user, s
o
273 # any user with access can delete any other user's files. Obviously this
274 # directory must be writable by the default user. Another user could of
course
275 # be specified, in which case all files would be owned by that user inst
ead.
276 ;[public]
277 ; path = /usr/somewhere/else/public
278 ; public = yes
279 ; only guest = yes
280 ; writable = yes
281 ; printable = no
282
283 # The following two entries demonstrate how to share a directory so that
two
284 # users can place files there that will be owned by the specific users.
In this
285 # setup, the directory should be writable by both users and should have
the
286 # sticky bit set on it to prevent abuse. Obviously this could be extende
d to
287 # as many users as required.
288 ;[myshare]
289 ; comment = Mary's and Fred's stuff
290 ; path = /usr/somewhere/shared
291 ; valid users = mary fred
292 ; public = no
293 ; writable = yes
294 ; printable = no

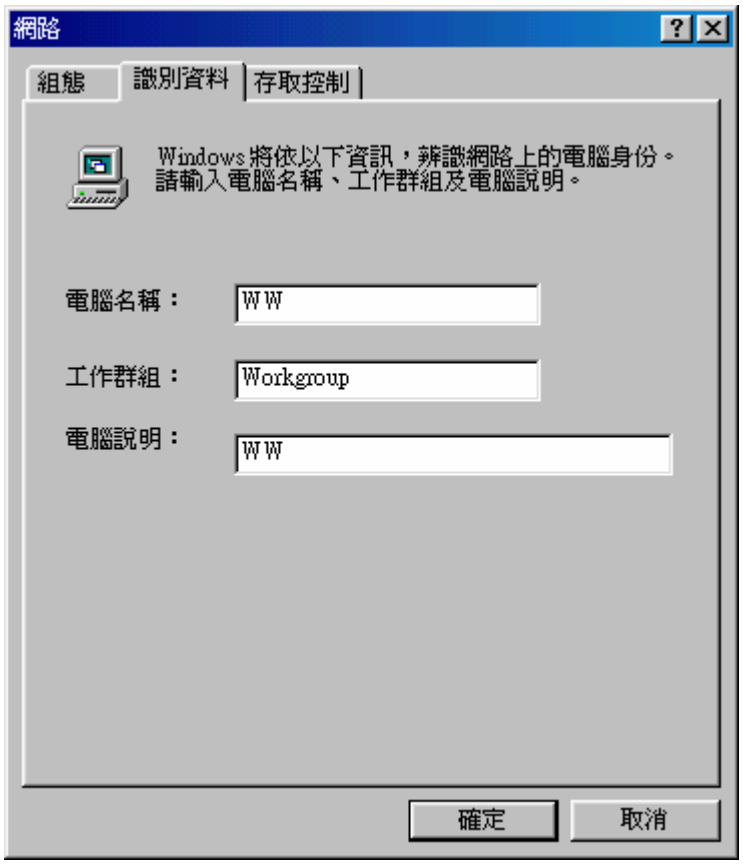

root@flash:~
檔案 編輯 Settings 說明
275 # be specified, in which case all files would be owned by that user inst
ead.
276 ;[public]
277 ;   path = /usr/somewhere/else/public
278 ;   public = yes
279 ;   only guest = yes
280 ;   writable = yes
281 ;   printable = no
282
283 # The following two entries demonstrate how to share a directory so that
 two
284 # users can place files there that will be owned by the specific users.
In this
285 # setup, the directory should be writable by both users and should have
the
286 # sticky bit set on it to prevent abuse. Obviously this could be extende
d to
287 # as many users as required.
288 ;[myshare]
289 ;   comment = Mary's and Fred's stuff
290 ;   path = /usr/somewhere/shared
291 ;   valid users = mary fred
292 ;   public = no
293 ;   writable = yes
294 ;   printable = no
295 ;   create mask = 0765
296 [home]
297 path = /home/chaiyen
298 public=yes
299 writable=yes
300 onlyguest=yes
301 []

<<1>>**設定群組名稱**

將 samba **第** 18 **行的** workgroup **改成讀者的網路芳鄰**

```
17 # workgroup = NT-Domain-Name or Workgroup-Name
18    workgroup =workgroup
```

在 windows **中的工作群組改成** workgroup。



<<2>>**可允許** samba **伺服器的** IP **範圍，我們是設定在自己的網域，我們的網域是** 61.218.29.

```
28 ;   hosts allow = 61.218.29.
29
```

<<3>>**伺服器的安全等級**

share **是每個人都可以分享，且不需帳號和密碼；**user **這是** samba **的預設等級，檢查帳號與密碼的工作由** samba **來作;**server **在此是以另外一台的** samba **來負責**

```
53    security = share
54
```

當使用者從 windows **透過** samba **進入** linux **時，會自動傳送使用者的** username **與** password **給** samba **伺服器，然後** samba **會依據這兩個資料去向** password **伺服器驗證**。

安全等級	說名
Share	我們在 windows 上並不需要輸入使用者帳號和密碼，任何人都可以使用並且進入我們指定的目錄。
User	這是預設的安全等級。我們在登入使用資源前必需先登錄我們的帳號和密碼，當身份驗證通過後才允許我們進入。
Password Server	我們使用者的身份認證是由另外一部 Samba 伺服器的電腦負責，當驗證失拜時，才會將安全降到 User 等級來驗證。
Domain	如果我們的網路不是以群組方式，而是以網域方式，則我們可以使用 Domain 安全等級。

<<4>>使用者密碼加密

我們在第 70 行將使用者密碼加密。

```
70    encrypt passwords = yes
71    smb passwd file = /etc/samba/smbpasswd
```

<<5>>使用者共享資源設定

我們在此設定在 linux 上共享資源的目錄 chaiyen，路徑是/home/chaiyen 目錄。

我們可以新增第 296 行到 300 行，path 是指定所開放目錄的路徑，而 writable 我們設定為 yes。Browseable=Yes 是設定可以看得到所分享的文件。

第 298 行的 public 是設定是否共享。

第 299 行的 writable 是設定是否可以寫入。

```
296 [home]
297 path = /home/chaiyen
298 public=yes
299 writable=yes
300 onlyguest=yes
```

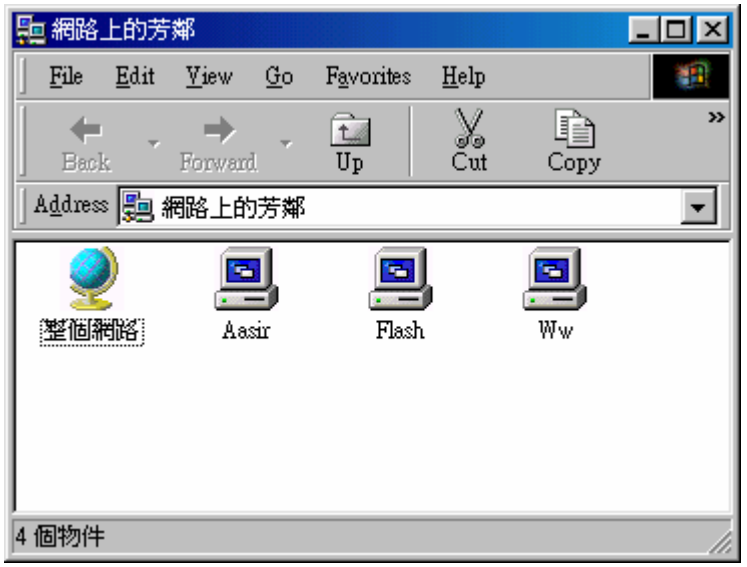
<<6>>改變 chaiyen 目錄下的權限

我們再將/home/chaiyen 的目錄改成可讀寫與執行，這樣就可以分享出去了。

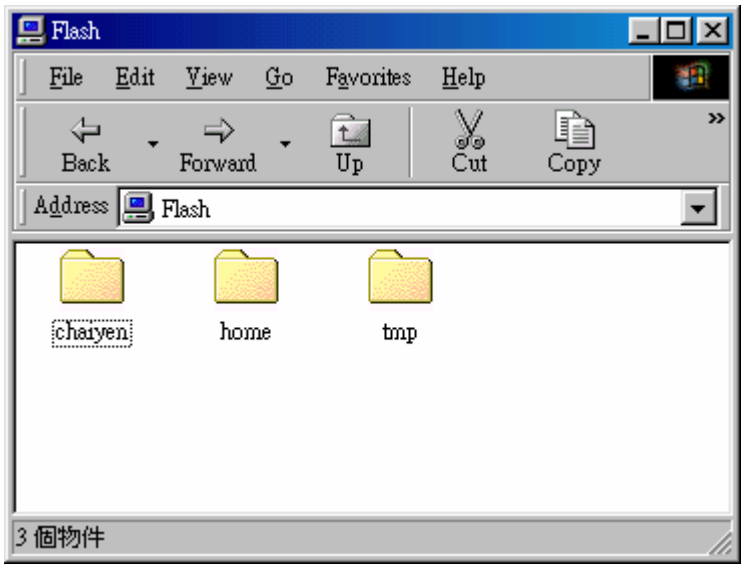
```
[root@flash home]# chmod 777 chaiyen
```

<<7>>按下網路芳鄰

我們就可以看到所分享出來的主機了。



<<8>>home 是我們分享出來的目錄



<<9>>Samba 加密密碼-smbpasswd

當登入 Samba 伺服器時，使用者要輸入他們的帳號和密碼，這個管理登入帳號和密碼的檔案就是/etc/samba/smbpasswd 的 Samba 密碼檔，我們也可以使用 smbpasswd 指令來增加這些密碼。

我們使用 mksmbpasswd.sh 小程式和/etc/passwd 系統密碼檔來產生 /etc/samba/smbpasswd 的檔案。

```
[root@aasir chaiyen]# cat /etc/passwd | mksmbpasswd.sh > /etc/samba/smbpasswd
```

然後我們設定只有超級使用者可以寫入和讀取的權限 600。

```
[root@aasir chaiyen]# chmod 600 /etc/samba/smbpasswd
```

我們可以使用 smbpasswd 指令來增加特定使用者登入 samba。

```
[root@aasir chaiyen]# smbpasswd chaiyen
New SMB password:
Retype new SMB password:
```

我們在 Samba 伺服器組態/etc/samba/smb.conf 也要設定它的組態來確保加密密碼的使用。第 70 行和第 71 行的設定。第 70 行是設定加密密碼的使用為 yes。第 71 行是設定 Samba 伺服器的密碼檔是放在/etc/samba/smbpasswd。

```
70      encrypt passwords = yes
71      smb passwd file = /etc/samba/smbpasswd
```

<<10>>顯示 Samba 伺服器的狀態

我們可以使用 smbstatus 來顯示 Samba 伺服器的狀態，這裏顯示有人從 61.218.29.5 的位址登錄我們主機。

```
[root@aasir chaiyen]# smbstatus

Samba version 2.2.7a
Service      uid      gid      pid     machine
----------------------------------------------
public       nobody   nobody   11406   ww       (61.218.29.5) Fri Sep 26 16:06:3
1 2003

No locked files
```

課後練習

一. 選擇題

1.何者和 Samba 伺服器的組成元件無關?

A./usr/bin/nmbd

B./usr/bin/smbclient

C./usr/bin/nmbd

D./etc/samba/smb.conf

2.何種伺服器可以讓我們 Linux 上的檔案在各個不同作業系統平台上作分享，例如我們可以在 Windows 的作業系統上透過網路來讀取 Linux 作業系統上的檔案。該伺服器也可以提供我們印表機的服務，而且我們可以使用 smb 來和其它 Unix-like 的作業系統作檔案的溝通。

A.Apache

B.FTP

C. Samba

D.DHCP

3.在伺服器的安全等級中，何者是每個人都可以分享，且不需帳號和密碼

A. share

B. Password Server

C.User

D.Domain

4. 安裝 samba 是方便我們將在 windows 上面做好的檔案用 samba 的介面，將他傳到 linux 上，samba 伺服器就是一種溝通 linux 和 windows 的介面。我們可以啟動 samba 伺服器使用下列何種指令?

A./etc/rc.d/init.d/smb start

B./etc/rc.d/init.d/smb stop

C./etc/rc.d/init.d/smb restart

D.testparm

5.在使用者共享資源設定上，我們在此設定在 linux 上共享資源的目錄 chaiyen，路徑是/home/chaiyen 目錄。我們可以設定 path 是指定所開放目錄的路徑，而 writable 我們設定為 yes。何者是設定可以看得到所分享的文件?

A.Browseable=yes

B.Hidden=no

C.Viewable=Yes

D.Display=yes

答案

1.B　2.C　3.A　4.A　5.A