

# SAMBA伺服器

---

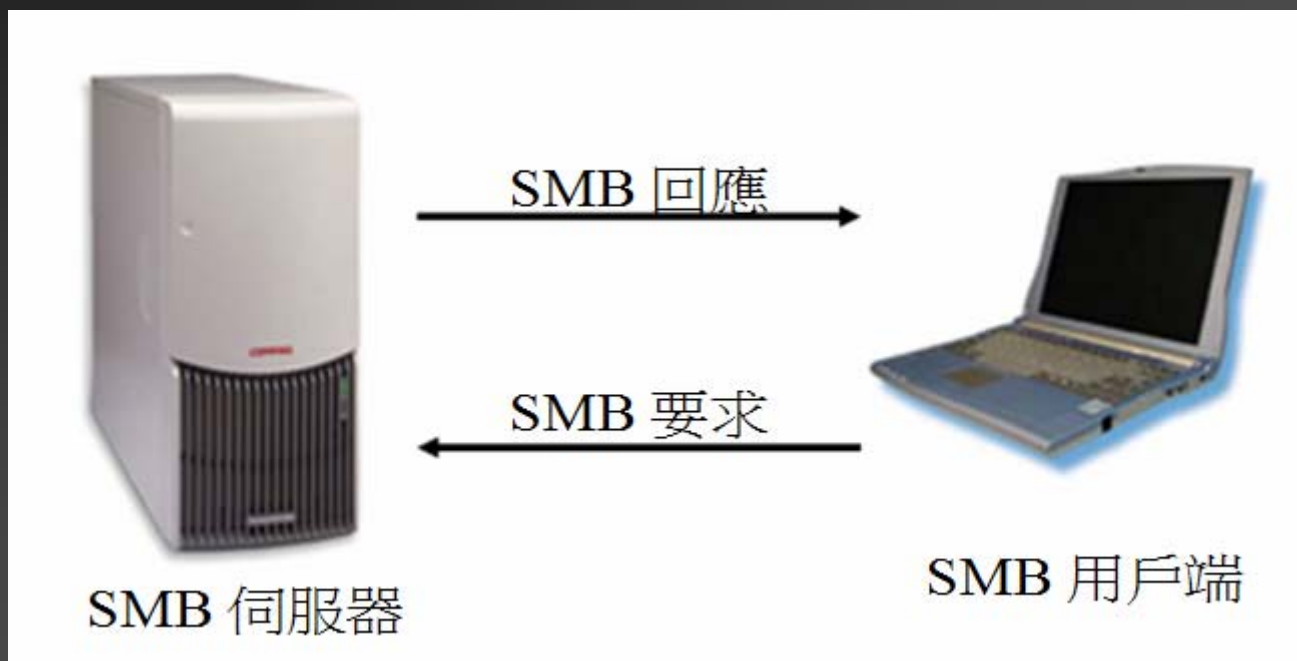
- 1 SAM與SAMBA
  - 2 SAMBA組態設定
  - 3 以瀏覽器管理SAMBA
-



# SAM與SAMBA

---

# SMB主從式架構模式



# 與SMB執行時有關的通訊協定

OSI	TCP/IP				
應用程式層	SMB				Application
表達層					
交談層	NetBIOS	NetBEUI	NetBIOS	NetBIOS	NetBIOS
傳輸層	IPX		DECnet	CP/UDP	TCP/UDP
網路層			IP	IP	
資料連結層	802.2/3/5	802.2	Ethernet	Ethernet	Ethernet
		802.3/5	V2	V2	
實體層					

# SMB用戶端

---

- Windows作業系統
  - Digital開發的PATHWORKS用戶端
  - SAMBA上的smbclient
  - Linux上的smbfs
  - SMBlib
-

# SMB伺服器

---

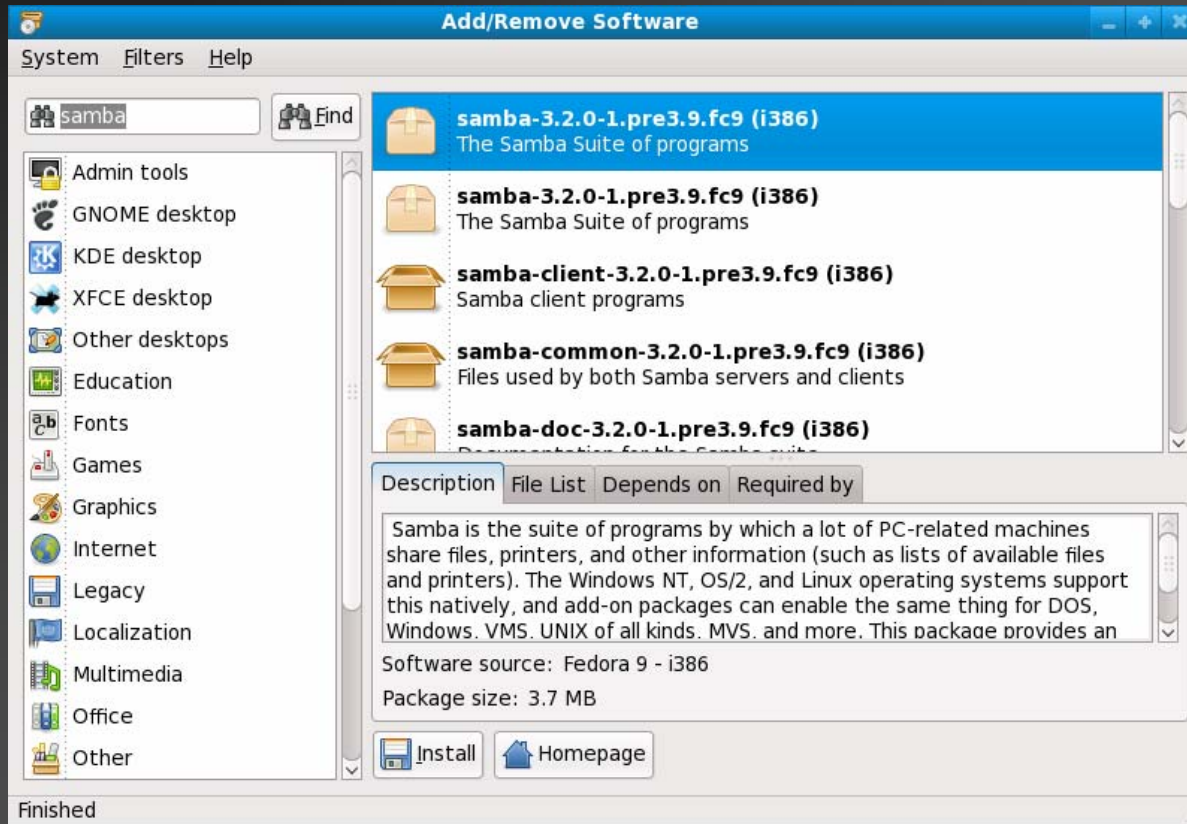
- 提供SMB服務的伺服器軟體
  - 很多平台上都有SMB伺服器
  - Linux上的SMB伺服器稱爲－SAMBA
  - SAMBA是由Andrew Tridgell和一組志願者所發展的SMB伺服器
-

# SAMBA的組成套件

---

- `smbd`
  - `nmbd`
  - `smbclient`
  - `testparm`
  - `smb.conf`
  - `smbprint`
-

# 安裝SAMBA伺服器套件



The image features a dark grey central area with a white title. Above and below this area are decorative horizontal bands with a colorful, textured, abstract pattern in shades of red, orange, yellow, and green.

# SAMBA組態設定

# 設定/etc/services檔案內容

---

- 確定所有以「netbios-」開頭的記錄（共有六筆）都可執行
  - 每筆記錄前都不可包含「#」符號
-

# 設定/etc/samba/lmhosts檔案

---

- 唯一功能是提供主機名稱與IP位址的對應資料
  - 應該將網路中所有Windows電腦和Linux主機的對應資料都記錄在此
  - 每筆記錄的格式如下：  
IP位址 主機別名（NetBIOS名稱）
-

# 設定/etc/samba/smb.conf檔案內容

## 設定smb.conf檔案注意事項

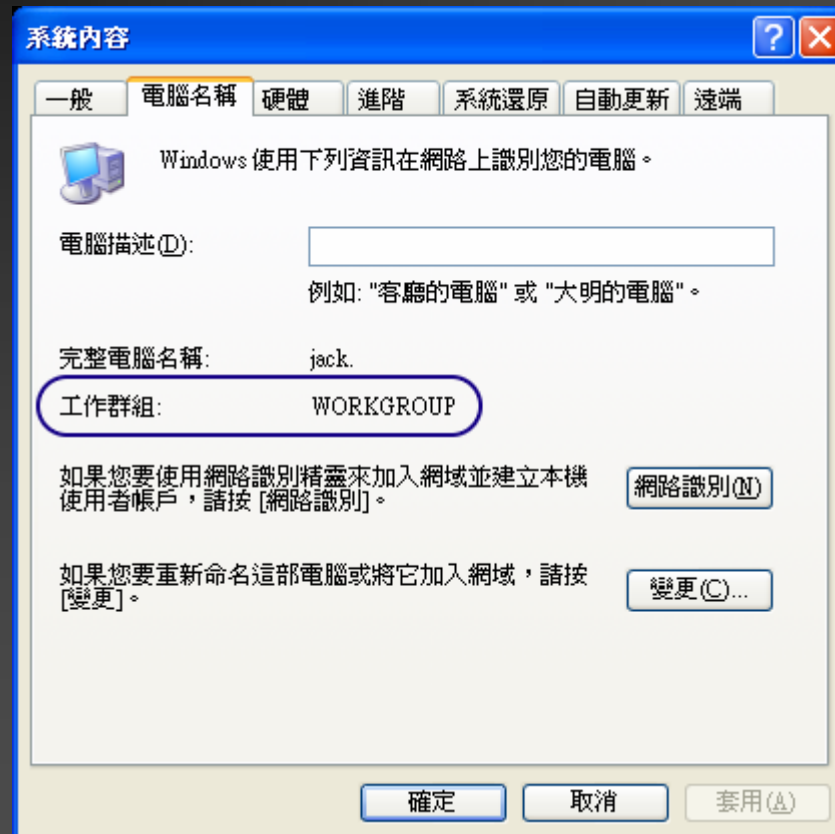
- 在smb.conf設定檔中的任一行，若是以分號（；）或井字號（#）開頭都表示為註解，因此該行的內容將被忽略而不會生效。
- 爲了區別起見，檔案中以「#」開頭的部份是指說明，而以「;」開頭的內容則表示目前停用，但可視需要而啓用的選項。
- 在修改任何設定後，建議執行「testparm」指令，以檢查是否產生語法上的錯誤。
- 設定檔中的每一行都是以「設定項目=設定值」的格式來表示。

# Global Settings — 設定整體環境

---

- workgroup = MYGROUP

# Windows XP電腦所屬工作群組名稱



# Global Settings — 設定整體環境

---

- server string = Samba Server
  - ; hosts allow = 192.168.1. 192.168.2. 127.
  - printcap name = /etc/printcap
  - load printers = yes
  - ; printing = bsd
  - ; guest account = pcguest
  - log file = /var/log/samba/%m.log
  - max log size = 50
-

# Global Settings — 設定整體環境

- security = user
- ; password server = <NT-Server-Name>
- ; password level = 8
- ; username level = 8
- ; encrypt passwords = yes
- ; smb passwd file = /etc/samba/smbpasswd
- ; unix password sync = Yes
- ; passwd program = /usr/bin/passwd %u

# Global Settings — 設定整體環境

- ; passwd chat = \*New\*password\* %n\n \*Retype\*new\*password\*  
%n\n \*passwd : \*all\*authentication\*tokens\*updated\*successfully\*
- ; username map = /etc/samba/smbusers
- ; include = /etc/samba/smb.conf.%m
- socket options = TCP\_NODELAY SO\_RCVBUF=8192  
SO\_SNDBUF=8192
- ; interfaces = 192.168.12.2/24 192.168.13.2/24
- ; remote announce = 192.168.1.255 192.168.2.44
- ; local master = no

# Global Settings — 設定整體環境

---

- os level = 33
  - ; domain master = yes
  - ; preferred master = yes
  - ; domain logons = yes
  - ; logon script = %m.bat
  - ; logon script = %U.bat
  - ; logon path = \\%L\Profiles\%U
  - ; name resolve order = wins lmhosts bcast
-

# Global Settings — 設定整體環境

---

- wins support = yes
  - ; wins server = w.x.y.z
  - ; wins proxy = yes
  - dns proxy = no
  - ; preserve case = no
  - ; short preserve case = no
  - ; default case = lower
  - ; case sensitive = no
-

# Share Definitions—設定共用資源

---

- [homes]—使用者個人的主目錄設定內容
  - [netlogon]—登入網域時的「netlogon」目錄設定內容
  - [Profiles]—使用者設定檔目錄設定內容
  - [printers]—設定印表機環境內容
  - [tmp]—「tmp」目錄設定內容
  - [public]—「public」目錄設定內容
-

# 執行testparm以測試smb.conf設定檔

---

```
[root@ns1 ~]# testparm
```

```
Load smb config files from /etc/samba/smb.conf
```

```
Processing section "[homes]"
```

```
Processing section "[printers]"
```

```
Loaded services file OK.
```

```
Server role : ROLE_STANDALONE
```

```
Press enter to see a dump of your service definitions
```

---

# 啓動SAMBA伺服器

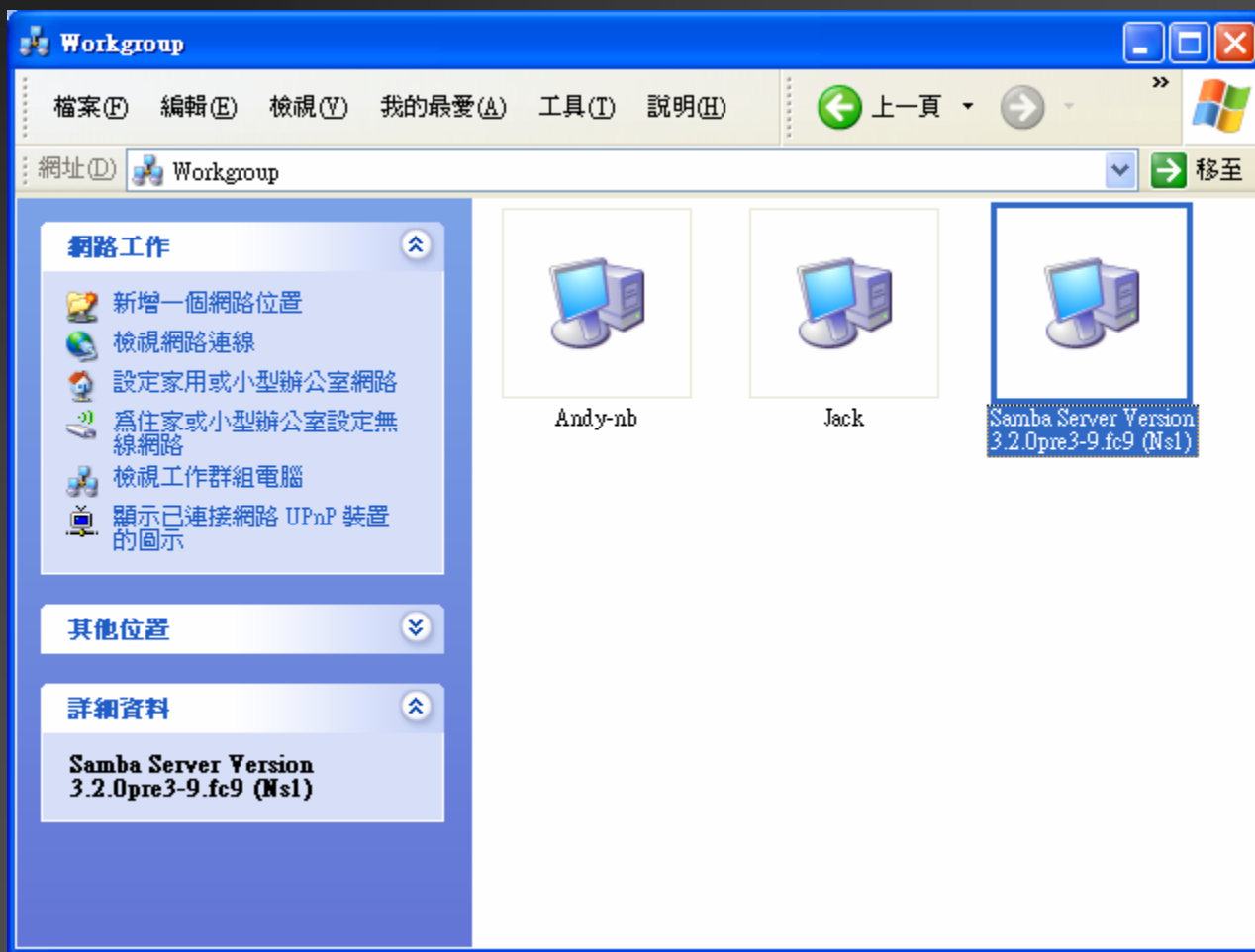
---

```
[root@ns1 ~]# /etc/rc.d/init.d/smb start
```

```
[root@ns1 ~]# /etc/rc.d/init.d/nmb start
```

---

# 「網路上的芳鄰」中出現的SAMBA伺服器



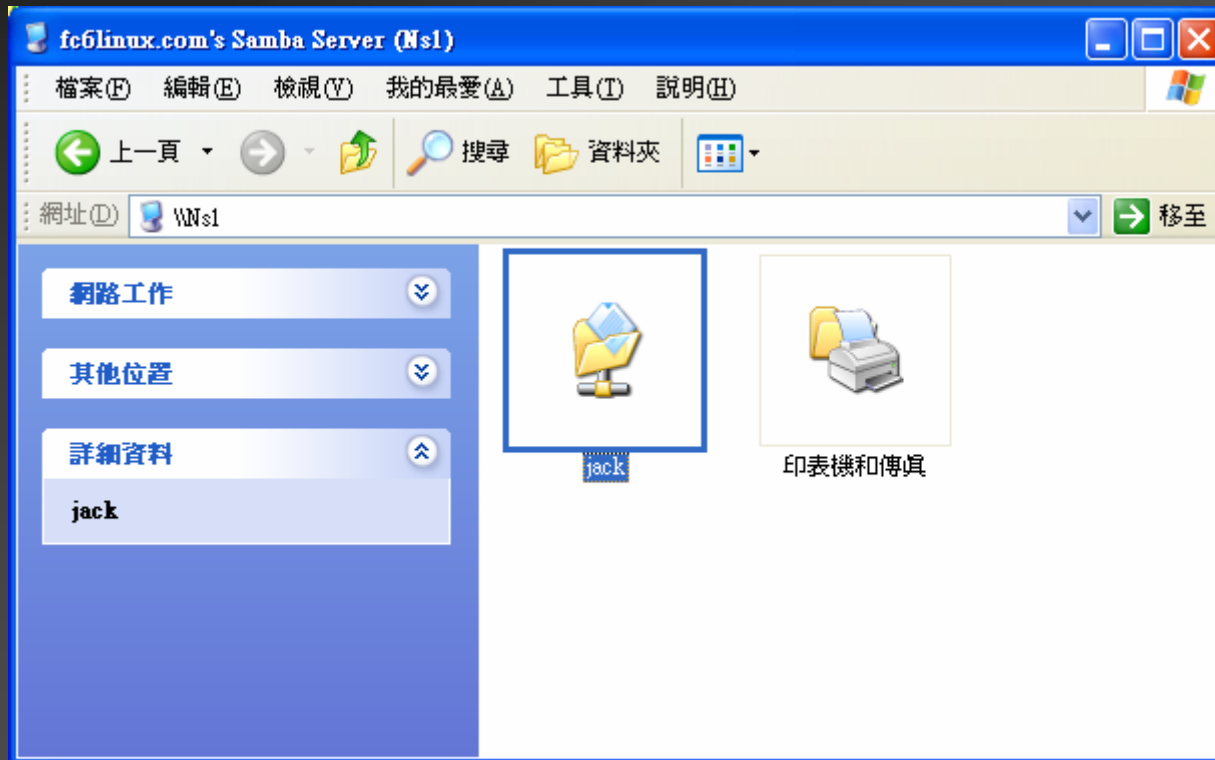
# 建立SAMBA密碼檔-`/etc/samba/smbpasswd`

- SAMBA伺服器與Linux作業系統使用不同的密碼檔，所以無法以Linux作業系統上的帳號密碼登入SAMBA伺服器。
- 建立「`smb passwd file`」所指定的密碼檔。
  - `[root@ns1 ~]# cat /etc/passwd | mksmbpasswd.sh > /etc/samba/smbpasswd`
- 設定密碼
  - `[root@ns1 ~]# smbpasswd username`

# 身份驗證視窗



# 進入使用者的主目錄視窗



# SAMBA伺服器安全性等級

---

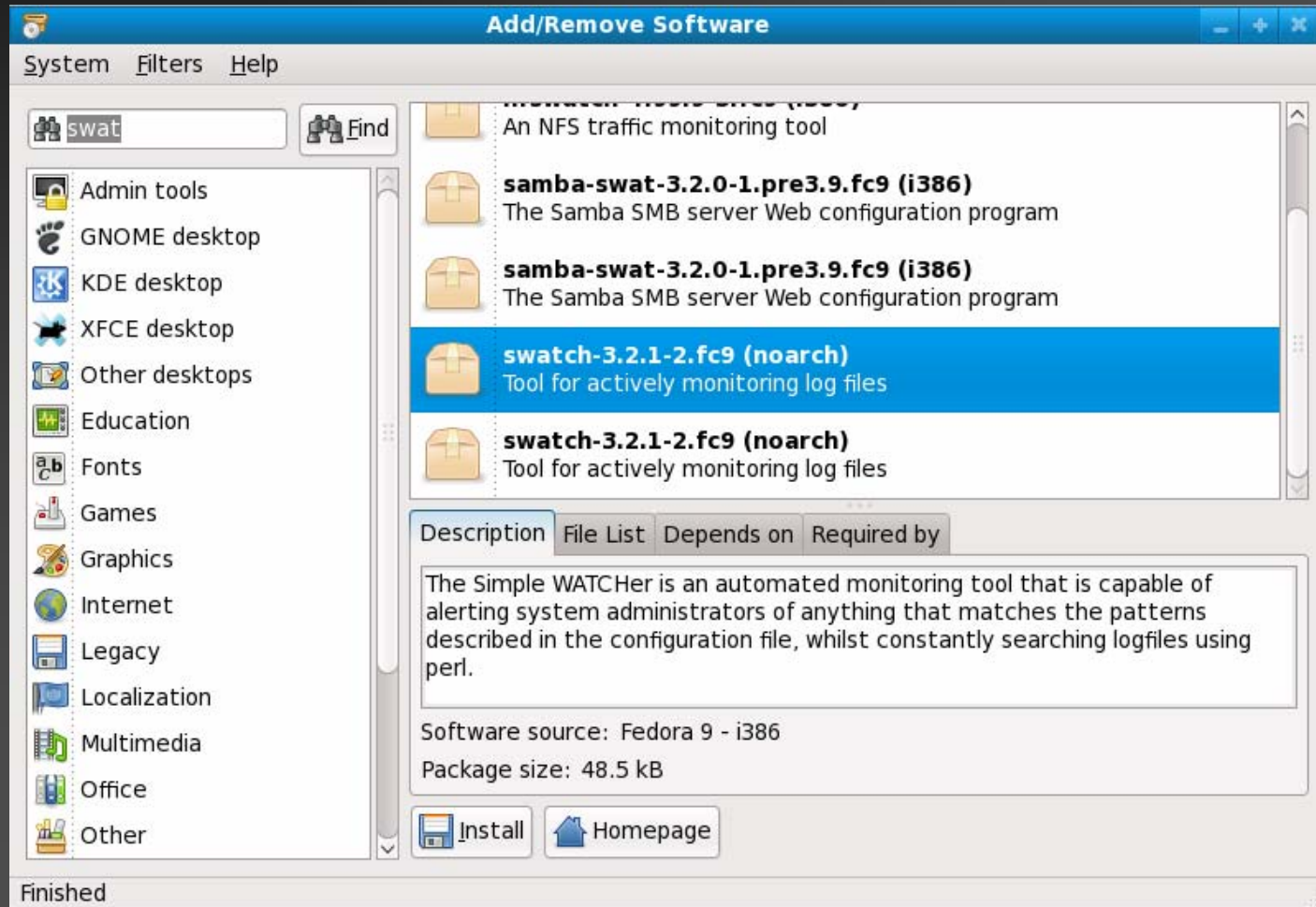
- Share安全性等級
  - User安全性等級
  - Server安全性等級
  - Domain安全性等級
-



# 以瀏覽器管理SAMBA



# 安裝SWAT套件



# 啓動SWAT服務

- 確定 `/etc/services` 檔案中關於 `swat` 的服務沒有加上註解。
- 修改 `/etc/xinetd.d/swat` 的內容：
  - `only from` = `XXX.XXX.XXX.XXX`
  - `disable` = `no`
- 重新啓動 `xinetd` 使設定生效
  - `>> /etc/rc.d/init.d/xinetd restart`

# 連接SWAT網頁

---

連接SAMBA的URL格式

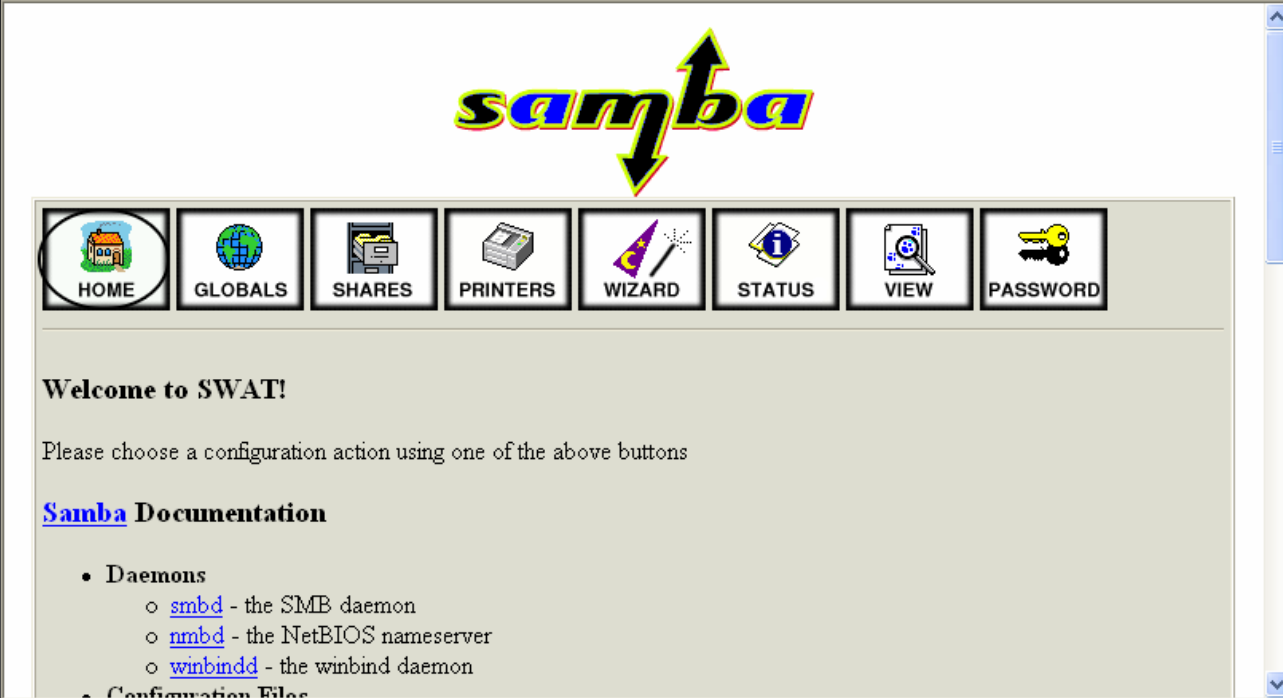
http://SAMBA主機或IP位址：901

---

# 身份驗證視窗畫面



# HOME標籤內容



**samba**

HOME GLOBALS SHARES PRINTERS WIZARD STATUS VIEW PASSWORD

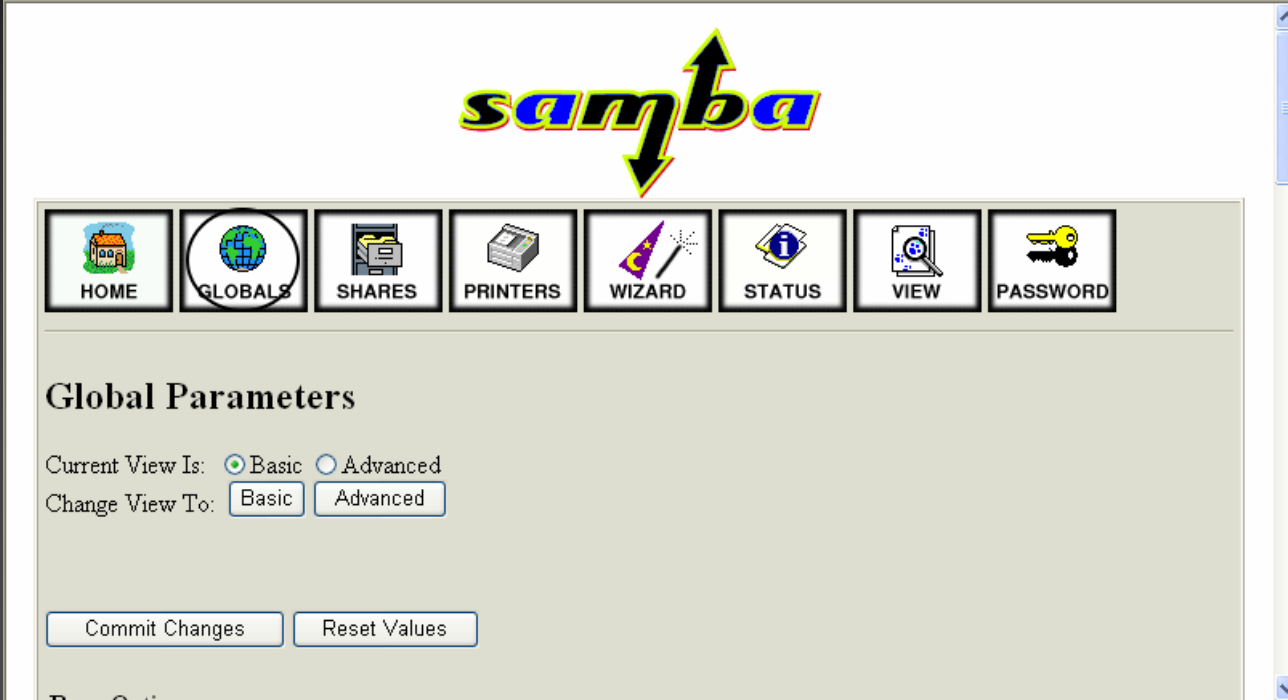
**Welcome to SWAT!**

Please choose a configuration action using one of the above buttons

**[Samba](#) Documentation**

- **Daemons**
  - [smbd](#) - the SMB daemon
  - [nmbd](#) - the NetBIOS nameserver
  - [winbindd](#) - the winbind daemon
- **Configuration Files**

# GLOBALS標籤內容



The screenshot displays the Samba web interface. At the top center is the Samba logo, which consists of the word "samba" in a stylized, lowercase font with a blue-to-yellow gradient and a black outline. A large, black, double-headed arrow is superimposed over the logo, pointing both upwards and downwards.

Below the logo is a horizontal navigation bar containing eight icons, each with a label underneath:

- HOME: A house icon.
- GLOBALS: A globe icon, which is currently selected and highlighted with a blue border.
- SHARES: A folder icon.
- PRINTERS: A printer icon.
- WIZARD: A wizard hat icon.
- STATUS: An information icon (a lowercase 'i' in a circle).
- VIEW: A magnifying glass icon.
- PASSWORD: A key icon.

Below the navigation bar is the main content area, titled "Global Parameters".

Under the title, there are two radio buttons for "Current View Is":

- Basic
- Advanced

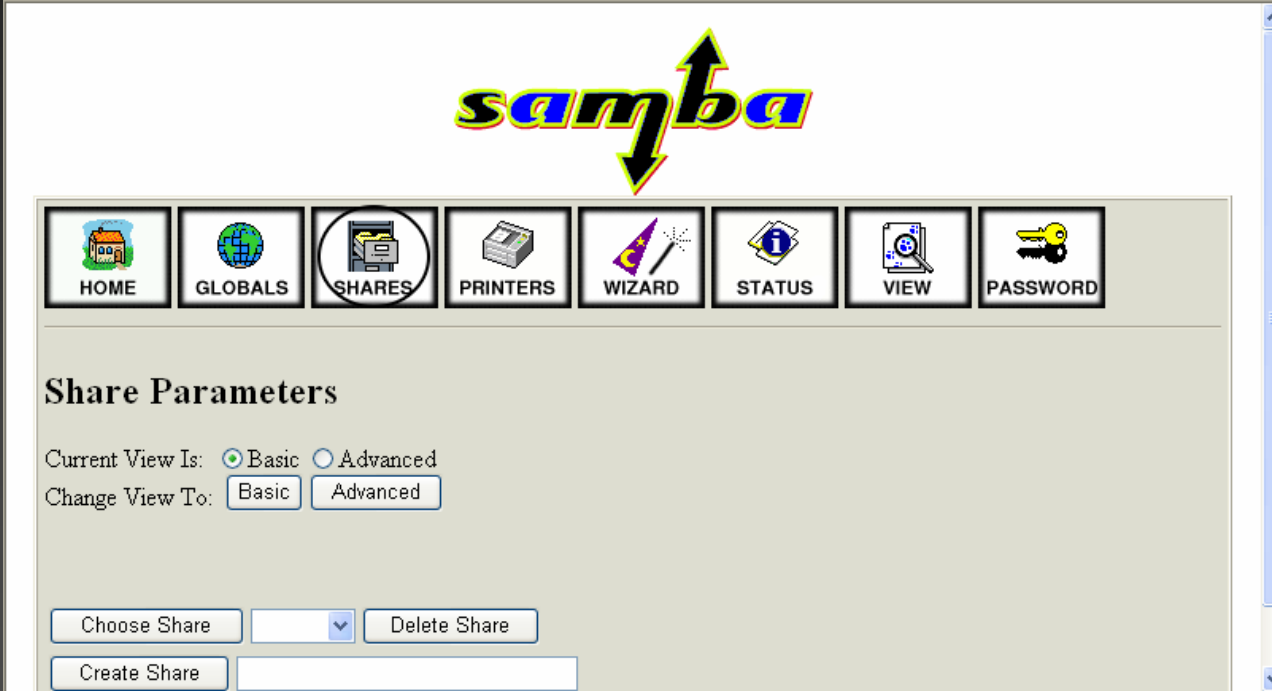
Below this, there are two buttons for "Change View To":

- Basic
- Advanced

At the bottom of the content area, there are two buttons:

- Commit Changes
- Reset Values

# SHARES標籤內容



The screenshot displays the Samba web interface. At the top center is the Samba logo, which consists of the word "samba" in a stylized, lowercase font with a blue-to-yellow gradient and a black outline. A large, black, double-headed arrow is superimposed over the logo, pointing both upwards and downwards.

Below the logo is a horizontal navigation bar containing eight icons, each with a label underneath:

- HOME: A house icon.
- GLOBALS: A globe icon.
- SHARES: A folder icon with a document, which is currently selected and highlighted with a white background.
- PRINTERS: A printer icon.
- WIZARD: A wizard hat icon.
- STATUS: An information icon (i in a circle).
- VIEW: A magnifying glass icon.
- PASSWORD: A key icon.

Below the navigation bar is the main content area, titled "Share Parameters".

Under "Share Parameters", there are two radio buttons for "Current View Is":

- Basic
- Advanced

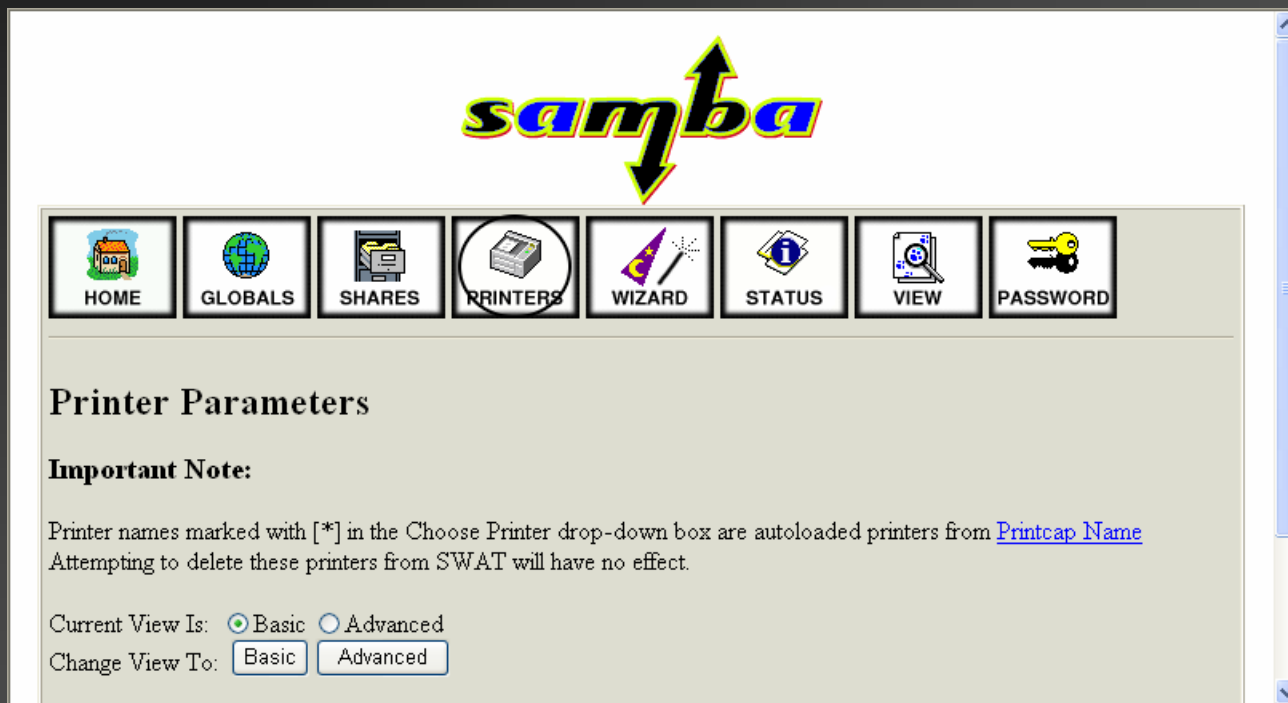
Below this, there are two buttons for "Change View To":

- Basic
- Advanced

At the bottom of the interface, there are two rows of controls:

- The first row contains a "Choose Share" button, a dropdown menu, and a "Delete Share" button.
- The second row contains a "Create Share" button and a text input field.

# PRINTERS 標籤內容



The screenshot shows the Samba web interface. At the top center is the Samba logo, which consists of the word "samba" in a stylized, lowercase font with a yellow-to-blue gradient and a black outline. A large, black, downward-pointing arrow is positioned behind the letter 'a'. Below the logo is a horizontal navigation bar containing eight icons in square boxes: HOME (house), GLOBALS (globe), SHARES (printer), PRINTERS (printer), WIZARD (magic wand), STATUS (info icon), VIEW (magnifying glass), and PASSWORD (key). The "PRINTERS" icon is circled in black. Below the navigation bar, the page title "Printer Parameters" is displayed. Underneath, there is an "Important Note:" section with a paragraph of text. At the bottom, there are radio buttons for "Current View Is:" (Basic is selected) and "Change View To:" (Basic and Advanced buttons).

**samba**

HOME GLOBALS SHARES PRINTERS WIZARD STATUS VIEW PASSWORD

## Printer Parameters

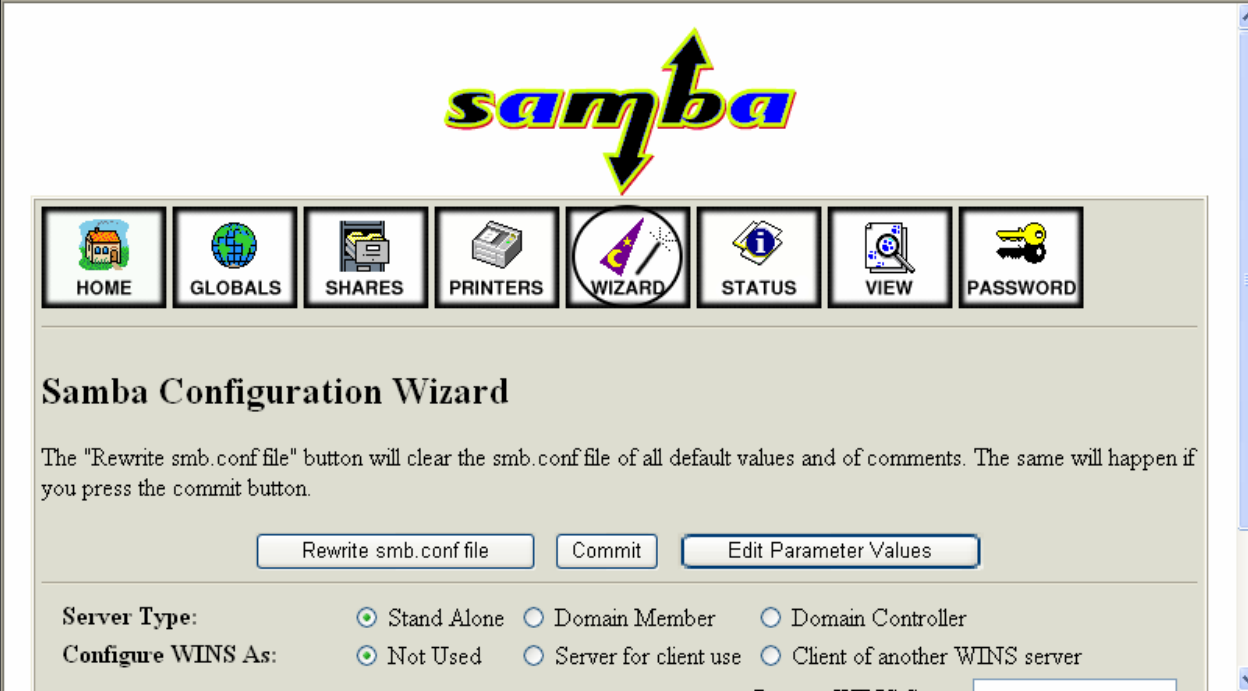
**Important Note:**

Printer names marked with [\*] in the Choose Printer drop-down box are autoloaded printers from [Printcap Name](#). Attempting to delete these printers from SWAT will have no effect.

Current View Is:  Basic  Advanced

Change View To:

# WIZARD標籤內容



The screenshot shows the Samba Configuration Wizard web interface. At the top center is the Samba logo, which consists of the word "samba" in a stylized, lowercase font with a blue-to-yellow gradient and a black outline. A large black arrow points upwards from the 'a' and downwards from the 'b'. Below the logo is a horizontal navigation bar with eight icons and labels: HOME (house icon), GLOBALS (globe icon), SHARES (folder icon), PRINTERS (printer icon), WIZARD (magic wand icon, which is highlighted with a red circle), STATUS (info icon), VIEW (magnifying glass icon), and PASSWORD (key icon). Below the navigation bar is the main content area titled "Samba Configuration Wizard". It contains a paragraph of text: "The 'Rewrite smb.conf file' button will clear the smb.conf file of all default values and of comments. The same will happen if you press the commit button." Below this text are three buttons: "Rewrite smb.conf file", "Commit", and "Edit Parameter Values". At the bottom, there are two sections of radio button options: "Server Type:" with options "Stand Alone" (selected), "Domain Member", and "Domain Controller"; and "Configure WINS As:" with options "Not Used" (selected), "Server for client use", and "Client of another WINS server".

**samba**

HOME GLOBALS SHARES PRINTERS WIZARD STATUS VIEW PASSWORD

### Samba Configuration Wizard

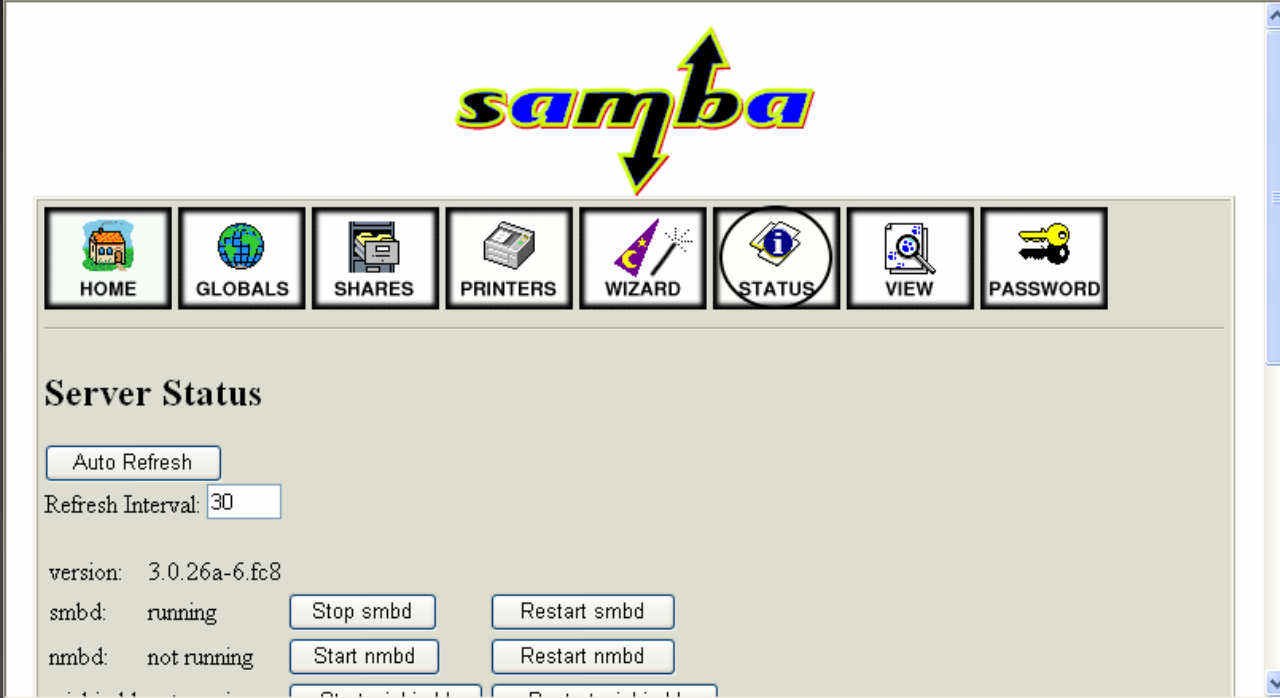
The "Rewrite smb.conf file" button will clear the smb.conf file of all default values and of comments. The same will happen if you press the commit button.

Rewrite smb.conf file Commit Edit Parameter Values

Server Type:  Stand Alone  Domain Member  Domain Controller

Configure WINS As:  Not Used  Server for client use  Client of another WINS server

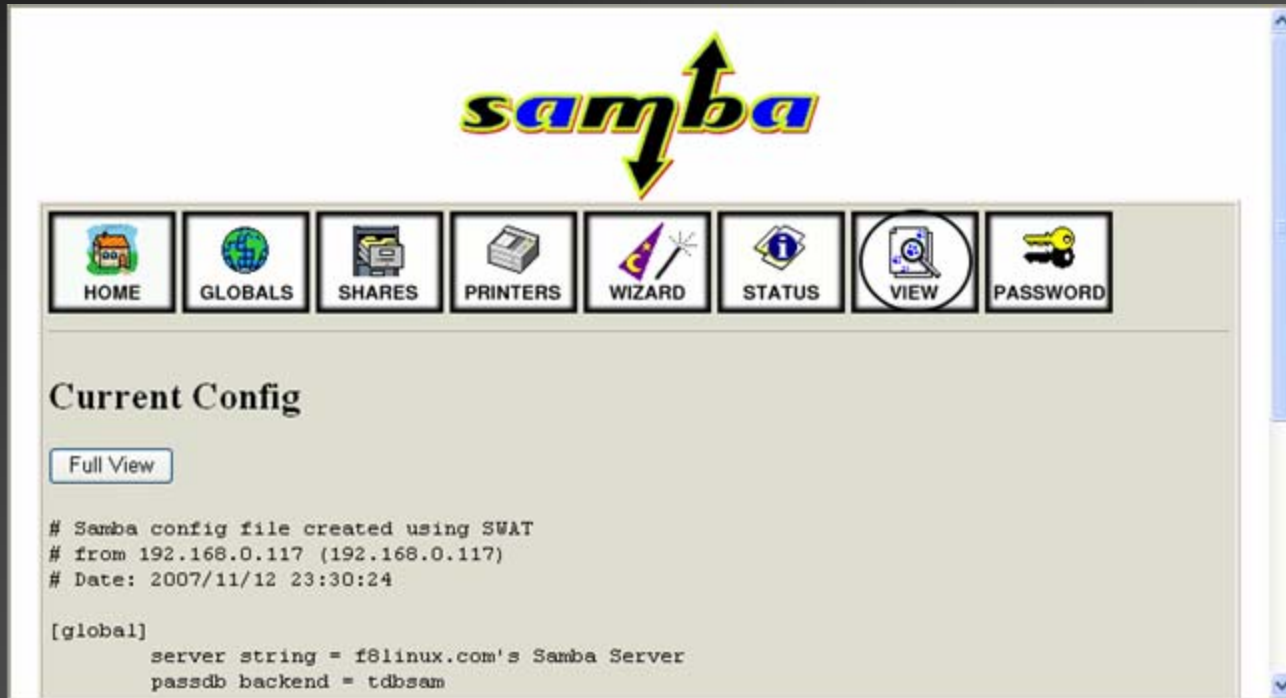
# STATUS標籤內容



The screenshot displays the Samba web interface. At the top center is the Samba logo, which consists of the word "samba" in a stylized, lowercase font with a yellow-to-blue gradient and a black outline. A large, black, downward-pointing arrow is positioned behind the letter 'a'. Below the logo is a horizontal navigation bar containing seven icons with labels: HOME (house icon), GLOBALS (globe icon), SHARES (folder icon), PRINTERS (printer icon), WIZARD (magic wand icon), STATUS (info icon), VIEW (magnifying glass icon), and PASSWORD (key icon). The STATUS icon is highlighted with a white background. Below the navigation bar, the main content area is titled "Server Status". It features an "Auto Refresh" button and a "Refresh Interval" input field set to "30". The status information is as follows:

version:	3.0.26a-6.fc8		
smbd:	running	<input type="button" value="Stop smbd"/>	<input type="button" value="Restart smbd"/>
nmbd:	not running	<input type="button" value="Start nmbd"/>	<input type="button" value="Restart nmbd"/>

# VIEW標籤內容

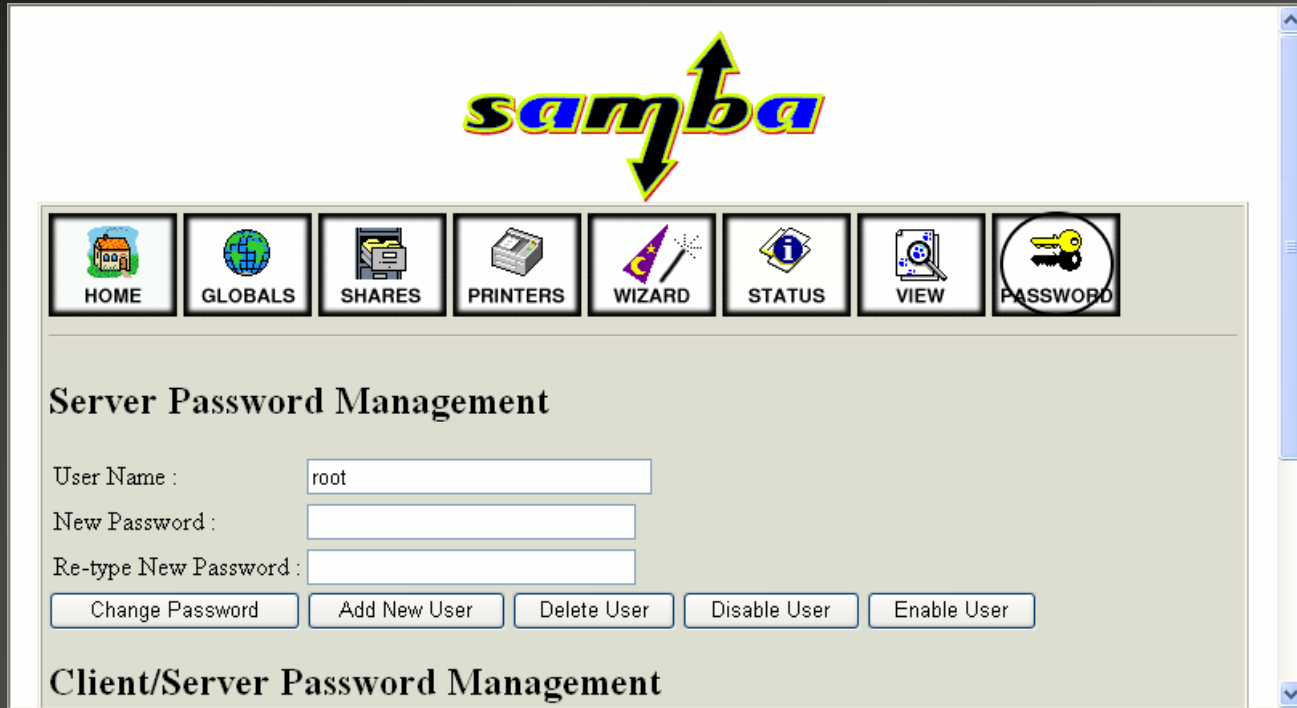


The screenshot displays the Samba web interface. At the top center is the Samba logo, which consists of the word "samba" in a stylized, lowercase font with a yellow-to-blue gradient and a black outline. A large black arrow points upwards from the 'a' and downwards from the 'b'. Below the logo is a horizontal navigation bar with eight icons and labels: HOME (house icon), GLOBALS (globe icon), SHARES (server rack icon), PRINTERS (printer icon), WIZARD (magic wand icon), STATUS (info icon), VIEW (magnifying glass icon), and PASSWORD (key icon). The 'VIEW' icon is highlighted with a white border. Below the navigation bar, the main content area is titled "Current Config" and contains a "Full View" button. The configuration text is as follows:

```
# Samba config file created using SWAT
# from 192.168.0.117 (192.168.0.117)
# Date: 2007/11/12 23:30:24

[global]
server string = f8linux.com's Samba Server
passwd backend = tdbsam
```

# PASSWORD 標籤內容



The screenshot displays the Samba web interface. At the top center is the Samba logo, which consists of the word "samba" in a stylized, lowercase font with a double outline, and a large, colorful arrow pointing upwards and to the right. Below the logo is a horizontal menu bar with eight icons and their corresponding labels: HOME (house icon), GLOBALS (globe icon), SHARES (folder icon), PRINTERS (printer icon), WIZARD (magic wand icon), STATUS (information icon), VIEW (magnifying glass icon), and PASSWORD (key icon). The "PASSWORD" icon is highlighted with a circular border. Below the menu bar, the "Server Password Management" section is visible. It contains three input fields: "User Name" with the value "root", "New Password", and "Re-type New Password". Below these fields are five buttons: "Change Password", "Add New User", "Delete User", "Disable User", and "Enable User". The "Client/Server Password Management" section is partially visible at the bottom of the screenshot.

**samba**

HOME GLOBALS SHARES PRINTERS WIZARD STATUS VIEW **PASSWORD**

### Server Password Management

User Name :

New Password :

Re-type New Password :

### Client/Server Password Management