# File Sharing and Network Services

## Configuring Samba for File and Printer Sharing

The following steps outline the process of setting up Samba on a Fedora server. Ensure that you have administrative privileges before executing these commands.

### 1. Install Samba

Install Samba and its required components using the DNF package manager:

* sudo dnf install samba samba-common samba-client

### 2. Configure the Firewall

Allow Samba traffic through the firewall using firewalld. You can either open the specific ports or use the predefined service:

* sudo firewall-cmd --permanent --zone=public --add-service=samba
* sudo firewall-cmd --permanent --zone=public --add-port=139/tcp
* sudo firewall-cmd --permanent --zone=public --add-port=445/tcp
* sudo firewall-cmd --reload

### 3. Create a Samba User

Samba requires user accounts for authentication. Create a Samba user corresponding to an existing Linux account:

* sudo smbpasswd -a your\_username

### 4. Create a Samba Share Directory

Create the directory to share and set proper SELinux contexts:

* sudo mkdir -p /path/to/share
* sudo semanage fcontext --add --type samba\_share\_t "/path/to/share(/.\*)?"
* sudo restorecon -R /path/to/share

### 5. Configure smb.conf

The main configuration file for Samba is located at /etc/samba/smb.conf. Always back up the file before editing.

* sudo cp /etc/samba/smb.conf /etc/samba/smb.conf.bak
* sudo nano /etc/samba/smb.conf

Example configuration:

[global]  
 workgroup = WORKGROUP  
 security = user  
 map to guest = Bad User  
  
[share\_name]  
 path = /path/to/share  
 browseable = yes  
 read only = no  
 valid users = your\_username

### 6. Test the Configuration

Check the configuration syntax using:

* testparm

### 7. Start and Enable Samba Services

* sudo systemctl start smb
* sudo systemctl enable smb
* sudo systemctl start nmb
* sudo systemctl enable nmb

### 8. Set Up Printer Sharing

* sudo dnf install cups
* sudo systemctl start cups
* sudo systemctl enable cups

Add the following printer configuration in /etc/samba/smb.conf:

[printers]  
 path = /var/spool/samba  
 printable = yes  
 guest ok = no

### 9. Connect to the Samba Share

From Linux: smbclient //server\_name/share\_name -U seth