**Setting up a Samba File Server on Fedora**

**Samba** allows you to share files and directories between **Linux** and **Windows** systems using the **SMB/CIFS** protocol. It's especially useful in mixed-OS environments, workgroups, and small business networks.

In this article, you’ll learn how to set up and configure a Samba file server on Fedora. By the end, you'll be able to share a folder and access it from other machines on your network.

What You’ll Learn

* How to install Samba on Fedora
* How to create shared directories
* How to configure Samba securely
* How to connect from Windows and Linux clients

Step 1: Install Samba

Use DNF to install Samba and its utilities:

1. sudo dnf install samba samba-client samba-common -y

Step 2: Create a Shared Directory

Let’s create a directory to share with users:

1. sudo mkdir -p /srv/samba/shared
2. sudo chown -R nobody:nobody /srv/samba/shared
3. sudo chmod -R 0775 /srv/samba/shared

This allows anonymous access (we’ll configure access control later).

Step 3: Configure Samba

Edit the Samba configuration file:

1. sudo nano /etc/samba/smb.conf

Scroll to the bottom and add:

1. [Shared]
2. path = /srv/samba/shared
3. browsable = yes
4. read only = no
5. guest ok = yes

This creates a share called Shared accessible to guests.

Step 4: Set the SELinux Context (if enabled)

If SELinux is enabled, set the correct context:

1. sudo chcon -t samba\_share\_t /srv/samba/shared -R

And make it permanent:

1. sudo semanage fcontext -a -t samba\_share\_t "/srv/samba/shared(/.\*)?"

If semanage is not available, install it via:

1. sudo dnf install policycoreutils-python-utils -y

Step 5: Open the Firewall

Enable Samba service in firewalld:

1. sudo firewall-cmd --add-service=samba --permanent
2. sudo firewall-cmd --reload

Step 6: Start and Enable Samba Services

1. sudo systemctl enable smb nmb
2. sudo systemctl start smb nmb

Step 7: Accessing the Share

🔹 From a Linux client:

1. smbclient //server-ip/Shared -U guest

Replace server-ip with the Fedora server’s IP address.

🔹 From a Windows machine:

* Open File Explorer
* In the address bar, type:  
  \\server-ip\Shared
* Press Enter

You should see the shared folder.

Optional: Adding User Authentication

To require login credentials:

1. Create a system user:
   1. sudo useradd sambauser
   2. sudo passwd sambauser
2. Add the user to Samba:
   1. sudo smbpasswd -a sambauser
3. Modify the share config:
4. [SecureShare]
5. path = /srv/samba/secure
6. valid users = sambauser
7. read only = no

Create the secure folder and set permissions accordingly.

Summary

You now have a working Samba file server on Fedora! This is ideal for file sharing in home or office networks, with or without user authentication.