

Steps to install and configure FTP server (using vsftpd)

Step 1: Install vsftpd

Run command: `sudo yum update`
`sudo yum install vsftpd`

```
[prajwal@localhost ~]$ sudo yum install vsftpd -y
[sudo] password for prajwal:
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "subscription-manager" to register.
Last metadata expiration check: 1:21:19 ago on Tuesday 24 September 2024 08:03:55 PM.
Dependencies resolved.
=====
Package      Architecture Version      Repository    Size
=====
Installing:  x86_64      3.0.5-6.el9 appstream     168 k
Transaction Summary
=====
Install 1 Package
Total download size: 168 k
Installed size: 347 k
Downloading Packages:
vsftpd-3.0.5-6.el9.x86_64.rpm 527 kB/s | 168 kB 00:00
-----
Total 45 kB/s | 168 kB 00:03
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
  Preparing                : 1/1
  Installing               : vsftpd-3.0.5-6.el9.x86_64 1/1
  Running scriptlet: vsftpd-3.0.5-6.el9.x86_64 1/1
  Verifying                : vsftpd-3.0.5-6.el9.x86_64 1/1
Installed products updated.

Installed:
  vsftpd-3.0.5-6.el9.x86_64

Complete!
[prajwal@localhost ~]$
```

Once the installation is complete, enable and start the vsftpd service:

Run Command: `sudo systemctl enable vsftpd`
`sudo systemctl start vsftpd`

```
[prajwal@localhost ~]$ sudo systemctl enable vsftpd
[sudo] password for prajwal:
Created symlink /etc/systemd/system/multi-user.target.wants/vsftpd.service → /usr/lib/systemd/system/vsftpd.service.
[prajwal@localhost ~]$ sudo systemctl start vsftpd
```

Step 2: Configure vsftpd

The vsftpd configuration file is located at `/etc/vsftpd/vsftpd.conf`. Open this file with your preferred text editor and make the necessary adjustments to suit your requirements.

Run Command: `sudo nano /etc/vsftpd/vsftpd.conf`

For a basic FTP server, consider the following configuration directives:

- `anonymous_enable=NO`: Disables anonymous FTP access.
- `local_enable=YES`: Permits local users to log in.
- `write_enable=YES`: Allows writing to the server (uploading files).
- `chroot_local_user=YES`: Restricts local users to their home directories.

After making changes, save the file and restart the vsftpd service to apply them:

Run Command: `sudo systemctl restart vsftpd`

```
[prajwal@localhost ~]$ sudo nano /etc/vsftpd/vsftpd.conf
[prajwal@localhost ~]$ sudo systemctl restart vsftpd
[prajwal@localhost ~]$
```

Step 3: Configure the Firewall

CentOS 9 comes with `firewalld` installed by default. To allow FTP traffic, you need to add an exception for `vsftpd`:

Run Command: `sudo firewall-cmd --zone=public --add-service=ftp --permanent`
`sudo firewall-cmd --reload`

```
[prajwal@localhost ~]$ sudo firewall-cmd --zone=public --add-service=ftp --permanent
success
[prajwal@localhost ~]$ sudo firewall-cmd --reload
success
[prajwal@localhost ~]$
```

Step 4: Create FTP User (Optional)

If you want to create a dedicated FTP user, issue the following command:

Run Command: `sudo adduser ftpuser`
`sudo passwd ftpuser`

Ensure that this user has appropriate permissions to the files and directories you want to be accessible via FTP.

```
[prajwal@localhost ~]$ sudo adduser ftpuser
[prajwal@localhost ~]$ sudo passwd ftpuser
Changing password for user ftpuser.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
```

Step 5: Accessing Your FTP Server

Now that your FTP server is up and running, you can access it using an FTP client such as FileZilla or from the command line:

Run Command: `ftp your_server_ip`

Ex: `ftp 192.168.73.130`

Enter your user credentials and begin transferring files.

```
[prajwal@localhost ~]$
[prajwal@localhost ~]$ ftp 192.168.73.130
Connected to 192.168.73.130 (192.168.73.130).
220 (vsFTPd 3.0.5)
Name (192.168.73.130:prajwal): ftpuser
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp>
```