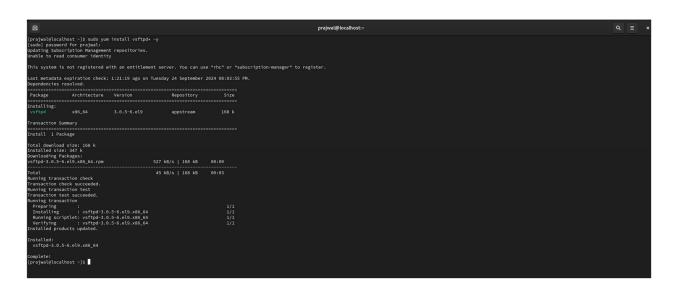
Steps to install and configure FTP server (using vsftpd)

Step 1: Install vsftpd

Run command: sudo yum update sudo yum install vsftpd



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 authentiation 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>
```