Setting up a local YUM repository on an FTP server involves several steps.

### Prerequisites

- A Linux server with FTP server software (like vsftpd) installed and running.

- A directory on the FTP server where the YUM repository will be stored.

- The `createrepo` package installed on your server.

### Step 1: Install Required Packages

First, ensure that the necessary packages are installed. You might need to install `createrepo\_c` if it’s not already installed.

```bash

sudo yum install createrepo\_c vsftpd

```

### Step 2: Create a Directory for the YUM Repository

Create a directory where the RPM packages and repository metadata will be stored.

```bash

sudo mkdir -p /var/ftp/pub/yumrepo

### Step 3: Copy RPM Packages

Copy your RPM packages to the newly created directory.

```bash

sudo cp /path/to/your/rpms/\*.rpm /var/ftp/pub/yumrepo/

```

### Step 4: Create Repository Metadata

Navigate to the YUM repository directory and create the repository metadata using `createrepo\_c`.

```bash

cd /var/ftp/pub/yumrepo

sudo createrepo\_c .

```

### Step 5: Configure FTP Server

Edit the FTP server configuration file (for vsftpd, it’s usually `/etc/vsftpd/vsftpd.conf`) to ensure the directory is accessible.

```bash

# Ensure these lines are set

anonymous\_enable=YES

local\_enable=NO

write\_enable=NO

```

After editing, restart the FTP service to apply the changes:

```bash

sudo systemctl restart vsftpd

```

### Step 6: Configure Firewall

If you have a firewall running, make sure to allow FTP traffic.

```bash

sudo firewall-cmd --add-service=ftp --permanent

sudo firewall-cmd --reload

```

### Step 7: Set Up the YUM Repository on Client Machines

On the client machines that will use this YUM repository, create a `.repo` file in `/etc/yum.repos.d/`. For example, create a file named `localrepo.repo`.

```bash

sudo vi /etc/yum.repos.d/localrepo.repo

```

Add the following content, adjusting the URL as needed:

```ini

[localrepo]

name=Local YUM Repository

baseurl=ftp://<ftp-server-ip>/pub/yumrepo/

enabled=1

gpgcheck=0

```

### Step 8: Test the Configuration

To test the setup, run:

```bash

sudo yum clean all

sudo yum repolist

```

You should see your local repository listed. You can now install packages from it using YUM.

### Conclusion

You have successfully set up a local YUM repository on an FTP server. This setup allows client machines to retrieve RPM packages from your local repository efficiently.