

Building a FTP Server with vsftpd

LPIC-2: Linux Engineer (202-450)

Objectives:

At the end of this episode, I will be able to:

1. Describe VSFTP and the features that it offers.
2. Install and configure a *vsftpd* FTP server on Linux.

Additional resources used during the episode can be obtained using the download link on the overview episode.

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- Building a FTP Server with *vsftpd*
 - Introduction to VSFTP
 - Installing VSFTP
 - Configuring Security Options
 - Introduction to VSFTP (*vsftpd*)
 - <https://security.appspot.com/vsftpd.html>
 - Very Secure File Transfer Protocol Daemon (*vsftpd*)
 - Written by a security researcher (Chris Evans)
 - Ubiquitous across the web
 - Installing *vsftpd*
 1. Install *vsftpd*
 - `sudo apt install vsftpd`
 2. Enable and start the service
 - `systemctl enable --now vsftpd`
 3. Allow traffic through the firewall
 - `sudo ufw allow ftp`
 - `sudo ufw allow 10000:20000/tcp`
 - Configuring VSFTP
 - Main configuration file
 - `sudoedit /etc/vsftpd.conf`
 - Common settings
 - Restricts listening interfaces
 - `listen_address=10.222.0.51`
 - Allow anonymous users access
 - `anonymous_enable=YES`
 - Allow `/etc/passwd` users access
 - `local_enable=YES`
 - Read-only mode
 - `write_enable=YES`
 - File system permissions still apply
 - Does not grant write to anonymous users
 - Passive Transfer ports
 - `pasv_enable=YES`
 - `pasv_min_port=10000`
 - `pasv_max_port=20000`

- User Data Access
 - Anonymous users
 - Default directory is /srv/ftp
 - Authenticated users
 - Default to their home folder
 - `chroot_local_user=YES`
 - Have access to anything they would normally be able to access
- Transfer logs can be enabled
 - Configuration
 1. Edit `/etc/vsftpd.conf`
 2. Set `xferlog_enable=YES`
 3. Restart `vsftpd`
 - `systemctl restart vsftpd.service`
 - Log location
 - `/var/log/vsftpd.log`
- Enabling FTP/S
 - File Transfer Protocol over SSL (FTP/S)
 - Not very common
 - Should use SFTP instead
 - SFTP uses SSH to encapsulate FTP
 - Configuration
 - `sudoedit /etc/vsftpd.conf`
 - `ssl_enable=YES`
 - Update the certificate values