

Building a VPN Server with OpenVPN

LPIC-2: Linux Engineer (202-450)

Objectives:

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

1. Describe the OpenVPN networking server.
2. Install and configure OpenVPN on a Linux server.

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

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- Building a VPN Server with OpenVPN
 - Introduction to OpenVPN
 - Installing OpenVPN
 - OpenVPN Configuration Files
 - Introduction to OpenVPN
 - Open source project
 - Designed to provide a simple, yet flexible, VPN server/client infrastructure
 - Uses OpenSSL (TLS) for encryption/decryption
 - Relies upon private/public key pairs for authentication
 - Also supports username/password
 - OpenVPN Infrastructure
 - Install the OpenVPN package on the VPN server
 - `sudo apt install openvpn`
 - Issue a trusted certificate for the server
 - Generate client profiles using that certificate
 - Transmit the client profiles to the remote users
 - OpenVPN Installation Script
 1. Download and review the script
 - `wget https://git.io/vpn -O openvpn.sh`
 2. Mark the script executable
 - `chmod +x ./openvpn.sh`
 3. Run the script and answer the configuration questions
 - `sudo ./openvpn.sh`
 - Firewall rules
 - Script based install
 - Automatically configured in *iptables*
 - `sudo iptables-save | grep 1194`
 - Manual install
 - Open up the appropriate port
 - `sudo ufw allow 1194/udp`
 - `sudo ufw allow 1194/tcp`
 - Verifying OpenVPN
 - Check for service errors
 - `sudo systemctl status openvpn-server@server`
 - Verify the tunnel interface is present

- `ip -br addr | less -S`
- Review the server config
 - `less /etc/openvpn/server/server.conf`