https://segmentfault.com/a/1190000016534824

2018-09-27 发布

[Debian Linux v8.x/9.x中5分钟搭建OpenVPN Server](https://segmentfault.com/a/1190000016534824)

* [unix](https://segmentfault.com/t/unix/blogs)

* [linux](https://segmentfault.com/t/linux/blogs)

 2.4k 次阅读  ·  读完需要 29 分钟

1

OpenVPN是一个免费的开源VPN（虚拟专用网络）软件，适用于Linux和类Unix系统。它使用SSL / TLS协议实现OSI第2层或第3层安全网络扩展。VPN允许您安全地连接到不安全的公共网络，例如机场或酒店的无线网络。VPN还需要访问您的企业或企业或家庭服务器资源。您可以绕过地理位置阻止的网站，并在线增加您的隐私或安全。本教程提供了**在Debian Linux v8.x / 9.x上配置OpenVPN“road warrior”服务器的逐步说明，包括ufw / iptables防火墙配置**。

步骤如下：

1. 查找并记下您的公共IP地址
2. 下载openvpn-install.sh脚本
3. 运行openvpn-install.sh以安装OpenVPN服务器
4. 使用IOS / Android / Linux /Windows客户端连接OpenVPN服务器
5. 验证您的连接

第1步 - 查找您的公共IP地址

1使用以下任一命令查找IPv4公共地址。如果您internface名字为eth0或eth1的，请输入：

$ ip addr **show** eth0

或者

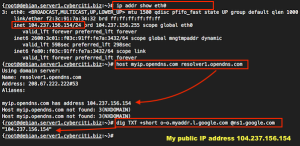
$ ip addr **show** eth1

或者

**host** **myip**.opendns.com **resolver1**.opendns.com

又或者

$ dig TXT +**short** o-o.myaddr.l.google.com **@ns**1.google.com

示例输出：记下的公共IP地址104.237.156.154即你的OpenVPN服务器的公网IP地址。  


第2步 - 更新系统并安装ufw

1.输入apt-get command / apt命令来更新系统：示例输出：

$ sudo apt-get **update**

$ sudo apt-**get** **upgrade**

Reading package lists... Done

Building dependency tree

Reading state information... Done

Calculating upgrade... Done

The following packages will be upgraded:

libc-bin libc-l10n libc6 libexpat1 linux-image-4.9.0-3-amd64 locales

multiarch-support

7 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.

Need to get 46.6 MB of archives.

After this operation, 0 B of additional disk space will be used.

**Do** you want **to** continue? [Y/n] y

**Get**:1 **http**://security.debian.org/debian-**security** stretch/updates/**main** amd64 libc6 amd64 2.24-11+deb9u1 [2,695 kB]

**Get**:2 **http**://security.debian.org/debian-**security** stretch/updates/**main** amd64 libc-**bin** amd64 2.24-11+deb9u1 [778 kB]

**Get**:3 **http**://security.debian.org/debian-**security** stretch/updates/**main** amd64 multiarch-support amd64 2.24-11+deb9u1 [200 kB]

**Get**:4 **http**://security.debian.org/debian-**security** stretch/updates/**main** amd64 libc-l10n all 2.24-11+deb9u1 [820 kB]

**Get**:5 **http**://security.debian.org/debian-**security** stretch/updates/**main** amd64 locales all 2.24-11+deb9u1 [3,290 kB]

**Get**:6 **http**://security.debian.org/debian-**security** stretch/updates/**main** amd64 libexpat1 amd64 2.2.0-2+deb9u1 [83.4 kB]

**Get**:7 **http**://**security**-cdn.debian.org stretch/updates/**main** amd64 linux-image-4.9.0-3-amd64 amd64 4.9.30-2+deb9u2 [38.7 MB]

Fetched 46.6 MB **in** 2s (15.5 MB/s)

Reading changelogs... Done

Preconfiguring packages ...

(Reading **database** ... 28439 files **and** directories currently installed.)

Preparing **to** unpack .../libc6\_2.24-11+deb9u1\_amd64.deb ...

Unpacking libc6:amd64 (2.24-11+deb9u1) **over** (2.24-11) ...

Setting up libc6:amd64 (2.24-11+deb9u1) ...

(Reading **database** ... 28439 files **and** directories currently installed.)

Preparing **to** unpack .../libc-bin\_2.24-11+deb9u1\_amd64.deb ...

Unpacking libc-**bin** (2.24-11+deb9u1) **over** (2.24-11) ...

Setting up libc-**bin** (2.24-11+deb9u1) ...

Updating /etc/nsswitch.conf **to** **current** default.

(Reading **database** ... 28439 files **and** directories currently installed.)

Preparing **to** unpack .../multiarch-support\_2.24-11+deb9u1\_amd64.deb ...

Unpacking multiarch-support (2.24-11+deb9u1) **over** (2.24-11) ...

Setting up multiarch-support (2.24-11+deb9u1) ...

(Reading **database** ... 28439 files **and** directories currently installed.)

Preparing **to** unpack .../libc-l10n\_2.24-11+deb9u1\_all.deb ...

Unpacking libc-l10n (2.24-11+deb9u1) **over** (2.24-11) ...

Preparing **to** unpack .../locales\_2.24-11+deb9u1\_all.deb ...

Unpacking locales (2.24-11+deb9u1) **over** (2.24-11) ...

Preparing **to** unpack .../libexpat1\_2.2.0-2+deb9u1\_amd64.deb ...

Unpacking libexpat1:amd64 (2.2.0-2+deb9u1) **over** (2.2.0-2) ...

Preparing **to** unpack .../linux-image-4.9.0-3-amd64\_4.9.30-2+deb9u2\_amd64.deb ...

Unpacking linux-image-4.9.0-3-amd64 (4.9.30-2+deb9u2) **over** (4.9.30-2) ...

Setting up libexpat1:amd64 (2.2.0-2+deb9u1) ...

Processing **triggers** **for** libc-**bin** (2.24-11+deb9u1) ...

Setting up libc-l10n (2.24-11+deb9u1) ...

Processing **triggers** **for** man-db (2.7.6.1-2) ...

Setting up linux-image-4.9.0-3-amd64 (4.9.30-2+deb9u2) ...

/etc/kernel/postinst.d/initramfs-tools:

**update**-initramfs: Generating /boot/initrd.img-4.9.0-3-amd64

/etc/kernel/postinst.d/zz-**update**-grub:

Generating grub configuration **file** ...

**Found** linux image: /boot/vmlinuz-4.9.0-3-amd64

**Found** initrd image: /boot/initrd.img-4.9.0-3-amd64

done

Setting up locales (2.24-11+deb9u1) ...

Generating locales (this might take a **while**)...

en\_US.UTF-8... done

Generation complete.

重启电脑,保证内核升级生效

**$** sudo reboot

第3步-安装ufw ( Uncomplicated Firewall)[不复杂的防火墙]

1.要在Debian 9/8上安装ufw，请键入以下apt-get命令

$ sudo apt-**get** install ufw

示例输出：

Reading **package** lists... Done

Building dependency tree

Reading state information... Done

The following NEW packages will be installed:

ufw

0 upgraded, 1 newly installed, 0 to remove and 0 not upgraded.

Need to get 164 kB of archives.

After **this** operation, 848 kB of additional disk space will be used.

Get:1 http://mirrors.linode.com/debian stretch/main amd64 ufw all 0.35-4 [164 kB]

Fetched 164 kB **in** 0s (13.1 MB/s)

Preconfiguring packages ...

Selecting previously unselected **package** ufw.

(Reading database ... 28439 files and directories currently installed.)

Preparing to unpack .../archives/ufw\_0.35-4\_all.deb ...

Unpacking ufw (0.35-4) ...

Setting up ufw (0.35-4) ...

Creating config file /etc/ufw/before.rules with **new** version

Creating config file /etc/ufw/before6.rules with **new** version

Creating config file /etc/ufw/after.rules with **new** version

Creating config file /etc/ufw/after6.rules with **new** version

Created symlink /etc/systemd/system/multi-user.target.wants/ufw.service ? /lib/systemd/system/ufw.service.

Processing triggers **for** systemd (232-25) ...

Processing triggers **for** man-db (2.7.6.1-2) ...

Processing triggers **for** rsyslog (8.24.0-1) ...

2.您必须打开所需的端口，例如SSH端口22,80,443等：启用防火墙，运行：

**$** sudo ufw allow 22

**$** sudo ufw allow 80

**$** sudo ufw allow 443

...

**$** sudo ufw enable

Command may disrupt existing ssh connections. Proceed with operation (y|n)? y  
Firewall is active and enabled on system startup

第4步 - 下载openvpn-install.sh脚本

键入以下wget命令：

$ wget https://gitee.com/MILISERVICE\_admin/codes/al57tqnchxv4se9firj2831/raw?blob\_name=5%E5%88%86%E9%92%9F%E6%90%AD%E5%BB%BAOpenVPN+Server -O openvpn-install.sh

输出：

--2018-09-27 12:48:27-- https://git.io/vpn

Resolving git.io (git.io)... 34.238.48.57, 34.238.3.58, 34.235.97.255, ...

Connecting to git.io (git.io)|34.238.48.57|:443... connected.

HTTP request sent, awaiting response... 302 Found

Location: https://raw.github.com/Nyr/openvpn-**install**/**master**/openvpn-install.sh [**following**]

--2018-09-27 12:48:29-- https://raw.github.com/Nyr/openvpn-install/master/openvpn-install.sh

Resolving raw.github.com (raw.github.com)... 151.101.108.133

Connecting **to** raw.github.com (raw.github.com)|151.101.108.133|:443... connected.

**HTTP** request sent, awaiting response... 301 Moved Permanently

Location: https://raw.githubusercontent.com/Nyr/openvpn-**install**/**master**/openvpn-install.sh [**following**]

--2018-09-27 12:48:31-- https://raw.githubusercontent.com/Nyr/openvpn-install/master/openvpn-install.sh

Resolving raw.githubusercontent.com (raw.githubusercontent.com)... 151.101.108.133

Connecting **to** raw.githubusercontent.com (raw.githubusercontent.com)|151.101.108.133|:443... connected.

**HTTP** request sent, awaiting response... 200 OK

**Length**: 14257 (14K) [text/plain]

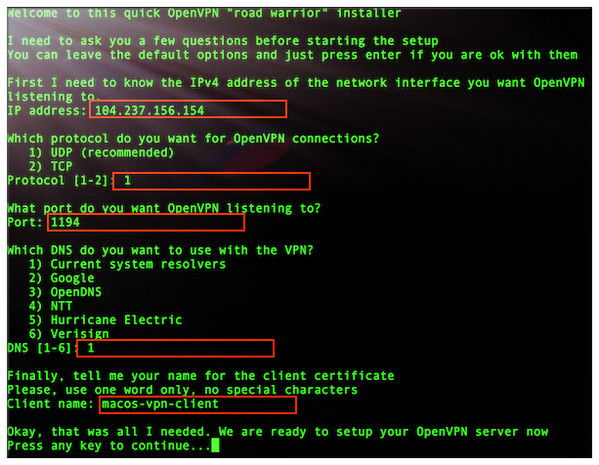
Saving **to**: ‘openvpn-install.sh’

openvpn-install.sh 100%[==============================================================>] 13.92K 66.9KB/s **in** 0.2s

2018-09-27 12:48:32 (66.9 KB/s) - ‘openvpn-install.sh’ saved [14257/14257]

运行openvpn-install.sh脚本为您自动安装和配置OpenVPN服务器：

**$** sudo bash openvpn-install.sh

当提示设置IP地址为104.237.156.154（用您的实际IP地址替换104.237.156.154）和端口为1194（如果您不使用，则为443）网络服务器）。将Google或OpenDNS DNS服务器与vpn一起使用。接下来，键入客户端名称（例如iPhone，Nexus6，LinuxRouter，BackupServer等）。最后，按[Enter]键在您的系统上安装和设置OpenVPN：  


就这些。您的OpenVPN服务器已配置好并可以使用。您可以使用cat命令查看添加的防火墙规则/etc/rc.local文件：

iptables -I FORWARD -m state --state RELATED,ESTABLISHED -j ACCEPT

iptables -I FORWARD -s 10.8.0.0/24 -j ACCEPT

iptables -I INPUT -p tcp --dport 1194 -j ACCEPT

iptables -t nat -A POSTROUTING -s 10.8.0.0/24 ! -d 10.8.0.0/24 -j SNAT --to 104.237.156.154

您可以按如下方式查看脚本生成的openvpn服务器配置文件（不要手动编辑此文件）：示例输出：

$ sudo more /etc/openvpn/server.conf

$ sudo vi -M /etc/openvpn/server.conf

**如何在Debian Linux 9.x / 8.x LTS上启动/停止/重启OpenVPN服务器？**

sudo systemctl **start**/**stop**/restart openvpn@**server**

第4步 - 客户端配置

在服务器上，您将找到一个名为〜/ macos-vpn-client.ovpn的客户端配置文件。您所要做的就是使用scp将此文件复制到本地桌面，并将此文件提供给OpenVPN客户端进行连接：

$ scp vivek@104.237.156.154:~/macos-vpn-client.ovpn .

配置客户端即可，archlinux参考：  
[OpenVPN (client)](https://wiki.archlinux.org/index.php/OpenVPN#The_client_config_profile)