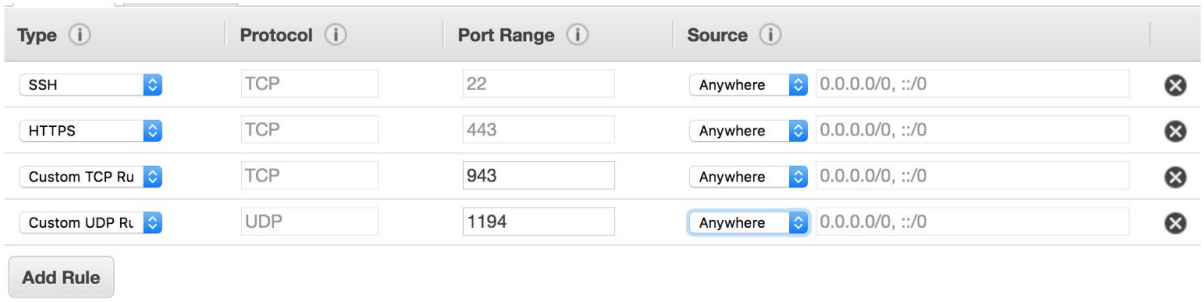
FreeOpenVPN on AWS

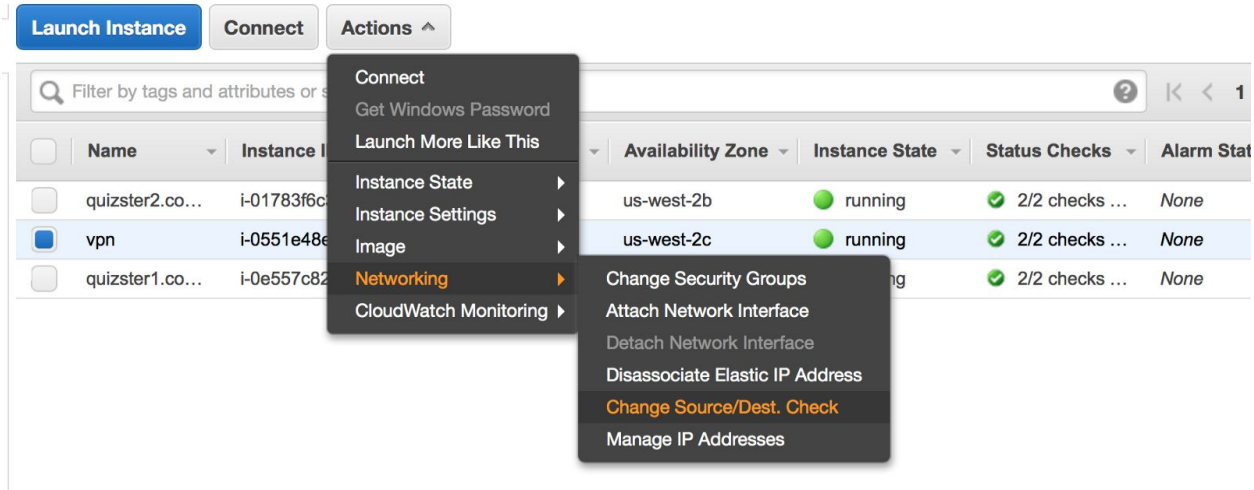
OpenVPN is used create a secure connectivity from local system to CE2 instances in aws. There are following steps to setup OpenVPN.

1. Login to aws dashboard.
2. Create a security group with name **OpenVPN** and enable 22, 943, 1194, 443 ports like this



3. Create a ubuntu16.04 EC2 instance and select the **OpenVPN** security group, which we have created above.

4. Now Disable Source/Destination Check for VPN server. This is needed as otherwise, VPN server will not be able to connect to other EC2 instances.



5. Create an Elastic IP and assign to VPN server.

6. Now connect to VPN server via ssh

```
$ ssh -i ssh_key ubunu@public_ip_of_VPN_server
```

7. Download some scripts and set up a default config.

```
$ git clone https://github.com/redgeoff/openvpn-server-vagrant
$ cd openvpn-server-vagrant
$ cp config-default.sh config.sh
```

8. Now edit the config.sh

```
$ vi config.sh
```

9. Switch to root user

```
$ sudo -i
```

10. Update library and install OpenVPN using following commands.

```
# /home/ubuntu/openvpn-server-vagrant/ubuntu.sh
# /home/ubuntu/openvpn-server-vagrant/openvpn.sh
```

11. Add the Route, we shall determine the proper subnet by returning to list of EC2 instances, clicking on a target instance and identifying the Private IP.

IPv4 Public IP	52.35.96.85
IPv6 IPs	-
Private DNS	ip-172-31-27-21.us-west-2.compute.internal
Private IPs	172.31.27.21

network will be the first 2 parts of the Private IP appended with zeros, e.g. 172.31.0.0
On the VPN Server edit /etc/openvpn/server.conf and add something like the following:

```
push "route 172.31.0.0 255.255.0.0"
```

Then restart the VPN Server with:

```
# systemctl restart openvpn@server
```

12. Now grant access to VPN server. Here we are giving user(client) access to VPN server with following command

```
# /home/ubuntu/openvpn-server-vagrant/add-client.sh client
```

Here we can replace client with any our user name also.

13. Copy the `~/client-configs/files/client-name.ovpn` File to local system.

14. Download the following VPN client for different distro and install.

OS X: https://tunnelblick.net/index.html
Linux, iOS, Android and Windows: https://openvpn.net/community-downloads/

Here i have downloaded and Installed for OS X .

15. Double click on a file we have downloaded in step 13, and we would be connected to VPN server it looks like this

16. Now access EC2 instances via ssh with private IP from local system.