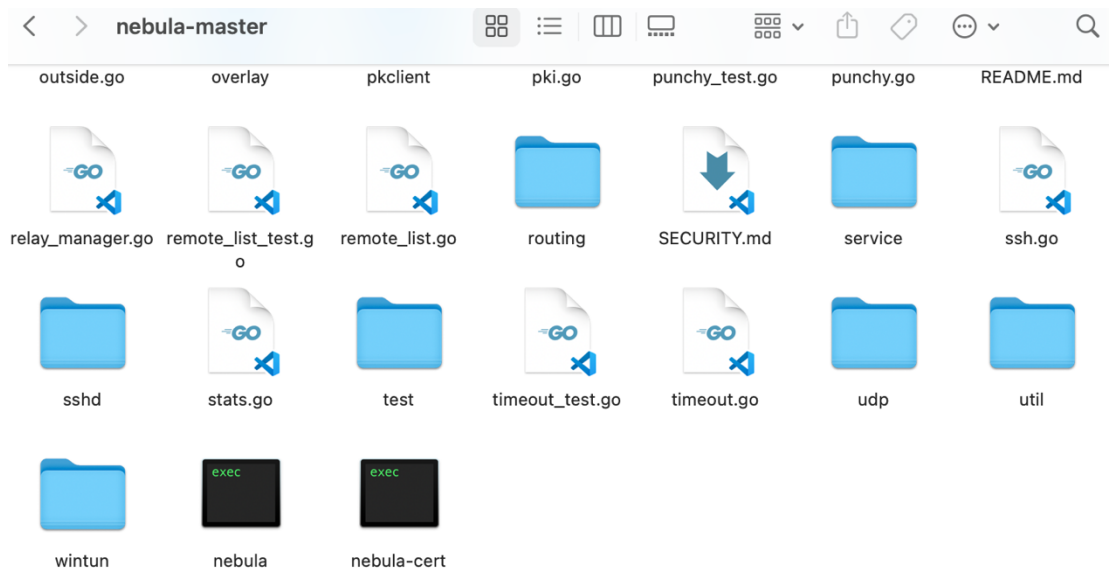## 1. Install Nebula

Figure1. Install Nebula & Nebula-cert

```
[(base) niusu@unius-3 nebula-master % ./nebula -version
 Version:
[(base) niusu@unius-3 nebula-master % ./nebula-cert -version
 Version:
```

Figure2. Nebula & Nebula-cert version
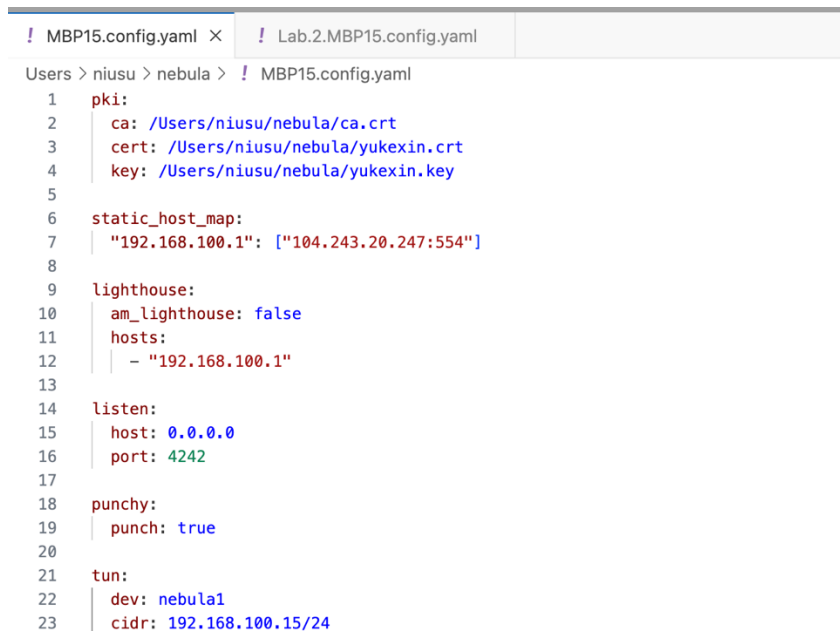
2. Configure MBP15.conf.yaml

Figure3. MBP15.conf.yaml

3. Connect to the lighthouse

```
[(base) niusu@unius-3 nebula-master % sudo ./nebula -config ~/nebula/MBP15.config.yaml
[Password:
INFO[0000] Firewall started                              firewallHashes="SHA:e3b0c44298fc1c149af
bf4c8996fb92427ae41e4649b934ca495991b7852b855,FNV:2166136261"
WARN[0000] interface name must be utun[0-9]+ on Darwin, ignoring
INFO[0000] listening on 0.0.0.0:4242
INFO[0000] Main HostMap created                          preferredRanges="[]"
INFO[0000] punchy enabled
INFO[0000] Loaded send_recv_error config                 sendRecvError=always
INFO[0000] Nebula interface is active                    boringcrypto=false build= interface=utu
n6 networks="[192.168.100.119/24]" udpAddr="[::]:4242"
INFO[0000] Handshake message sent                        handshake="map[stage:1 style:ix_psk0]"
initiatorIndex=4122746735 localIndex=4122746735 remoteIndex=0 udpAddrs="[104.243.20.247:554]" vp
nAddrs="[192.168.100.1]"
INFO[0000] Handshake message received                    certName=lighthouse certVersion=1 durat
ionNs=341338084 fingerprint=fbf998b866c8275810bdbe0c175cd7cbf31be03d0adc2a831ae16f9669a52617 han
dshake="map[stage:2 style:ix_psk0]" initiatorIndex=4122746735 issuer=e430f526e15e22fd11dbb26e948
2945865f17aa42c800481e56f68d087c892c0 remoteIndex=4122746735 responderIndex=85581350 sentCachedP
ackets=1 udpAddr="104.243.20.247:554" vpnAddrs="[192.168.100.1]"
```

Figure4. Start local nebula and connect to the lighthouse

4. Connect to the Nebula network

```
[(base) niusu@unius-3 ~ % ping 102.168.100.1
PING 102.168.100.1 (102.168.100.1): 56 data bytes
64 bytes from 102.168.100.1: icmp_seq=0 ttl=64 time=0.196 ms
64 bytes from 102.168.100.1: icmp_seq=1 ttl=64 time=0.288 ms
64 bytes from 102.168.100.1: icmp_seq=2 ttl=64 time=0.317 ms
64 bytes from 102.168.100.1: icmp_seq=3 ttl=64 time=0.328 ms
64 bytes from 102.168.100.1: icmp_seq=4 ttl=64 time=0.346 ms
64 bytes from 102.168.100.1: icmp_seq=5 ttl=64 time=0.353 ms
^C
--- 102.168.100.1 ping statistics ---
6 packets transmitted, 6 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 0.196/0.305/0.353/0.053 ms
```

Figure5. Test the network connectivity