

Lab 2 - Find the secret server

According to the question, our laptop is connected to their network via the vpn file. There are also two other servers in the network.

Let's check the routing table in our machine before connecting to the vpn.

```
hades@Asus:~/Desktop/eJPT PTS/Lab 2 - Find the Secret Server$ sudo route
Kernel IP routing table
Destination      Gateway          Genmask          Flags Metric Ref    Use Iface
default          192.168.1.1     0.0.0.0          UG    100    0      0 eth0
default          192.168.1.1     0.0.0.0          UG    600    0      0 wlan0
192.168.1.0      0.0.0.0         255.255.255.0    U     100    0      0 eth0
192.168.1.0      0.0.0.0         255.255.255.0    U     600    0      0 wlan0
192.168.34.0     0.0.0.0         255.255.255.0    U      0      0      0 vmnet8
192.168.62.0     0.0.0.0         255.255.255.0    U      0      0      0 vmnet1
```

We have our default entries in the routing table. We don't have the tunnel interface yet because we haven't connected via our vpn file. Now, let's connect and see the routing table again.

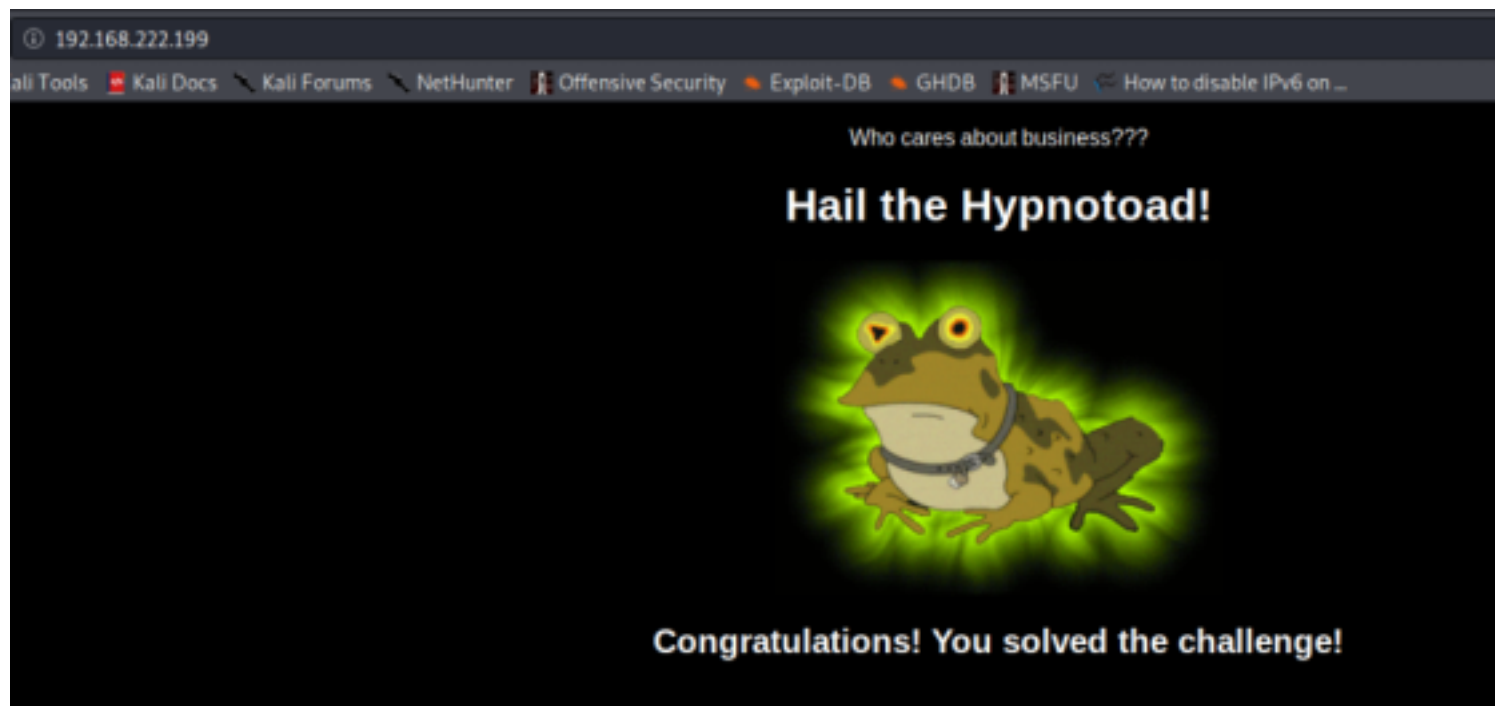
```
hades@Asus:~/Desktop/eJPT PTS/Lab 2 - Find the Secret Server$ sudo route
Kernel IP routing table
Destination      Gateway          Genmask          Flags Metric Ref    Use Iface
default          192.168.1.1     0.0.0.0          UG    100    0      0 eth0
default          192.168.1.1     0.0.0.0          UG    600    0      0 wlan0
10.175.34.0      0.0.0.0         255.255.255.0    U      0      0      0 tap0
172.16.88.0      10.175.34.1     255.255.255.0    UG      0      0      0 tap0
192.168.1.0      0.0.0.0         255.255.255.0    U     100    0      0 eth0
192.168.1.0      0.0.0.0         255.255.255.0    U     600    0      0 wlan0
192.168.34.0     0.0.0.0         255.255.255.0    U      0      0      0 vmnet8
192.168.62.0     0.0.0.0         255.255.255.0    U      0      0      0 vmnet1
192.168.241.0    10.175.34.1     255.255.255.0    UG      0      0      0 tap0
```

We can see a new interface now - tap0. This is the interface via which we are connected to the network. We can see our vpn ip 10.75.34.0 routed through the default gateway 0.0.0.0 and we can also see two other servers 172.16.88.0 and 192.168.241.0 routed through the VPN's gateway 10.175.34.1. We can access websites hosted on these servers as mentioned in the question.

Our task is to access the hidden server as well. We know it's ip, so let's add it to our routing table and set the default gateway similar to the other servers.

```
hades@Asus:~/Desktop/eJPT PTS/Lab 2 - Find the Secret Server$ sudo ip route add 192.168.222.0/24 via 10.175.34.1
hades@Asus:~/Desktop/eJPT PTS/Lab 2 - Find the Secret Server$ sudo route
Kernel IP routing table
Destination      Gateway          Genmask          Flags Metric Ref    Use Iface
default          192.168.1.1     0.0.0.0          UG    100    0      0 eth0
default          192.168.1.1     0.0.0.0          UG    600    0      0 wlan0
10.175.34.0      0.0.0.0         255.255.255.0    U      0      0      0 tap0
172.16.88.0      10.175.34.1     255.255.255.0    UG      0      0      0 tap0
192.168.1.0      0.0.0.0         255.255.255.0    U     100    0      0 eth0
192.168.1.0      0.0.0.0         255.255.255.0    U     600    0      0 wlan0
192.168.34.0     0.0.0.0         255.255.255.0    U      0      0      0 vmnet8
192.168.62.0     0.0.0.0         255.255.255.0    U      0      0      0 vmnet1
192.168.222.0    10.175.34.1     255.255.255.0    UG      0      0      0 tap0
192.168.241.0    10.175.34.1     255.255.255.0    UG      0      0      0 tap0
```

We can see 192.168.222.0 is added and it is routed through 10.175.34.1. (second to last line). We should be able to access the hidden website now. Let's check.



Yes, we have completed the challenge