

Setting a Static IP on Ubuntu Server (Netplan)

Our 3 splunk clusters all need a Static IP address to avoid any new addresses assigned to our servers to mess up the configurations. This documentation will take through setting up Static IP on the 3 VMs.

NOTE: This documentation address the issues of networking and I will only show how to set a Static IP on the index VM, I will perform the same step for other 2 machines each with its own IP address assigned to it. **Before we start, i need to ssh into every machine and set the static IP address.**

step 1. Find your network interface name

run the following command to get the name of the interface:

ip link

```
[index@indexer-node]-(/etc/netplan)
> ip link
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN mode DEFAULT group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
2: enp1s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP mode DEFAULT group default qlen 1000
    link/ether 52:54:00:03:c0:a0 brd ff:ff:ff:ff:ff:ff
[index@indexer-node]-(/etc/netplan)
>
```

In my case, my NIC name is **enp1s0**.

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step 2. Edit Netplan configuration file

we need to edit the netplan configuration file at the ect dicrectory using vim:

sudo vim /etc/netplan/50-cloud-init.yaml

Editing YAML (.yaml or .yml) files on Linux requires careful attention because YAML is strictly formatted and very sensitive to spacing and syntax errors.

- YAML uses spaces, not tabs
- Always use consistent spacing (usually 2 or 4 spaces)
- Mixing tabs and spaces can cause silent errors or software crashes.

```

network:
  version: 2
  ethernet:
    enp1s0:
      dhcp4: false
      addresses:
        - 192.168.122.10/24      #index machine IP
      nameservers:
        addresses:
          - 8.8.8.8
          - 1.1.1.1
      routes:
        - to: 0.0.0.0/0
          via: 192.168.122.0/24  #my phone's gateway IP

```

save the file and apply the changes with this command:

sudo netplan apply

NOTE: there's a mistake with the comment where it says “#my phone's gateway IP”, It was supposed to say “#the virtual network gateway IP”. QEMU creates a virtual network interface for communication .

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In the YAML file, note where it says “ - 192.168.122.10 #index machine IP”. We gonna create edit the same file in the other 2 VMs and set the same gateway and different Static IP addresses.

For Search VM static IP:

– 192.168.122.11/24

For Forwarder VM static IP:

– 192.168.122.12/24

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Network Configuration problem fix

I want you to pay attention where it says:

```
via: 192.168.122.0/24  #my phone's gateway IP
```

- The default gateway show be 192.168.122.1 not 0 (The IP you see here is a subnet IP not gateway)
- The reason why it 192.168.122.1 is because that's the IP of the Virtual NIC