Setting a Static IP on Ubuntu Server (Netplan)

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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**.

>> $——[09 April 2025]

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
  ethernets:
    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 is 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