

Second Way of giving ip address (Centos7/Redhat7)

First:

first:

you need to select a static ip address , subnet mask and the gateway that you give your machine .according to your network specifications.

we give the following ip address subnet mask ,gate way and Dns

ip address : 192.168.0.10

subnet mask: 255.255.255.0

Gateway:192.168.0.1

DNS: 8.8.8.8

second:

you need to find the network interface that you give the static ip address
A Server can have multiple network interface.

In our virtual machine there are two network interface. We can see the interface from this command

=>ifconfig

or

=> ip address show

```

[vagrant@tanvir ~]$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
    inet6 fe80::5054:ff:fe8a:fee6 prefixlen 64 scopeid 0x20<link>
    ether 52:54:00:8a:fe:e6 txqueuelen 1000 (Ethernet)
    RX packets 1110 bytes 135804 (132.6 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 940 bytes 149277 (145.7 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.0.5 netmask 255.255.255.0 broadcast 192.168.0.255
    inet6 fe80::a00:27ff:fe8d:5aa3 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:cd:5a:a3 txqueuelen 1000 (Ethernet)
    RX packets 13 bytes 1362 (1.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 16 bytes 1826 (1.7 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 32 bytes 2592 (2.5 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 32 bytes 2592 (2.5 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

```

we are currently connected to the server with a ssh connection through eth0. So we can't change the ip address to eth0. This will disconnect the ssh connectivity. We are going to give the static ip address to the eth1 interface

Third:

we have to do to the '/etc/sysconfig/network-scripts' directory

=> cd /etc/sysconfig/network-scripts

In this directory there are a lot of files. From there we have to select the 'ifcfg-eth1' [yours can be different. select the file based on your interface it will be like ifcfg-<interface>]

```
[vagrant@tanvir ~]$ cd /etc/sysconfig/network-scripts/  
[vagrant@tanvir network-scripts]$ ls  
ifcfg-eth0    ifdown-ippv6  ifdown-sit    ifup-bnep    ifup-plusb    ifup-TeamPort  
ifcfg-eth1    ifdown-ipv6   ifdown-Team   ifup-eth     ifup-post     ifup-tunnel  
ifcfg-lo      ifdown-isdn   ifdown-TeamPort ifup-ippv6   ifup-ppp      ifup-wireless  
ifdown        ifdown-post   ifdown-tunnel ifup-ipv6    ifup-routes   init.ipv6-global  
ifdown-bnep   ifdown-ppp    ifup          ifup-isdn    ifup-sit      network-functions  
ifdown-eth    ifdown-routes ifup-aliases  ifup-plip    ifup-Team     network-functions-ipv6  
[vagrant@tanvir network-scripts]$ █
```

Fourth:

we have to edit the file with a text editor with root privileges.

In that file we have to change the

BOOTPROTO=static

ONBOOT=yes

IPADDR=192.168.0.10

PREFIX=24

GATEWAY=192.168.0.1

DNS1=8.8.8.8

```
#VAGRANT-BEGIN
# The contents below are automatically generated by Vagrant. Do not modify.
BOOTPROTO=static
ONBOOT=yes
DEVICE=eth1
NM_CONTROLLED=yes
#VAGRANT-END
TYPE=Ethernet
PROXY_METHOD=none
BROWSER_ONLY=no
IPADDR=192.178.0.10
PREFIX=24
GATEWAY=192.168.0.1
DNS1=8.8.8.8
DEFROUTE=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=no
NAME="System eth1"
UUID=9c92fad9-6ecb-3e6c-eb4d-8a47c6f50c04
~
~
~
```

fifth:

if we see our ip address we can see the the ip address still dont change.to make the change we need to restart the interface.

We shutdown the interface with this command

=>sudo ifdown eth1

Then we start the interface again

=>sudo ifup eth1

```
[vagrant@tanvir ~]$ sudo ifdown eth1
Device 'eth1' successfully disconnected.
[vagrant@tanvir ~]$ sudo ifup eth1
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnection/3)
[vagrant@tanvir ~]$ █
```

Sixth:

Then if we check ip address using
=>ifconfig eth1

```
[vagrant@tanvir ~]$ ifconfig eth1
eth1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.178.0.10 netmask 255.255.255.0 broadcast 192.178.0.255
    inet6 fe80::a00:27ff:fe80:5aa3 prefixlen 64 scopeid 0x20<link>
    ether 08:00:27:cd:5a:a3 txqueuelen 1000 (Ethernet)
    RX packets 62 bytes 5854 (5.7 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 24 bytes 2452 (2.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[vagrant@tanvir ~]$ █
```

we can see the ip address changed .

Seventh:

We have to test the connection via pinging a network.

=>ping 8.8.8.8

```
[vagrant@tanvir ~]$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8) 56(84) bytes of data.
64 bytes from 8.8.8.8: icmp_seq=1 ttl=63 time=80.2 ms
64 bytes from 8.8.8.8: icmp_seq=2 ttl=63 time=102 ms
64 bytes from 8.8.8.8: icmp_seq=3 ttl=63 time=123 ms
^C
--- 8.8.8.8 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2005ms
rtt min/avg/max/mdev = 80.248/101.916/123.156/17.519 ms
[vagrant@tanvir ~]$ █
```

So the connection is up and running. That's another way of giving an IP address to a CentOS7/Redhat7 server a static address.