

DIGITAL ASSIGNMENT – 5

Information Security Management (CSE3502)

NAME: AMRITANSHI SAXENA

REG. NO: 18BCE2524

HOW TO CHANGE IP ADDRESS ON LINUX

STEPS-

Before changing your IP address, make sure to have a look at your current IP address.

To find your current IP address, you can use the “ip” command with the “a” option for address.

```
(amritanshi@kali)-[~]
$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
   link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
   inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
   inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
   link/ether 00:0c:29:d2:9b:be brd ff:ff:ff:ff:ff:ff
   inet 192.168.29.63/24 brd 192.168.29.255 scope global dynamic noprefixroute eth0
       valid_lft 3558sec preferred_lft 3558sec
   inet6 2405:201:6001:fb35:c6ee:258d:1d76:7c75/64 scope global temporary dynamic
       valid_lft 4169sec preferred_lft 4169sec
   inet6 2405:201:6001:fb35:20c:29ff:fed2:9bbe/64 scope global dynamic mngtmpaddr noprefixroute
       valid_lft 4169sec preferred_lft 4169sec
   inet6 fe80::20c:29ff:fed2:9bbe/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
```

On modern distributions, the “ifconfig” command has been completely deprecated and it is now advised to use the “ip” command. However, you should still be able to use the “ifconfig” to change your IP address

```
(amritanshi@kali)-[~]
$ which ifconfig
/usr/sbin/ifconfig
```

To change your IP address on Linux, use the “ifconfig” command followed by the name of your network interface and the new IP address to be changed on your computer. To assign the subnet mask, you can either add a “netmask” clause followed by the subnet mask or use the CIDR notation directly.

```
(amritanshi@kali)-[~]  
$ sudo ifconfig eth0 192.168.178.32/24  
[sudo] password for amritanshi:
```

In order to verify that your IP address was correctly changed, you can run the “ifconfig” command followed by the name of your network adapter.

```
(amritanshi@kali)-[~]  
$ ifconfig eth0  
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
    inet 192.168.178.32 netmask 255.255.255.0 broadcast 192.168.178.255  
    inet6 fe80::20c:29ff:fed2:9bbe prefixlen 64 scopeid 0x20<link>  
    inet6 2405:201:6001:fb35:20c:29ff:fed2:9bbe prefixlen 64 scopeid 0x0<global>  
    inet6 2405:201:6001:fb35:c6ee:258d:1d76:7c75 prefixlen 64 scopeid 0x0<global>  
    ether 00:0c:29:d2:9b:be txqueuelen 1000 (Ethernet)  
    RX packets 149 bytes 14847 (14.4 KiB)  
    RX errors 0 dropped 0 overruns 0 frame 0  
    TX packets 90 bytes 9451 (9.2 KiB)  
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

In order to change your IP address on Linux, you will have to add your network configuration in the “/etc/network/interfaces” or create this file if it does not exist already.

```
(amritanshi@kali)-[~]  
$ sudo nano /etc/network/interfaces
```

Content of /etc/network/interfaces

```
GNU nano 5.4 /etc/network/interfaces  
iface eth0 inet static  
address 192.168.178.32  
netmask 255.255.255.0  
gateway 192.168.178.1
```

In order for the changes to be applied, you will need to restart your networking service (managed by ifupdown)

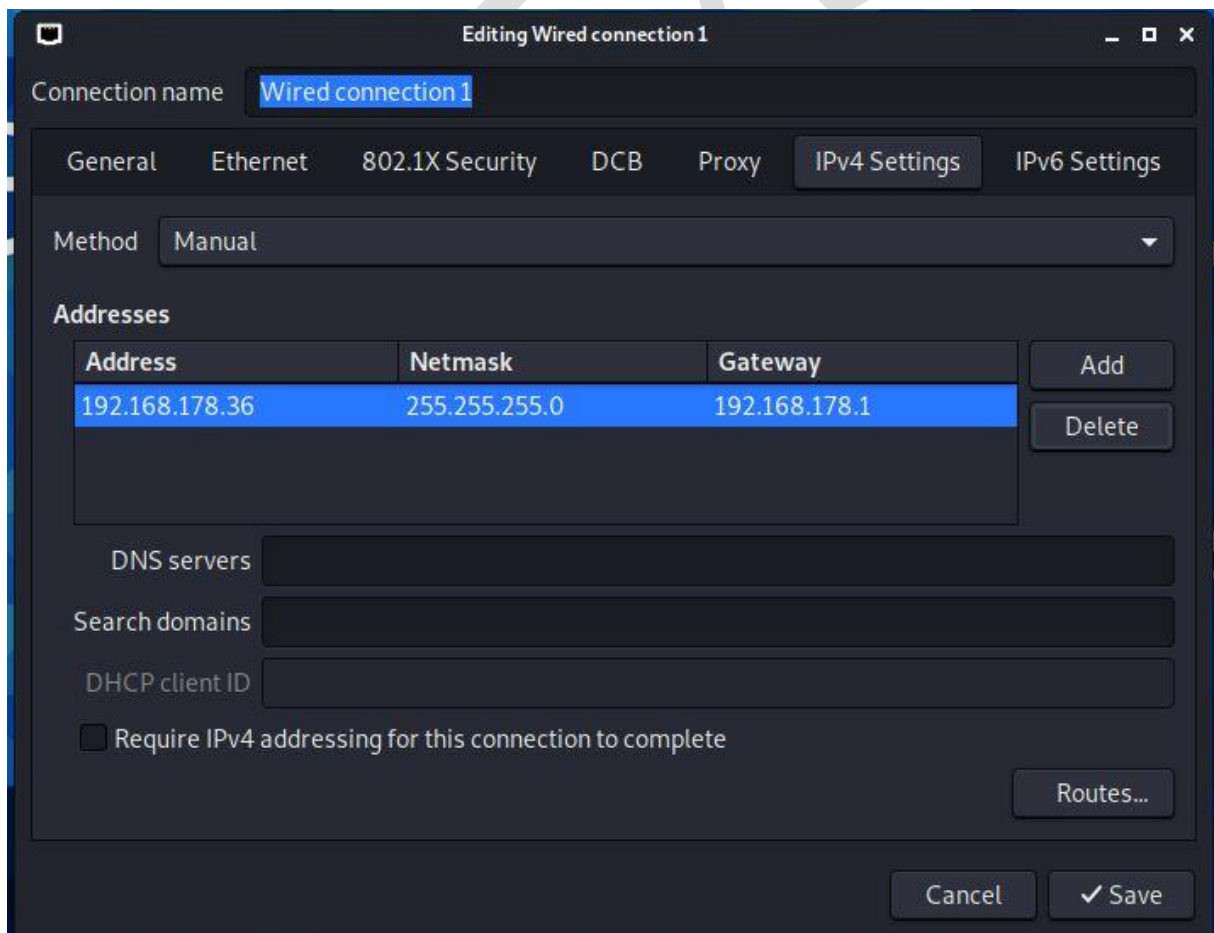
```
(amritanshi@kali)-[~]  
$ sudo systemctl restart networking.service  
  
(amritanshi@kali)-[~]  
$ sudo /etc/init.d/networking restart  
Restarting networking (via systemctl): networking.service.
```

After restarting your networking service, you should be able to see your new IP by running the “ifconfig” or the “ip” command.

```
(amritanshi@kali)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.178.32 netmask 255.255.255.0 broadcast 192.168.178.255
    inet6 fe80::20c:29ff:fed2:9bbe prefixlen 64 scopeid 0x20<link>
    inet6 2405:201:6001:fb35:20c:29ff:fed2:9bbe prefixlen 64 scopeid 0x0<global>
    inet6 2405:201:6001:fb35:c6ee:258d:1d76:7c75 prefixlen 64 scopeid 0x0<global>
    ether 00:0c:29:d2:9b:be txqueuelen 1000 (Ethernet)
    RX packets 516 bytes 49401 (48.2 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 335 bytes 36401 (35.5 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 8 bytes 400 (400.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 8 bytes 400 (400.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Modify IP Address using Graphical Interface



```
(amritanshi@kali)-[~]
$ nmcli networking off

(amritanshi@kali)-[~]
$ nmcli networking on

(amritanshi@kali)-[~]
$ ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.178.36 netmask 255.255.255.0 broadcast 192.168.178.255
    inet6 fe80::20c:29ff:fed2:9bbe prefixlen 64 scopeid 0x20<link>
    inet6 2405:201:6001:fb35:20c:29ff:fed2:9bbe prefixlen 64 scopeid 0x0<global>
    inet6 2405:201:6001:fb35:7355:ed73:5860:725a prefixlen 64 scopeid 0x0<global>
    ether 00:0c:29:d2:9b:be txqueuelen 1000 (Ethernet)
    RX packets 845 bytes 80495 (78.6 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 660 bytes 71007 (69.3 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 8 bytes 400 (400.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 8 bytes 400 (400.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

-----X-----X-----X-----X-----X-----