

Ex. No: 2

## LINUX Networking commands

1. IP

→ id address Show

[root @ localhost student] # ip address <sup>show</sup>

1. Lo  $\leftarrow$  loopback, uplower-ups 65536  
qdisc noqueue state unknown group  
default qlen 10000

→ IP address add.

# ip address add 192.168.1.254/24  
dev enp2s0

→ ip address delete

# ip address del 192.168.1.254/24  
dev enp2s0

→ IP link Setup.

# ip link set to up

→ IP link Set down.

# ip link set to down.

→ IP link set promise on.

# ip link set to promise on.

→ IP route add default.

# ip route add default via  
192.168.1.254 dev enp2s0

→ add default through gateway.

# ip route add 192.168.1.0/24 via  
192.168.1.254

→ Adding Route to device

```
# ip route add 192.168.1.0/24  
dev enp2s0
```

→ delete route through gateway

```
# ip route delete 192.168.1.0/24 via  
192.168.1.254
```

→ Display Route for ip

```
# ip route get 10.10.1.4  
10.10.1.14 via 172.16.8.1 dev enp2s0  
172.16.8.92 id cache
```

→ mtr

```
# mtr google.com  
1. 172.16.8.1
```

```
Statistic: 41.229.49.
```

```
142.251.227.127.
```

→ mtr -b

```
# mtr -b google.com
```

```
Local host: local domain (0.1.0.0)
```

```
17.2.16.8.1
```

```
142.250.171.162
```

```
142.251.227.217.
```

→ tcpdump -v

```
1. enp2s0 [up, running]
```



2. Wireshark [Op. running]
3. any (pseudo) device that capture interface
4. [Op. running]

→ tcpdump -i

# tcpdump -i enp2s0 src host 0.0.0.0

tcpdump -rr for full protocol

decade listening on enp2s0

link type ENTP2S0 capture size

262144 bytes.

→ ping -c 1 8.8.8.8

# ping -c to google.com

64 bytes from macos.sib.in.flh:

100net (216.58.200.142) icmp seq=242

→ nmcli - connection show

Now 802-3-ethernet connection

7d95b6e - 189a-b1d5-8b4a-03

(ofac 7e6e - 802-3-3-ethernet - enp2s0)

→ nmcli connection edit con-name 802-3-ethernet

802-3-ethernet ifname enp2s0 type ethernet

Successfully address

3. nmcli connection modify "New 802-3-ethernet" connection.interface-name auto

→ # nmcli connection modify "New 802-3-ethernet" connection.interface-name autoconnect yes

4. # nmcli show "New 802-3-ethernet" connection.interface-name enp28s0  
id: "New 802-3"  
uuid: 28fd109f-370c-42c5-904e-  
Interface name: enp28s0  
type: ethernet  
autoconnect: yes  
seed-only: No

# nmcli show "New 802-3-ethernet" connection.interface-name autoconnect yes  
id: "New 802-3"  
then id: 28fd109f-370c-42c5-904e-  
type: ethernet  
autoconnect: Yes

Nmcli show "New" prop. method auto



nmcli modify "New802" ip4.method  
auto  
nmcli modify "New802" ip4.method  
auto

nmcli modify connection "New802"  
ip4.method

manually ip4 address 192.0.2.1.124

ip4 gateway 192.0.2.28 ip4

dns 192.0.2.200 ip4 dns search

example host