System 1

File Machine View Input Devices Help

```
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.203  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 2409:4063:4e03:20ba:cbf6:a5ee:fa5f:3fad  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:59:22:62  txqueuelen 1000  (Ethernet)
        RX packets 37  bytes 3899 (3.8 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 42  bytes 4122 (4.0 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# ifconfig enp0s3 192.168.225.1/24
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.1  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 2409:4063:4e03:20ba:cbf6:a5ee:fa5f:3fad  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:59:22:62  txqueuelen 1000  (Ethernet)
        RX packets 41  bytes 4283 (4.1 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 45  bytes 4446 (4.3 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# route add -net 192.168.225.0/30 enp0s3
[root@localhost ~]# route -n
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
192.168.225.0   0.0.0.0         255.255.255.252 U     0      0        0 enp0s3
[root@localhost ~]#
```

System 2

```
        ether 08:00:27:89:d6:5d  txqueuelen 1000  (Ethernet)
        RX packets 87  bytes 9524 (9.3 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 60  bytes 5698 (5.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# ifconfig enp0s3 192.168.225.2/24    ⟵
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.2  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 fe80::5125:68ec:9752:1a22  prefixlen 64  scopeid 0x20<link>
        inet6 2409:4063:4e03:20ba:2b14:b92f:c9bc:aab0  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:89:d6:5d  txqueuelen 1000  (Ethernet)
        RX packets 94  bytes 10220 (9.9 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 64  bytes 6108 (5.9 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# route add -net 192.168.225.0/31 enp0s3    ⟵
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.2  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 fe80::5125:68ec:9752:1a22  prefixlen 64  scopeid 0x20<link>
        inet6 2409:4063:4e03:20ba:2b14:b92f:c9bc:aab0  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:89:d6:5d  txqueuelen 1000  (Ethernet)
        RX packets 102  bytes 10970 (10.7 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 70  bytes 6684 (6.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# route -n
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
192.168.225.0   0.0.0.0         255.255.255.254 U     0      0        0 enp0s3
[root@localhost ~]#
```

System 3

```
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.140  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 fe80::bf2a:3a15:54ab:ed54  prefixlen 64  scopeid 0x20<link>
        inet6 2409:4063:4e03:20ba:6eb1:2e30:3487:2b43  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        inet6 fe80::5125:88ec:9792:1d22  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:21:8c:cf  txqueuelen 1000  (Ethernet)
        RX packets 136  bytes 13254 (12.9 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 102  bytes 9592 (9.3 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# ifconfig enp0s3 192.168.225.3/24
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.3  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 fe80::bf2a:3a15:54ab:ed54  prefixlen 64  scopeid 0x20<link>
        inet6 2409:4063:4e03:20ba:6eb1:2e30:3487:2b43  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        inet6 fe80::5125:88ec:9792:1d22  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:21:8c:cf  txqueuelen 1000  (Ethernet)
        RX packets 139  bytes 13486 (13.1 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 104  bytes 9830 (9.5 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# route add -net 192.168.225.0/31 enp0s3
[root@localhost ~]# route -n
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
192.168.225.0   0.0.0.0         255.255.255.254 U     0      0        0 enp0s3
[root@localhost ~]#
```

System 1

```
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.1  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 2409:4063:4e03:20ba:cbf6:a5ee:fa5f:5fad  prefixlen 64  scopeid 0x0<global>
        inet6 2409:4063:439f:cd96:70f2:c6a3:207:2570  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:59:22:62  txqueuelen 1000  (Ethernet)
        RX packets 183  bytes 17049 (16.6 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 190  bytes 19192 (18.7 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# ping 192.168.225.1
PING 192.168.225.1 (192.168.225.1) 56(84) bytes of data.
64 bytes from 192.168.225.1: icmp_seq=1 ttl=64 time=0.059 ms
64 bytes from 192.168.225.1: icmp_seq=2 ttl=64 time=0.056 ms
^C
--- 192.168.225.1 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 42ms
rtt min/avg/max/mdev = 0.056/0.057/0.059/0.002 ...
[root@localhost ~]# ping 192.168.225.2
PING 192.168.225.2 (192.168.225.2) 56(84) bytes of data.
64 bytes from 192.168.225.2: icmp_seq=1 ttl=64 time=0.588 ms
64 bytes from 192.168.225.2: icmp_seq=2 ttl=64 time=0.914 ms
^C
--- 192.168.225.2 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 31ms
rtt min/avg/max/mdev = 0.588/0.751/0.914/0.163 ...
[root@localhost ~]# ping 192.168.225.3
PING 192.168.225.3 (192.168.225.3) 56(84) bytes of data.
64 bytes from 192.168.225.3: icmp_seq=1 ttl=64 time=0.547 ms
64 bytes from 192.168.225.3: icmp_seq=2 ttl=64 time=0.634 ms
^C
--- 192.168.225.3 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 36ms
rtt min/avg/max/mdev = 0.547/0.590/0.634/0.049 ms
[root@localhost ~]#
```

System 2

```
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.2  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 fe80::3123:00ec:9792:1a22  prefixlen 64  scopeid 0x20<link>
        inet6 2409:4063:4e03:20ba:2b14:b92f:c9bc:aab0  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:89:d6:5d  txqueuelen 1000  (Ethernet)
        RX packets 180  bytes 16870 (16.4 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 106  bytes 9546 (9.3 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# ping 192.168.225.1
PING 192.168.225.1 (192.168.225.1) 56(84) bytes of data.
64 bytes from 192.168.225.1: icmp_seq=1 ttl=64 time=2.74 ms
64 bytes from 192.168.225.1: icmp_seq=2 ttl=64 time=3.22 ms
64 bytes from 192.168.225.1: icmp_seq=3 ttl=64 time=2.88 ms
^C
--- 192.168.225.1 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 5ms
rtt min/avg/max/mdev = 2.740/2.944/3.215/0.204
[root@localhost ~]# ping 192.168.225.2
PING 192.168.225.2 (192.168.225.2) 56(84) bytes of data.
64 bytes from 192.168.225.2: icmp_seq=1 ttl=64 time=0.058 ms
64 bytes from 192.168.225.2: icmp_seq=2 ttl=64 time=0.100 ms
64 bytes from 192.168.225.2: icmp_seq=3 ttl=64 time=0.095 ms
^C
--- 192.168.225.2 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 81ms
rtt min/avg/max/mdev = 0.058/0.084/0.100/0.020
[root@localhost ~]# ping 192.168.225.3
connect: Network is unreachable
[root@localhost ~]#
```

System 3

```
[root@localhost ~]# ifconfig enp0s3
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.225.3  netmask 255.255.255.0  broadcast 192.168.225.255
        inet6 fe80::bf2a:3a13:34ab:ed54  prefixlen 64  scopeid 0x20<link>
        inet6 2409:4063:4e03:20ba:6eb1:2e30:3487:2b43  prefixlen 64  scopeid 0x0<global>
        inet6 fe80::cec0:e40c:8e1b:e305  prefixlen 64  scopeid 0x20<link>
        inet6 fe80::5125:88ec:9792:1d22  prefixlen 64  scopeid 0x20<link>
        ether 08:00:27:21:8c:cf  txqueuelen 1000  (Ethernet)
        RX packets 172  bytes 16116 (15.7 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 126  bytes 11918 (11.6 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@localhost ~]# ping 192.168.225.1
PING 192.168.225.1 (192.168.225.1) 56(84) bytes of data.
64 bytes from 192.168.225.1: icmp_seq=1 ttl=64 time=4.54 ms
64 bytes from 192.168.225.1: icmp_seq=2 ttl=64 time=3.26 ms
64 bytes from 192.168.225.1: icmp_seq=3 ttl=64 time=1.98 ms
^C
--- 192.168.225.1 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 6ms
rtt min/avg/max/mdev = 1.978/3.258/4.538/1.045 ms
[root@localhost ~]# ping 192.168.225.2
connect: Network is unreachable
[root@localhost ~]# ping 192.168.225.3
PING 192.168.225.3 (192.168.225.3) 56(84) bytes of data.
64 bytes from 192.168.225.3: icmp_seq=1 ttl=64 time=0.045 ms
64 bytes from 192.168.225.3: icmp_seq=2 ttl=64 time=0.053 ms
64 bytes from 192.168.225.3: icmp_seq=3 ttl=64 time=0.042 ms
^C
--- 192.168.225.3 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 72ms
rtt min/avg/max/mdev = 0.042/0.046/0.053/0.009 ms
[root@localhost ~]#
```