

```
Windows PowerShell  x  Ubuntu  x  Ubuntu  +  v
hariniubuntu@victus: $ 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
    inet 10.255.255.254/32 brd 10.255.255.254 scope global 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 1400 qdisc mq state UP group default qlen 1000
    link/ether 00:15:5d:16:23:b1 brd ff:ff:ff:ff:ff:ff
    inet 172.22.120.120/20 brd 172.22.127.255 scope global eth0
        valid_lft forever preferred_lft forever
    inet6 fe80::215:5dff:fe16:23b1/64 scope link
        valid_lft forever preferred_lft forever
```

```
Windows PowerShell  x  Ubuntu  x  Ubuntu  +  v
hariniubuntu@victus: $ ping google.com
PING google.com (142.251.223.14) 56(84) bytes of data.
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=2 ttl=113 time=254 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=3 ttl=113 time=88.7 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=4 ttl=113 time=180 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=5 ttl=113 time=348 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=7 ttl=113 time=354 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=9 ttl=113 time=348 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=10 ttl=113 time=418 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=11 ttl=113 time=193 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=12 ttl=113 time=256 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=13 ttl=113 time=253 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=14 ttl=113 time=64.8 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=16 ttl=113 time=293 ms
^C
--- google.com ping statistics ---
17 packets transmitted, 12 received, 29.4118% packet loss, time 16012ms
rtt min/avg/max/mdev = 64.763/254.232/417.751/103.357 ms
hariniubuntu@victus: $ ss -tuln
Netid      State      Recv-Q     Send-Q     Local Address:Port      Peer Address:Port      Process
udp        UNCONN    0           0           127.0.0.54:53           0.0.0.0:*
udp        UNCONN    0           0           127.0.0.53%lo:53        0.0.0.0:*
udp        UNCONN    0           0           10.255.255.254:53        0.0.0.0:*
udp        UNCONN    0           0           127.0.0.1:323           0.0.0.0:*
udp        UNCONN    0           0           [::1]:323               [::]:*
tcp        LISTEN    0           1000        10.255.255.254:53        0.0.0.0:*
tcp        LISTEN    0           151         127.0.0.1:3306           0.0.0.0:*
tcp        LISTEN    0           4096        127.0.0.53%lo:53        0.0.0.0:*
```

```
Windows PowerShell  x  Ubuntu  x  Ubuntu  +  v
hariniubuntu@victus: $ nslookup google.com
Server:      10.255.255.254
Address:      10.255.255.254#53

Non-authoritative answer:
Name:   google.com
Address: 142.251.223.14
Name:   google.com
Address: 2404:6800:4007:810::200e

hariniubuntu@victus: $ dig google.com

; <<>> DiG 9.18.39-0ubuntu0.24.04.2-Ubuntu <<>> google.com
;; global options: +cmd
;; Got answer:
;; -->HEADER<<- opcode: QUERY, status: NOERROR, id: 42821
;; flags: qr rd ra ad; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;google.com.                IN      A

;; ANSWER SECTION:
google.com.                 227     IN      A      142.251.223.14

;; Query time: 40 msec
;; SERVER: 10.255.255.254#53(10.255.255.254) (UDP)
;; WHEN: Mon Jan 19 12:47:10 UTC 2026
;; MSG SIZE rcvd: 44
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```
Windows PowerShell  x  Ubuntu  x  Ubuntu  x  +  v  -  □  x
hariniubuntu@victus: $ 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: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1400 qdisc mq state UP mode DEFAULT group default qlen 1000
    link/ether 00:15:5d:16:23:b1 brd ff:ff:ff:ff:ff:ff
hariniubuntu@victus: $ ip link show eth0
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1400 qdisc mq state UP mode DEFAULT group default qlen 1000
    link/ether 00:15:5d:16:23:b1 brd ff:ff:ff:ff:ff:ff
hariniubuntu@victus: $ sudo ip link set eth0 up
[sudo] password for hariniubuntu:
hariniubuntu@victus: $ ip link show eth0
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1400 qdisc mq state UP mode DEFAULT group default qlen 1000
    link/ether 00:15:5d:16:23:b1 brd ff:ff:ff:ff:ff:ff
hariniubuntu@victus: $ ping google.com
PING google.com (142.251.223.14) 56(84) bytes of data:
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=3 ttl=113 time=263 ms
64 bytes from cgk02s06-in-f14.1e100.net (142.251.223.14): icmp_seq=4 ttl=113 time=379 ms
^C
--- google.com ping statistics ---
5 packets transmitted, 2 received, 60% packet loss, time 4000ms
rtt min/avg/max/mdev = 262.893/321.086/379.280/58.193 ms
hariniubuntu@victus: $ sudo ip link set eth0 down
hariniubuntu@victus: $ ip link show eth0
2: eth0: <BROADCAST,MULTICAST> mtu 1400 qdisc mq state DOWN mode DEFAULT group default qlen 1000
    link/ether 00:15:5d:16:23:b1 brd ff:ff:ff:ff:ff:ff
hariniubuntu@victus: $ ping google.com
ping: connect: Network is unreachable
hariniubuntu@victus: $
```