

```
[exam@localhost ~]$ dig facebook.com
```

```
; <<> DiG 9.11.1-P1-RedHat-9.11.1-1.P1.fc26 <<> facebook.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 8187
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0
```

```
;; QUESTION SECTION:
```

```
facebook.com.                IN      A
```

```
;; ANSWER SECTION:
```

```
facebook.com.                7       IN      A      157.240.192.35
```

```
;; Query time: 0 msec
```

```
;; SERVER: 172.16.8.1#53(172.16.8.1)
```

```
;; WHEN: Tue Jul 16 11:03:22 IST 2024
```

```
;; MSG SIZE rcvd: 46
```

```
exam@localhost ~]$ dig 31.13.78.35
```

```
<<> DiG 9.11.1-P1-RedHat-9.11.1-1.P1.fc26 <<> 31.13.78.35
```

```
; global options: +cmd
```

```
; Got answer:
```

```
; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 7289
```

```
; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0
```

```
; QUESTION SECTION:
```

```
31.13.78.35.                 IN      A
```

```
; ANSWER SECTION:
```

```
31.13.78.35.                655360  IN      A      31.13.78.35
```

```
; Query time: 0 msec
```

```
; SERVER: 172.16.8.1#53(172.16.8.1)
```

```
; WHEN: Tue Jul 16 11:03:49 IST 2024
```

```
; MSG SIZE rcvd: 45
```

```
exam@localhost ~]$ traceroute www.facebook.com
```

```
traceroute to www.facebook.com (157.240.192.35), 30 hops max, 60 byte packets
```

```
1 gateway (172.16.8.1) 0.241 ms 0.219 ms 0.208 ms
2 static-41.229.249.49-tataidc.co.in (49.249.229.41) 6.075 ms 6.009 ms 5.805 ms
3 ae10.pr01.maa2.tfbnw.net (157.240.83.120) 3.346 ms 3.312 ms 3.203 ms
4 pol01.psw03.maa2.tfbnw.net (129.134.34.179) 2.789 ms pol01.psw02.maa2.tfbnw.net (129.134.34.177)
5 157.240.36.109 (157.240.36.109) 4.434 ms 157.240.39.75 (157.240.39.75) 4.406 ms 157.240.39.183
6 * * *
7 * * *
8 * * *
9 * * *
10 * * *
11 * * *
12 * * *
13 * * *
14 * * *
15 * * *
16 * * ^C
```

```
exam@localhost ~]$ hostname
```

```
localhost.localdomain
```

My traceroute [v0.87]

```
localhost.localdomain (0.0.0.0)
```

```
Tue Jul 16 11:31:21 2024
```

```
Keys: Help Display mode Restart statistics Order of fields quit
```

Host	Packets		Pings				
	Loss%	Snt	Last	Avg	Best	Wrst	StDev
1. 172.16.8.1	0.0%	3	0.1	0.2	0.1	0.3	0.0
2. static-41.229.249.49-tataidc.co.in	0.0%	3	3.0	3.0	2.8	3.1	0.0
3. 142.250.171.162	0.0%	3	3.2	2.9	2.5	3.2	0.0
4. 142.251.227.217	0.0%	3	3.7	4.0	3.7	4.4	0.0
5. 216.239.54.197	0.0%	2	4.1	4.0	3.8	4.1	0.0
6. maa05s10-in-f14.1e100.net	0.0%	2	3.0	3.2	3.0	3.4	0.0

```
[exam@localhost ~]$ ss -tulpn
Netid State      Recv-Q Send-Q Local Address:Port      Peer Address:Port
udp    UNCONN      0      0      *:5353                *:*
udp    UNCONN      0      0      *:49091               *:*
udp    UNCONN      0      0      :::1716               :::*
users:((("kdeconnectd",pid=1095,fd=11))
udp    UNCONN      0      0      :::5353               :::*
udp    UNCONN      0      0      :::37118              :::*
tcp    LISTEN      0      5      127.0.0.1:631         *:*

tcp    LISTEN      0      50     :::1716               :::*
users:((("kdeconnectd",pid=1095,fd=12))
tcp    LISTEN      0      5      :::1:631              :::*
[exam@localhost ~]$
[exam@localhost ~]$
[exam@localhost ~]$ tracepath example.net
 1?: [LOCALHOST] pmtu 1500
 1: gateway 0.431ms
 1: gateway 0.423ms
 2: gateway 0.435ms pmtu 1460
 2: static-41.229.249.49-tataidc.co.in 15.735ms
 3: 14.141.20.165.static-vsnl.net.in 3.171ms
 4: 172.25.81.134 46.732ms asymm 7
 5: no reply
 6: if-be-13-2.ecore1.mlv-mumbai.as6453.net 148.711ms asymm 9
 7: if-bundle-2-2.qcore2.mlv-mumbai.as6453.net 151.865ms asymm 8
 8: if-bundle-29-2.qcore1.ldn-london.as6453.net 150.129ms asymm 7
 9: 195.219.213.137 153.320ms asymm 8
10: ldn-bb1-link.ip.twelve99.net 149.896ms asymm 11
11: nyk-bb1-link.ip.twelve99.net 224.399ms
12: nyk-b1-link.ip.twelve99.net 220.087ms asymm 8
13: edgio-ic-317660.ip.twelve99-cust.net 264.800ms
14: ae-68.core1.nyd.edgecastcdn.net 230.312ms
[exam@localhost ~]$ tracepath example.net
 1?: [LOCALHOST] pmtu 1500
 1: gateway 0.431ms
 1: gateway 0.423ms
 2: gateway 0.435ms pmtu 1460
 2: static-41.229.249.49-tataidc.co.in 15.735ms
 3: 14.141.20.165.static-vsnl.net.in 3.171ms
 4: 172.25.81.134 46.732ms asymm 7
 5: no reply
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 8: if-bundle-29-2.qcore1.ldn-london.as6453.net 150.129ms asymm 7
 9: 195.219.213.137 153.320ms asymm 8
10: ldn-bb1-link.ip.twelve99.net 149.896ms asymm 11
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12: nyk-b1-link.ip.twelve99.net 220.087ms asymm 8
13: edgio-ic-317660.ip.twelve99-cust.net 264.800ms
14: ae-68.core1.nyd.edgecastcdn.net 230.312ms
[exam@localhost ~]$ curl https://example.com
<!doctype html>
<html>
<head>
  <title>Example Domain</title>

  <meta charset="utf-8" />
  <meta http-equiv="Content-type" content="text/html; charset=utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1" />
  <style type="text/css">
    body {
      background-color: #f0f0f2;
      margin: 0;
      padding: 0;
      font-family: -apple-system, system-ui, BlinkMacSystemFont, "Segoe UI",
n Sans", "Helvetica Neue", Helvetica, Arial, sans-serif;

    }

```

```
[exam@localhost ~]$ arp
Address          HWtype  HWaddress      Flags Mask    Iface
gateway          ether    7c:5a:1c:cf:be:45  C             enp2s0
[exam@localhost ~]$ system info
bash: system: command not found
[exam@localhost ~]$ systeminfo
bash: systeminfo: command not found
[exam@localhost ~]$ nslookup google.com
Server:          172.16.8.1
Address:          172.16.8.1#53

Non-authoritative answer:
Name:   google.com
Address: 142.250.67.46
Name:   google.com
Address: 2404:6800:4007:804::200e

[exam@localhost ~]$ route
Kernel IP routing table
Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
default         gateway        0.0.0.0         UG    100    0      0 enp2s0
172.16.8.0      0.0.0.0        255.255.252.0   U     100    0      0 enp2s0
[exam@localhost ~]$ vmstat -i eth0
vmstat: invalid option -- 'i'

Usage:
  vmstat [options] [delay [count]]

Options:
-a, --active          active/inactive memory
-f, --forks           number of forks since boot
-m, --slabs           slabinfo
-n, --one-header      do not redisplay header
-s, --stats           event counter statistics
-d, --disk            disk statistics
-D, --disk-sum        summarize disk statistics
-p, --partition <dev> partition specific statistics
-S, --unit <char>    define display unit
-w, --wide            wide output
-t, --timestamp       show timestamp

-h, --help           display this help and exit
-V, --version        output version information and exit

```

```
[exam@localhost ~]$ lsof -i
COMMAND  PID USER  FD  TYPE DEVICE SIZE/OFF NODE NAME
deconnec 1095 exam 11u  IPv6 29217      0t0  UDP *:xmsg
deconnec 1095 exam 12u  IPv6 29218      0t0  TCP *:xmsg (LISTEN)
firefox  1651 exam 94u  IPv4 39102      0t0  TCP localhost.localdomain:43176
a03s45-in-f3.1e100.net:https (ESTABLISHED)
firefox  1651 exam 99u  IPv4 40745      0t0  TCP localhost.localdomain:38364
a03s26-in-f14.1e100.net:https (ESTABLISHED)
firefox  1651 exam 130u IPv4 40977      0t0  TCP localhost.localdomain:37672
a05s19-in-f10.1e100.net:https (ESTABLISHED)
firefox  1651 exam 155u IPv4 40978      0t0  TCP localhost.localdomain:37674
a05s19-in-f10.1e100.net:https (ESTABLISHED)

```

```

exam@localhost ~]$ ifconfig
enp2s0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 172.16.8.18 netmask 255.255.252.0 broadcast 172.16.11.255
    inet6 fe80::758e:cfd:a063:adea prefixlen 64 scopeid 0x20<link>
    ether f8:bc:12:8f:cd:7a txqueuelen 1000 (Ethernet)
    RX packets 40427 bytes 31896112 (30.4 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 15681 bytes 3630009 (3.4 MiB)
    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 80 bytes 7548 (7.3 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 80 bytes 7548 (7.3 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

-----
exam@localhost ~]$ ping google.com
PING google.com (142.250.67.46) 56(84) bytes of data.
64 bytes from maa05s12-in-f14.1e100.net (142.250.67.46): icmp_seq=1 ttl=120 time=3.48 ms
64 bytes from maa05s12-in-f14.1e100.net (142.250.67.46): icmp_seq=2 ttl=120 time=2.65 ms
64 bytes from maa05s12-in-f14.1e100.net (142.250.67.46): icmp_seq=3 ttl=120 time=2.09 ms
^C
--- google.com ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2002ms
rtt min/avg/max/mdev = 2.097/2.746/3.484/0.572 ms
exam@localhost ~]$
exam@localhost ~]$
exam@localhost ~]$ ping 216.58.203.142
PING 216.58.203.142 (216.58.203.142) 56(84) bytes of data.

^C
--- 216.58.203.142 ping statistics ---
31 packets transmitted, 0 received, 100% packet loss, time 30746ms
^C
exam@localhost ~]$ dig

;<<>> DiG 9.11.1-P1-RenHat-9.11.1-1.P1.fc26 <<>>
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 54098
;; flags: qr rd ra; QUERY: 1, ANSWER: 13, AUTHORITY: 0, ADDITIONAL: 0

;; QUESTION SECTION:
;      IN      NS

;; ANSWER SECTION:
      87120    IN      NS      f.root-servers.net.
      87120    IN      NS      g.root-servers.net.
      87120    IN      NS      m.root-servers.net.
      87120    IN      NS      a.root-servers.net.
      87120    IN      NS      i.root-servers.net.
      87120    IN      NS      k.root-servers.net.
      87120    IN      NS      j.root-servers.net.
      87120    IN      NS      d.root-servers.net.
      87120    IN      NS      b.root-servers.net.
      87120    IN      NS      e.root-servers.net.
      87120    IN      NS      l.root-servers.net.
      87120    IN      NS      c.root-servers.net.
      87120    IN      NS      h.root-servers.net.

;; Query time: 0 msec
;; SERVER: 172.16.8.1#53(172.16.8.1)
;; WHEN: Tue Jul 16 11:02:56 IST 2024
;; MSG SIZE rcvd: 228

```