

Traceroute

A straightforward yet sophisticated command-line tool for tracing an IP packet's travel across one or more networks

The Windows implementation, known as "tracert," was initially created for UNIX-based platforms but is now present in most operating systems. A traceroute is another common name for the results of these instructions. Your ISP might request a traceroute if you contact them for assistance with, for example, poor streaming video performance.

Various TraceRoute Commands:-

Option	Description
-d	Do not resolve addresses to hostnames.
-h aximum_hops	Maximum number of hops to search for target. You can put higher than 30, if you want to query a very remote target.
-j host-list	Loose source route along host-list (IPv4-only). Show only IPv4 addresses.

-w timeout

Wait timeout milliseconds for each reply. Increase it, to see more about slower routers.

-R

Trace round-trip path (IPv6-only).

-S srcaddr

Source address to use (IPv6-only).

-4

Force using IPv4.

-6

Force using IPv6.

CLI implementation

```
Command Prompt
Microsoft Windows [Version 10.0.22621.1105]
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C:\Users\karna>ping github.com

Pinging github.com [20.207.73.82] with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 20.207.73.82:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Users\karna>tracert github.com

Tracing route to github.com [20.207.73.82]
over a maximum of 30 hops:

  1    1 ms    <1 ms    1 ms    dlinkrouter [192.168.0.1]
  2    *        *        *        Request timed out.
  3    *        *        *        Request timed out.
  4    *    172.16.16.1    reports: Destination net unreachable.

Trace complete.

C:\Users\karna>
```