

## RESEARCH ON TRACEROUTE

**Project Objective:** Learn how to use Traceroute in Kali Linux to trace the route to a host.

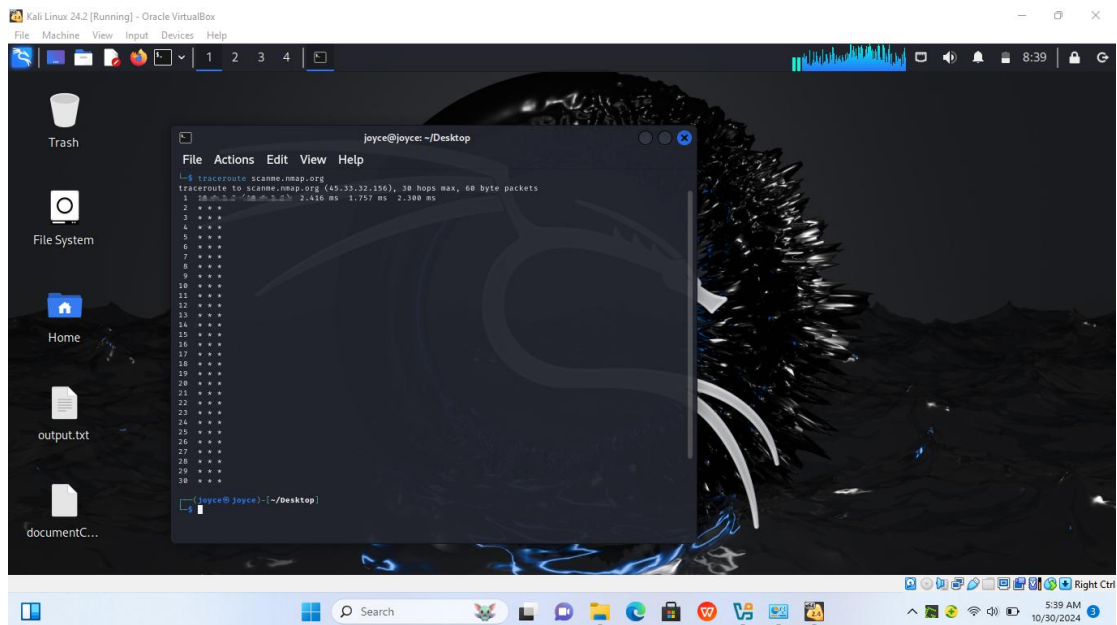
Traceroute is used the route to a host. It displays the route used by IP Packets on their way to the specified network, it is also useful as a network debugging tool, and as a diagnostic tool. It is used to trace the route to a host.

**Project Tool:** Kali Linux

**Traceroute scanme.nmap.org**

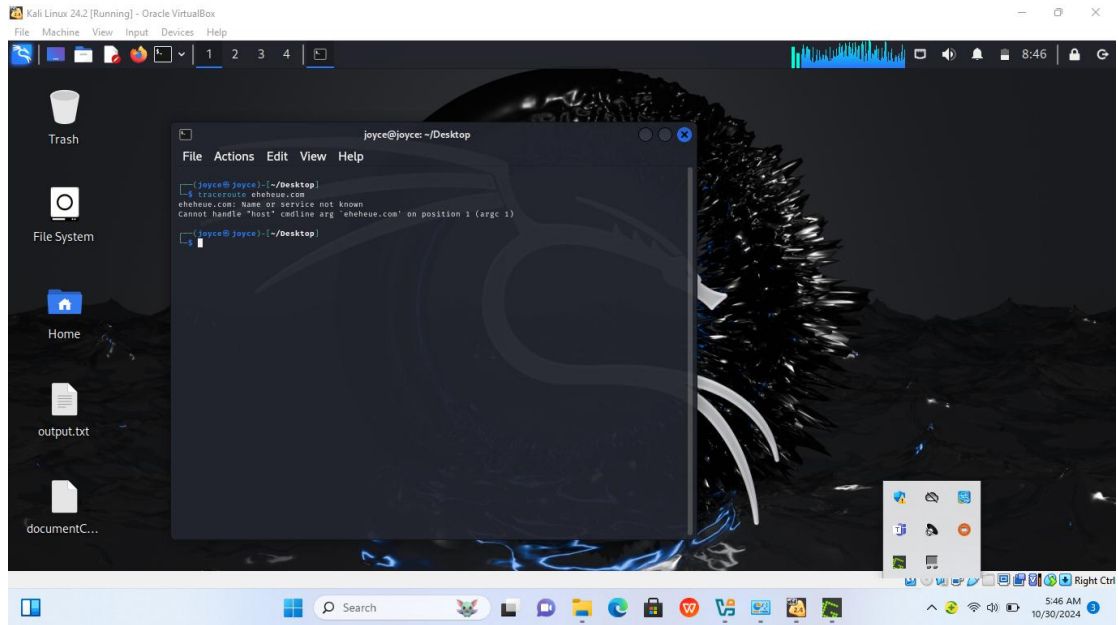
This displays the hostname and its IP address, which was obtained by using reverse DNS lookup.

**30 hops-** This means that the traceroute will only route the first 30 routes between the between one system and target's system.



The screenshot shows a Kali Linux desktop environment. A terminal window titled 'joyce@joyce: ~/Desktop' is open, displaying the output of the command 'traceroute scanme.nmap.org'. The output shows the route from the local machine to scanme.nmap.org (45.33.32.156), indicating 30 hops, a maximum of 60 byte packets, and round-trip times for each hop. The desktop background features a dark, abstract image. The taskbar at the bottom shows various application icons and the system clock indicating 5:39 AM on 10/30/2024.

```
File Actions Edit View Help
joyce@joyce: ~/Desktop
l-$ traceroute scanme.nmap.org
traceroute to scanme.nmap.org (45.33.32.156), 30 hops max, 60 byte packets
 1 10.0.0.1 <---> 10.0.0.2  2.416 ms  1.757 ms  2.380 ms
 2 * * *
 3 * * *
 4 * * *
 5 * * *
 6 * * *
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```



**traceroute eheueheu.com**

**traceroute can also help detect whether a hostname exist through traceroute.**