

```
kali@kali: ~  
Session Actions Edit View Help  
  
(kali@kali)-[~]  
$ 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  
    inet6 ::1/128 scope host noprefixroute  
        valid_lft forever preferred_lft forever  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000  
    link/ether 08:00:27:1f:b7:23 brd ff:ff:ff:ff:ff:ff  
    inet 10.0.2.15/24 brd 10.0.2.255 scope global dynamic noprefixroute eth0  
        valid_lft 85807sec preferred_lft 85807sec  
    inet6 fd17:625c:f037:2:8778:18e5:9f16:42b6/64 scope global dynamic noprefixroute  
        valid_lft 86055sec preferred_lft 14055sec  
    inet6 fe80::2586:3a34:f38d:2d8d/64 scope link noprefixroute  
        valid_lft forever preferred_lft forever  
  
(kali@kali)-[~]  
$ nmap 10.0.2.15-20  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 05:38 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000030s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)  
  
Nmap done: 6 IP addresses (1 host up) scanned in 4.36 seconds  
  
(kali@kali)-[~]
```



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Session Actions Edit View Help

```
(kali@kali)-[~]  
$ nmap  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 05:38 EDT  
WARNING: No targets were specified, so 0 hosts scanned.  
Nmap done: 0 IP addresses (0 hosts up) scanned in 0.02 seconds
```

```
(kali@kali)-[~]  
$ 10.0.2.15/24  
zsh: no such file or directory: 10.0.2.15/24
```

```
(kali@kali)-[~]  
$ nmap 10.0.2.15/24  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 05:39 EDT  
Nmap scan report for 10.0.2.2  
Host is up (0.0050s latency).  
Not shown: 995 filtered tcp ports (no-response)  
PORT      STATE SERVICE  
135/tcp   open  msrpc  
445/tcp   open  microsoft-ds  
1935/tcp  open  rtmp  
9080/tcp  open  glrpc  
49152/tcp open  unknown  
MAC Address: 52:55:0A:00:02:02 (Unknown)
```

```
Nmap scan report for 10.0.2.3  
Host is up (0.0050s latency).  
Not shown: 999 filtered tcp ports (net-unreach)  
PORT      STATE SERVICE  
53/tcp    open  domain  
MAC Address: 52:55:0A:00:02:03 (Unknown)
```

```
Session Actions Edit View Help
$ nmap 10.0.2.15/24
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 05:39 EDT
Nmap scan report for 10.0.2.2
Host is up (0.0050s latency).
Not shown: 995 filtered tcp ports (no-response)
PORT      STATE SERVICE
135/tcp    open  msrpc
445/tcp    open  microsoft-ds
1935/tcp   open  rtmp
9080/tcp   open  glrpc
49152/tcp  open  unknown
MAC Address: 52:55:0A:00:02:02 (Unknown)

Nmap scan report for 10.0.2.3
Host is up (0.0050s latency).
Not shown: 999 filtered tcp ports (net-unreach)
PORT      STATE SERVICE
53/tcp    open  domain
MAC Address: 52:55:0A:00:02:03 (Unknown)

Nmap scan report for 10.0.2.15
Host is up (0.0000040s latency).
All 1000 scanned ports on 10.0.2.15 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap done: 256 IP addresses (3 hosts up) scanned in 8.38 seconds

(kali@kali)-[~]
$ nmap -sV 10.0.2.15
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 05:39 EDT
Nmap scan report for 10.0.2.15
Host is up (0.0000020s latency).
```



kali@kali: ~

Session Actions Edit View Help

(kali@kali)-[~]

\$ nmap -sV 10.0.2.15

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 05:39 EDT

Nmap scan report for 10.0.2.15

Host is up (0.0000020s latency).

All 1000 scanned ports on 10.0.2.15 are in ignored states.

Not shown: 1000 closed tcp ports (reset)

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> .

Nmap done: 1 IP address (1 host up) scanned in 0.41 seconds

(kali@kali)-[~]

\$ nmap -O 10.0.2.15

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 05:40 EDT

Nmap scan report for 10.0.2.15

Host is up (0.000044s latency).

All 1000 scanned ports on 10.0.2.15 are in ignored states.

Not shown: 1000 closed tcp ports (reset)

Too many fingerprints match this host to give specific OS details

Network Distance: 0 hops

OS detection performed. Please report any incorrect results at <https://nmap.org/submit/> .

Nmap done: 1 IP address (1 host up) scanned in 8.72 seconds

(kali@kali)-[~]

\$ nmap -A 10.0.2.15

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 05:41 EDT

Nmap scan report for 10.0.2.15

Host is up (0.000044s latency).

All 1000 scanned ports on 10.0.2.15 are in ignored states.



Session Actions Edit View Help

```
(kali@kali)-[~]  
$ nmap --script=vuln 10.0.2.15  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:03 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000050s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)
```

Nmap done: 1 IP address (1 host up) scanned in 16.98 seconds

```
(kali@kali)-[~]  
$ nmap -sn 10.0.2.0/24  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:08 EDT  
Nmap scan report for 10.0.2.2  
Host is up (0.00023s latency).  
MAC Address: 52:55:0A:00:02:02 (Unknown)  
Nmap scan report for 10.0.2.3  
Host is up (0.00037s latency).  
MAC Address: 52:55:0A:00:02:03 (Unknown)  
Nmap scan report for 10.0.2.15  
Host is up.  
Nmap done: 256 IP addresses (3 hosts up) scanned in 4.61 seconds
```

```
(kali@kali)-[~]  
$ nmap 10.0.2.15  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:10 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000020s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)
```



kali@kali: ~

Session Actions Edit View Help

(kali@kali)-[~]

\$ nmap 10.0.2.15

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 06:10 EDT

Nmap scan report for 10.0.2.15

Host is up (0.0000020s latency).

All 1000 scanned ports on 10.0.2.15 are in ignored states.

Not shown: 1000 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 0.14 seconds

(kali@kali)-[~]

\$ nmap -p 22,80,443 10.0.2.15

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 06:11 EDT

Nmap scan report for 10.0.2.15

Host is up (0.000041s latency).

PORT	STATE	SERVICE
------	-------	---------

22/tcp	closed	ssh
--------	--------	-----

80/tcp	closed	http
--------	--------	------

443/tcp	closed	https
---------	--------	-------

Nmap done: 1 IP address (1 host up) scanned in 0.11 seconds

(kali@kali)-[~]

\$ nmap -sV 10.0.2.15

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 06:11 EDT

Nmap scan report for 10.0.2.15

Host is up (0.0000020s latency).

All 1000 scanned ports on 10.0.2.15 are in ignored states.

Not shown: 1000 closed tcp ports (reset)



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Session Actions Edit View Help

```
(kali@kali)-[~]  
$ nmap -A 10.0.2.15
```

```
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:12 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.000049s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)  
Too many fingerprints match this host to give specific OS details  
Network Distance: 0 hops
```

```
OS and Service detection performed. Please report any incorrect results at ht  
tps://nmap.org/submit/ .  
Nmap done: 1 IP address (1 host up) scanned in 1.95 seconds
```

```
(kali@kali)-[~]  
$ nmap -O 10.0.2.15
```

```
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:12 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.000039s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)  
Too many fingerprints match this host to give specific OS details  
Network Distance: 0 hops
```

```
OS detection performed. Please report any incorrect results at https://nmap.o  
rg/submit/ .  
Nmap done: 1 IP address (1 host up) scanned in 1.65 seconds
```

```
(kali@kali)-[~]  
$ nmap -p- 10.0.2.15
```



Session Actions Edit View Help

```
(kali@kali)-[~]  
$ nmap -p- 10.0.2.15
```

```
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:12 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000020s latency).  
All 65535 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 65535 closed tcp ports (reset)
```

Nmap done: 1 IP address (1 host up) scanned in 2.98 seconds

```
(kali@kali)-[~]  
$ nmap -sU 10.0.2.15
```

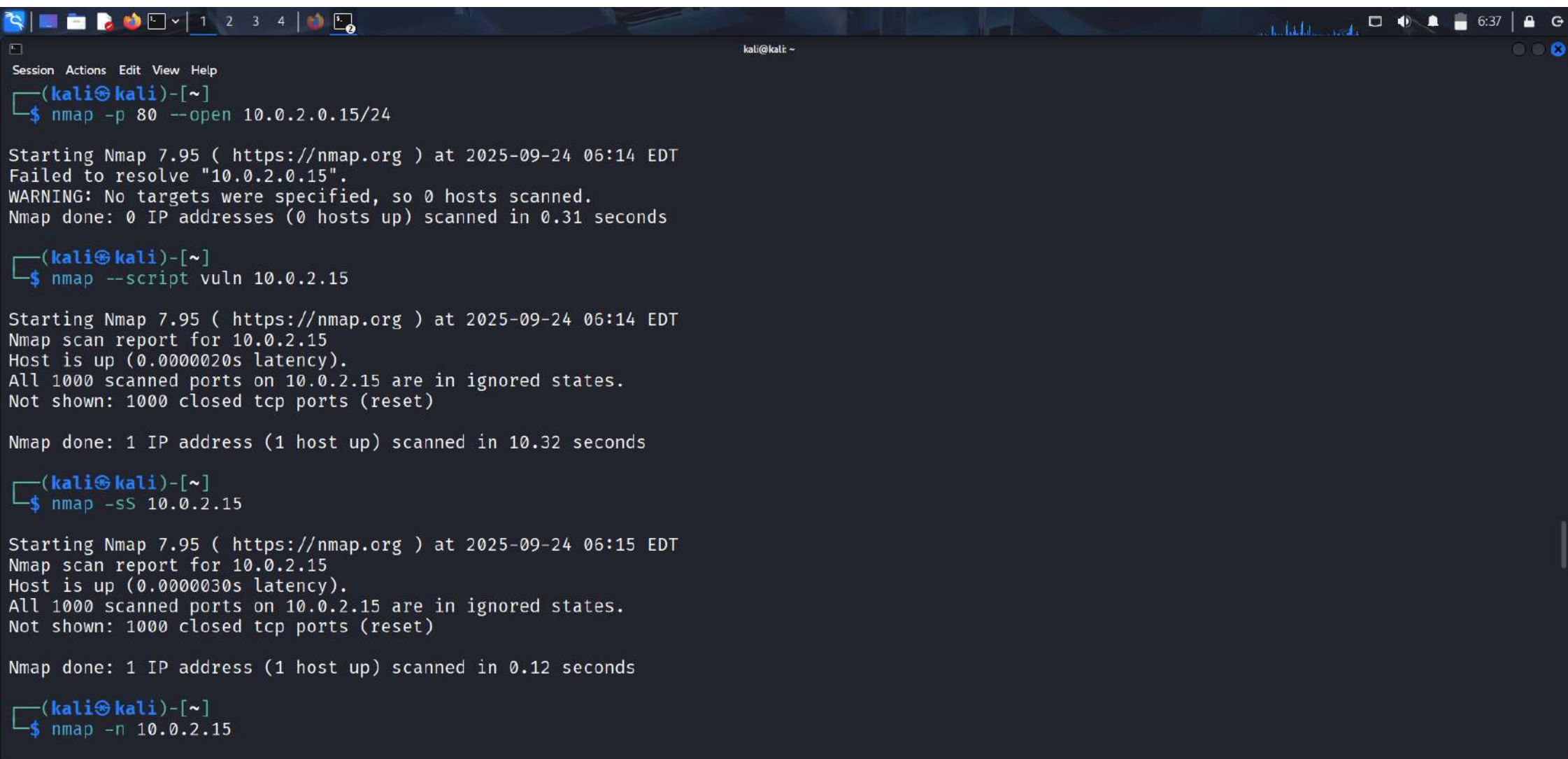
```
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:13 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000020s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed udp ports (port-unreach)
```

Nmap done: 1 IP address (1 host up) scanned in 2.81 seconds

```
(kali@kali)-[~]  
$ nmap --top-ports 100 10.0.2.15
```

```
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:13 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000020s latency).  
All 100 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 100 closed tcp ports (reset)
```

Nmap done: 1 IP address (1 host up) scanned in 0.12 seconds



```
(kali㉿kali)-[~]
$ nmap -p 80 --open 10.0.2.0.15/24

Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:14 EDT
Failed to resolve "10.0.2.0.15".
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 0.31 seconds

(kali㉿kali)-[~]
$ nmap --script vuln 10.0.2.15

Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:14 EDT
Nmap scan report for 10.0.2.15
Host is up (0.0000020s latency).
All 1000 scanned ports on 10.0.2.15 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

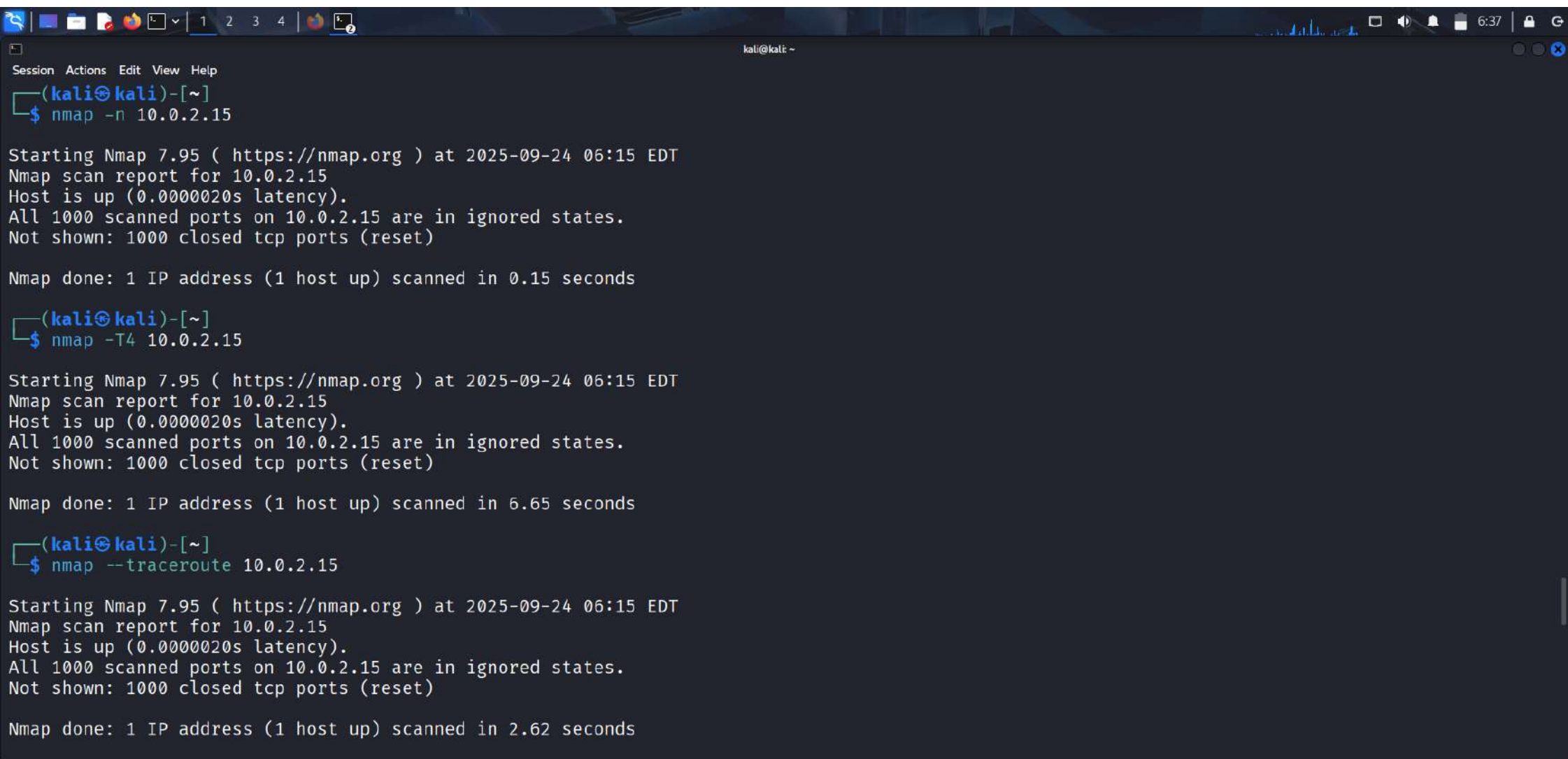
Nmap done: 1 IP address (1 host up) scanned in 10.32 seconds

(kali㉿kali)-[~]
$ nmap -sS 10.0.2.15

Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:15 EDT
Nmap scan report for 10.0.2.15
Host is up (0.0000030s latency).
All 1000 scanned ports on 10.0.2.15 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 0.12 seconds

(kali㉿kali)-[~]
$ nmap -n 10.0.2.15
```



```
(kali㉿kali)-[~]  
$ nmap -n 10.0.2.15  
  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:15 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000020s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)  
  
Nmap done: 1 IP address (1 host up) scanned in 0.15 seconds  
  
(kali㉿kali)-[~]  
$ nmap -T4 10.0.2.15  
  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:15 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000020s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)  
  
Nmap done: 1 IP address (1 host up) scanned in 6.65 seconds  
  
(kali㉿kali)-[~]  
$ nmap --traceroute 10.0.2.15  
  
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:15 EDT  
Nmap scan report for 10.0.2.15  
Host is up (0.0000020s latency).  
All 1000 scanned ports on 10.0.2.15 are in ignored states.  
Not shown: 1000 closed tcp ports (reset)  
  
Nmap done: 1 IP address (1 host up) scanned in 2.62 seconds
```



kali@kali: ~

Session Actions Edit View Help

(kali@kali)-[~]

\$ nmap 10.0.2.15 10.0.2.1 10.0.2.2

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 06:16 EDT
Nmap scan report for 10.0.2.15
Host is up (0.0000020s latency).
All 1000 scanned ports on 10.0.2.15 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap scan report for 10.0.2.2
Host is up (0.0017s latency).
Not shown: 995 filtered tcp ports (no-response)
PORT STATE SERVICE
135/tcp open msrpc
445/tcp open microsoft-ds
1935/tcp open rtmp
9080/tcp open glrpc
49152/tcp open unknown
MAC Address: 52:55:0A:00:02:02 (Unknown)

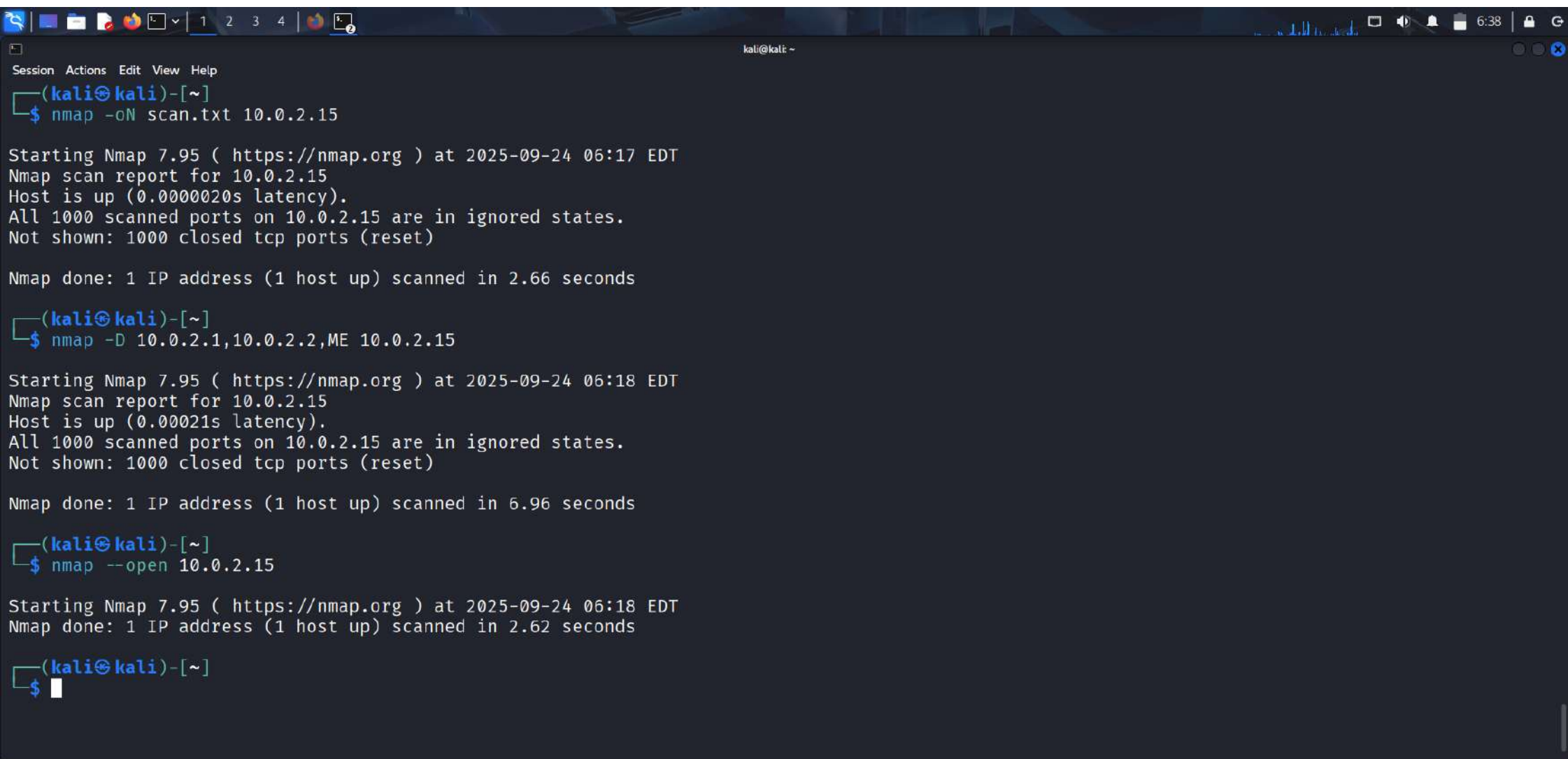
Nmap done: 3 IP addresses (2 hosts up) scanned in 10.63 seconds

(kali@kali)-[~]

\$ nmap -oA myscan 10.0.2.15

Starting Nmap 7.95 (<https://nmap.org>) at 2025-09-24 06:16 EDT
Nmap scan report for 10.0.2.15
Host is up (0.0000040s latency).
All 1000 scanned ports on 10.0.2.15 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 2.64 seconds



A terminal window on a Kali Linux system. The window title is "kali@kali: ~". The terminal shows three Nmap scan commands and their outputs. The first command is `nmap -oN scan.txt 10.0.2.15`, which reports that the host is up and all 1000 scanned ports are in ignored states. The second command is `nmap -D 10.0.2.1,10.0.2.2,ME 10.0.2.15`, which also reports that the host is up and all 1000 scanned ports are in ignored states. The third command is `nmap --open 10.0.2.15`, which reports that the host is up and all 1000 scanned ports are in ignored states. The terminal output for each scan includes the Nmap version (7.95), the scan time (2025-09-24 06:17 EDT, 06:18 EDT), and the scan duration (2.66 seconds, 6.96 seconds, 2.62 seconds).

```
Session Actions Edit View Help
(kali@kali)-[~]
$ nmap -oN scan.txt 10.0.2.15

Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:17 EDT
Nmap scan report for 10.0.2.15
Host is up (0.0000020s latency).
All 1000 scanned ports on 10.0.2.15 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 2.66 seconds

(kali@kali)-[~]
$ nmap -D 10.0.2.1,10.0.2.2,ME 10.0.2.15

Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:18 EDT
Nmap scan report for 10.0.2.15
Host is up (0.00021s latency).
All 1000 scanned ports on 10.0.2.15 are in ignored states.
Not shown: 1000 closed tcp ports (reset)

Nmap done: 1 IP address (1 host up) scanned in 6.96 seconds

(kali@kali)-[~]
$ nmap --open 10.0.2.15

Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-24 06:18 EDT
Nmap done: 1 IP address (1 host up) scanned in 2.62 seconds

(kali@kali)-[~]
$
```