

# nmap ?????

??????

### Scan a single ip address ###

```
nmap 192.168.1.1
```

## Scan a host name ###

```
nmap server1.cyberciti.biz
```

## Scan a host name with more info###

```
nmap -v server1.cyberciti.biz
```

??????

```
nmap 192.168.1.1 192.168.1.2 192.168.1.3
```

## works with same subnet i.e. 192.168.1.0/24

```
nmap 192.168.1.1,2,3
```

## You can scan a range of IP address too:

```
nmap 192.168.1.1-20
```

## You can scan a range of IP address using a wildcard:

```
nmap 192.168.1.*
```

## you scan an entire subnet:

```
nmap 192.168.1.0/24
```

# Ping scan subnet

```
nmap -sP 10.15.9.0/24 | grep -E '\b(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?\.){3}(25[0-5]|2[0-4][0-9]|[01]?[0-9][0-9]?)'
```

```
nmap -sP 10.15.9.0/24 | sed -n '/^.*[0-9]*\.[0-9]*\.[0-9]*\.[0-9]*p' | sed 's/^.*\([0-9]*\.[0-9]*\.[0-9]*\.[0-9]*\)\.*/\1/g'
```

????? IP ??

```
nmap -iL /tmp/ip.txt
```

## ?? IP ???

```
nmap 192.168.1.0/24 --exclude 192.168.1.5  
nmap 192.168.1.0/24 --exclude 192.168.1.5,192.168.1.254  
nmap -iL /tmp/scanlist.txt --excludefile /tmp/exclude.txt
```

## ????????????

```
nmap -A 192.168.1.254  
nmap -v -A 192.168.1.1  
nmap -A -iL /tmp/scanlist.txt
```

## ????????????

```
nmap -A 192.168.1.254  
nmap -v -A 192.168.1.1  
nmap -A -iL /tmp/scanlist.txt
```

## ????(????????)

```
nmap -PN 192.168.1.1  
nmap -PN server1.cyberciti.biz
```

## ?? IPv6 ??

```
nmap -6 IPv6-Address-Here  
nmap -6 server1.cyberciti.biz  
nmap -6 2607:f0d0:1002:51::4  
nmap -v A -6 2607:f0d0:1002:51::4
```

## ????????????/??

```
nmap -sP 192.168.1.0/24
```

## ??????

```
nmap -F 192.168.1.1
```

## ????????(Reason)

```
nmap --reason 192.168.1.1
```

## ????????

```
nmap --open 192.168.1.1
```

## ????/????

```
nmap --packet-trace 192.168.1.1
```

## ????????????

```
nmap --iflist
```

## ??????

```
nmap -p [port] hostName
```

```
## Scan port 80
```

```
nmap -p 80 192.168.1.1
```

```
## Scan TCP port 80
```

```
nmap -p T:80 192.168.1.1
```

```
## Scan UDP port 53
```

```
nmap -p U:53 192.168.1.1
```

```
## Scan two ports ##
```

```
nmap -p 80,443 192.168.1.1
```

```
## Scan port ranges ##
```

```
nmap -p 80-200 192.168.1.1
```

```
## Combine all options ##
```

```
nmap -p U:53,111,137,T:21-25,80,139,8080 192.168.1.1
```

```
nmap -p U:53,111,137,T:21-25,80,139,8080 server1.cyberciti.biz
```

```
nmap -v -sU -sT -p U:53,111,137,T:21-25,80,139,8080 192.168.1.254
```

## Scan all ports with \* wildcard ##

```
nmap -p "*" 192.168.1.1
```

## Scan top ports i.e. scan \$number most common ports ##

```
nmap --top-ports 5 192.168.1.1
```

```
nmap --top-ports 10 192.168.1.1
```

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```
nmap -T5 192.168.1.0/24
```

## Cheat Sheet

### Nmap Cheat Sheet

#### Target Specification

Switch	Example	Description
	nmap 192.168.1.1	Scan a single IP
	nmap 192.168.1.1 192.168.2.1	Scan specific IPs
	nmap 192.168.1.1-254	Scan a range
	nmap scanme.nmap.org	Scan a domain
	nmap 192.168.1.0/24	Scan using CIDR notation
-iL	nmap -iL targets.txt	Scan targets from a file
-iR	nmap -iR 100	Scan 100 random hosts
--exclude	nmap --exclude 192.168.1.1	Exclude listed hosts

#### Scan Techniques

Switch	Example	Description
-sS	nmap 192.168.1.1 -sS	TCP SYN port scan (Default)
-sT	nmap 192.168.1.1 -sT	TCP connect port scan (Default without root privilege)
-sU	nmap 192.168.1.1 -sU	UDP port scan
-sA	nmap 192.168.1.1 -sA	TCP ACK port scan
-sW	nmap 192.168.1.1 -sW	TCP Window port scan
-sM	nmap 192.168.1.1 -sM	TCP Maimon port scan

#### Host Discovery

Switch	Example	Description
-sL	nmap 192.168.1.1-3 -sL	No Scan. List targets only
-sn	nmap 192.168.1.1/24 -sn	Disable port scanning
-Pn	nmap 192.168.1.1-5 -Pn	Disable host discovery. Port scan only
-PS	nmap 192.168.1.1-5 -PS22-25,80	TCP SYN discovery on port x. Port 80 by default
-PA	nmap 192.168.1.1-5 -PA22-25,80	TCP ACK discovery on port x. Port 80 by default
-PU	nmap 192.168.1.1-5 -PU53	UDP discovery on port x. Port 40125 by default
-PR	nmap 192.168.1.1-1/24 -PR	ARP discovery on local network
-n	nmap 192.168.1.1 -n	Never do DNS resolution

#### Port Specification

Switch	Example	Description
-p	nmap 192.168.1.1 -p 21	Port scan for port x
-p	nmap 192.168.1.1 -p 21-100	Port range
-p	nmap 192.168.1.1 -p U:53,T:21-25,80	Port scan multiple TCP and UDP ports
-p-	nmap 192.168.1.1 -p-	Port scan all ports
-p	nmap 192.168.1.1 -p http,https	Port scan from service name
-F	nmap 192.168.1.1 -F	Fast port scan (100 ports)
--top-ports	nmap 192.168.1.1 --top-ports 2000	Port scan the top x ports
-p-65535	nmap 192.168.1.1 -p-65535	Leaving off initial port in range makes the scan start at port 1
-p0-	nmap 192.168.1.1 -p0-	Leaving off end port in range makes the scan go through to port 65535

[www.stationx.net/nmap-cheat-sheet/](http://www.stationx.net/nmap-cheat-sheet/)

