

Nmap Fundamentals

Listing open ports on a remote host	<code>nmap <target></code>
Exclude a host from scan	<code>nmap --exclude <excluded ip> <target></code>
Use custom DNS Server	<code>nmap --dns-servers [DNS1],[DNS2] <target></code>
Scan - no ping targets	<code>nmap -PN <target></code>
Scan - no DNS resolve	<code>nmap -n <target></code>
Scan specific port	<code>nmap -p80 <target></code>

Scanning Port Ranges

Scan specific port list	<code>nmap -p80,443,23 <target></code>
Scan specific port range	<code>nmap -p1-100 <target></code>
Scan all ports	<code>nmap -p- <target></code>
Scan specific ports by protocol	<code>nmap -pT:25,U:53 <target></code>
Scan by Service name	<code>nmap -p smtp <target></code>
Scan Service name wildcards	<code>nmap -p smtp* <target></code>
Scan only port registered in Nmap services	<code>nmap -p[1-65535] <target></code>

Scanning Large Networks

Skipping tests to speed up long scans	<code>nmap -T4 -n -Pn -p- <target></code>
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Arguments:

No Ping	<code>-Pn</code>
No reverse resolution	<code>-n</code>
No port scanning	<code>-sn</code>

Timing Templates Arguments

Scanning Large Networks (cont)

Scanning is not supposed to interfere with the target system	<code>-T2</code>
Recommended for broadband and Ethernet connections	<code>-T4</code>
Normal Scan Template	<code>-T3</code>
Not Recommended	<code>-T5</code> or <code>T1</code> or <code>T0</code>

Nmap Specifics

Select Interface to make scans	<code>nmap -e <INTERFACE> <target></code>
Save Normal method	<code>nmap -oN <filename> <target></code>
Save as xml (export)	<code>nmap -oX <filename> <target></code>

Finding alive hosts

Default ping scan mode	<code>nmap -sP <target></code>
Discovering hosts with TCP SYN ping scans	<code>nmap -sP -PS <target></code>
Specific Port using TCP SYN ping scans	<code>nmap -sP -PS80 <target></code>
Ping No arp	<code>nmap -sP --send-ip <target></code>
IP Protocol ping scan (IGMP, IP-in-IP, ICMP)	<code>nmap -sP -PO <target></code>
ARP Scan	<code>nmap -sP -PR <target></code>

Fingerprinting services of a remote host

Display service version	<code>nmap -sV <target></code>
Set probes	<code>nmap -sV --version-intensity 9 <target></code>
Aggressive detection	<code>nmap -A <target></code>

Fingerprinting the operating system of a host

Detect Operating System	<code>nmap -O <target></code>
Guess Operating System	<code>nmap -O -p- --osscan-guess <target></code>
Detect Operating System (Verbose)	<code>nmap -O -v <target></code>
Listing protocols supported by a remote host	<code>nmap -sO <target></code>
Discovering stateful firewalls by using a TCP ACK scan	<code>nmap -sA <target></code>

Nmap Examples

Detect Service versions and OS	<code>nmap -sV -O <target></code>
Detect Web Servers	<code>nmap -sV --script http-title <target></code>
Discover host using Broadcast pings	<code>nmap --script broadcast-ping</code>
Brute force DNS records	<code>nmap --script dns-brute <target></code>