## About Nmap

## http:// nmap.org/

Created by
Gordon Lyon in
1997

Already installed on Kali Linux

GUI version called Zenmap (also on Kali Linux)

```
Starting Nmap 7.12 ( https://nmap.org ) at 2017-07-01 07:05 EDT
Nmap scan report for 192,168,101,10
 Host is up (0.032s latency).
Not shown: 996 filtered ports
         STATE SERVICE VERSION
                       Postfix smtpd
  _smtp-commands: mail.ptest.lab, PIPELINING, SIZE, ETRN, STARTTLS, AUTH PLAIN LOGIN, AUTH-PLAIN LOGIN, ENHANCEDSTATUSCOCES, 8BITMIME, DSN,
  ssl-cert: Subject: commonName=mail.test.lab/organizationName=mail.test.lab/stateOrProvinceName=GuangDong/countryName=CN
  Not valid before: 2017-04-22T19:19:57
  Not valid after: 2027-04-20T19:19:57
  ssl-date: TLS randomness does not represent time
        open http
                       nginx 1.6.2
  http-robots.txt: 1 disallowed entry
  _http-server-header: nginx/1.6.2
  _http-title: Users
8080/tcp open http
  http-open-proxy: Proxy might be redirecting requests
  http-robots.txt: 1 disallowed entry
 |_http-server-header: nginx
|_http-title: Site doesn't have a title (text/html).
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: WAP|general purpose
Running: Actionted embedded, Linux 2.4.X|3.X
OS CPE: ope:/h:actiontec:mi424wr-gen3i cpe:/o:linux:linux_kernel cpe:/o:linux:linux_kernel:2.4.37 cpe:/o:linux:linux_kernel:3.2
OS details: Actiontec MI424WR-GEN3I WAP, DD-WRT v24-sp2 (Linux 2.4.37), Linux 3.2
Network Distance: 2 hops
Service Info: Host: mail.ptest.lab
TRACEROUTE (using port 80/tcp)
            ADDRESS
    0.43 ms 192.168.93.2
    0.30 ms 192.168.101.10
OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 72.94 seconds
```

## Using NMAP

Host discovery (ping based)

```
$ nmap -sP 10.0.1.0-255
```

OS detection

```
$ nmap -0 10.0.1.101
```

Full TCP port scanning

```
$ nmap -p0-65535 10.0.1.101
```

Version detection

```
$ nmap -sV 10.0.1.101
```

Export a full scan to a file

```
$ nmap -0 -sV -p0-65535 10.0.1.101 -oN target.nmap
```