Footprinting

Footprinting is an ethical hacking technique used to gather as much data as possible about a specific targeted computer system, an infrastructure and networks to identify opportunities to penetrate them. It is one of the best methods of finding vulnerabilities. There are two types of footprinting in ethical hacking:

1. active footprinting
2. passive footprinting

- Active Footprinting: Active footprinting means performing footprinting by getting in direct touch with the target machine.
- Passive Footprinting: Passive footprinting means collecting information about a system located at a remote distance from the attacker.

Reconnaissance

Reconnaissance, often referred to as "recon" in cyber security and military contexts, is the preliminary phase of a security assessment or attack where information is gathered about a target system, network, or organization. It is a critical step in understanding the potential weaknesses and vulnerabilities that can be exploited. Reconnaissance can take several forms,

- Passive Reconnaissance: Passive reconnaissance techniques include searching online resources such as search engines, social media platforms, public records, job postings, and websites to collect information about the target.
- Active Reconnaissance: Active reconnaissance techniques include port scanning, network mapping, OS fingerprinting, and other methods to probe the target for vulnerabilities and weaknesses.

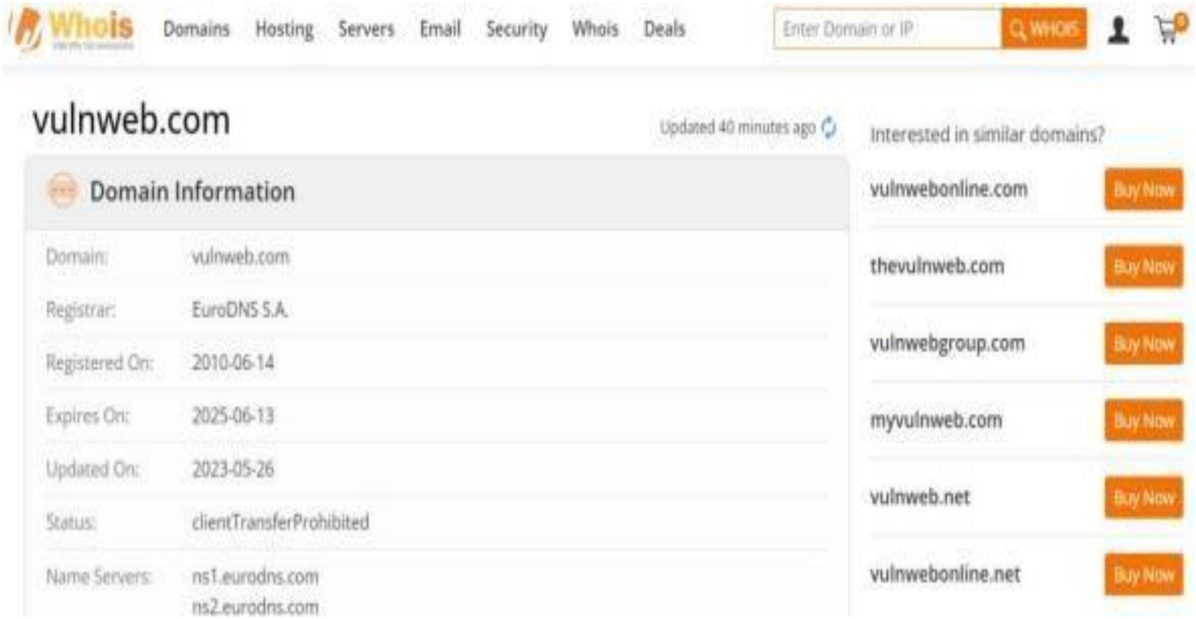
Reconnaissance serves several purposes:

- Information Gathering: Reconnaissance helps attackers identify potential targets, understand the target's infrastructure, and gather information about its systems, services, and personnel.
- Vulnerability Identification: Reconnaissance helps identify potential weaknesses and those vulnerabilities in the target system or network that can be exploited during an attack.

- Attack Planning: Reconnaissance provides attackers with valuable insights into the target environment, allowing them to develop effective attack strategies and tactics.
- Defense: Reconnaissance is also used by defenders to gather intelligence about potential threats and vulnerabilities in their own systems and networks, enabling them to take proactive measures to mitigate risks and strengthen their security posture.

Domain Information:

Domain information can be gathered from the “Whois” website.



vulnweb.com

Updated 40 minutes ago

Domain Information

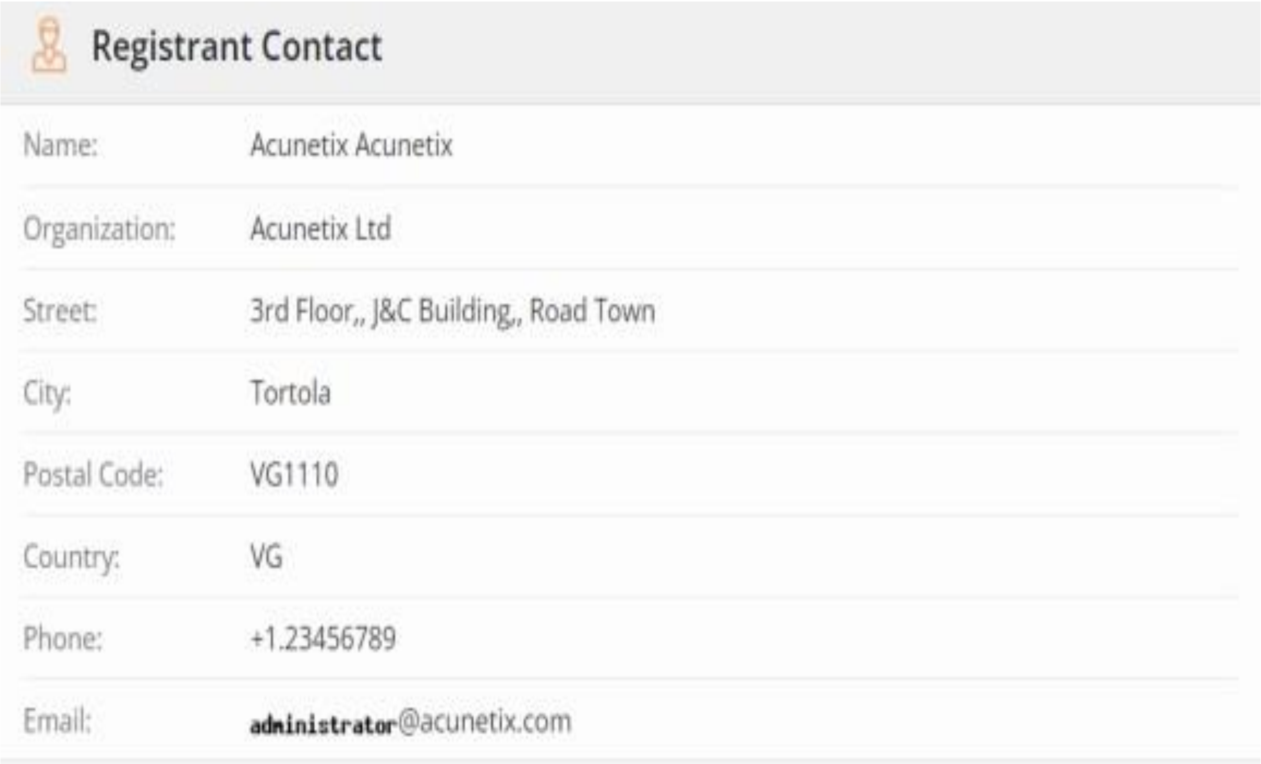
Domain:	vulnweb.com
Registrar:	EuroDNS S.A.
Registered On:	2010-06-14
Expires On:	2025-06-13
Updated On:	2023-05-26
Status:	clientTransferProhibited
Name Servers:	ns1.eurodns.com ns2.eurodns.com

Interested in similar domains?

vulnwebonline.com	Buy Now
thevulnweb.com	Buy Now
vulnwebgroup.com	Buy Now
myvulnweb.com	Buy Now
vulnweb.net	Buy Now
vulnwebonline.net	Buy Now

Registrant Contact:

Registrant contact or legal owner of the domain name and information.

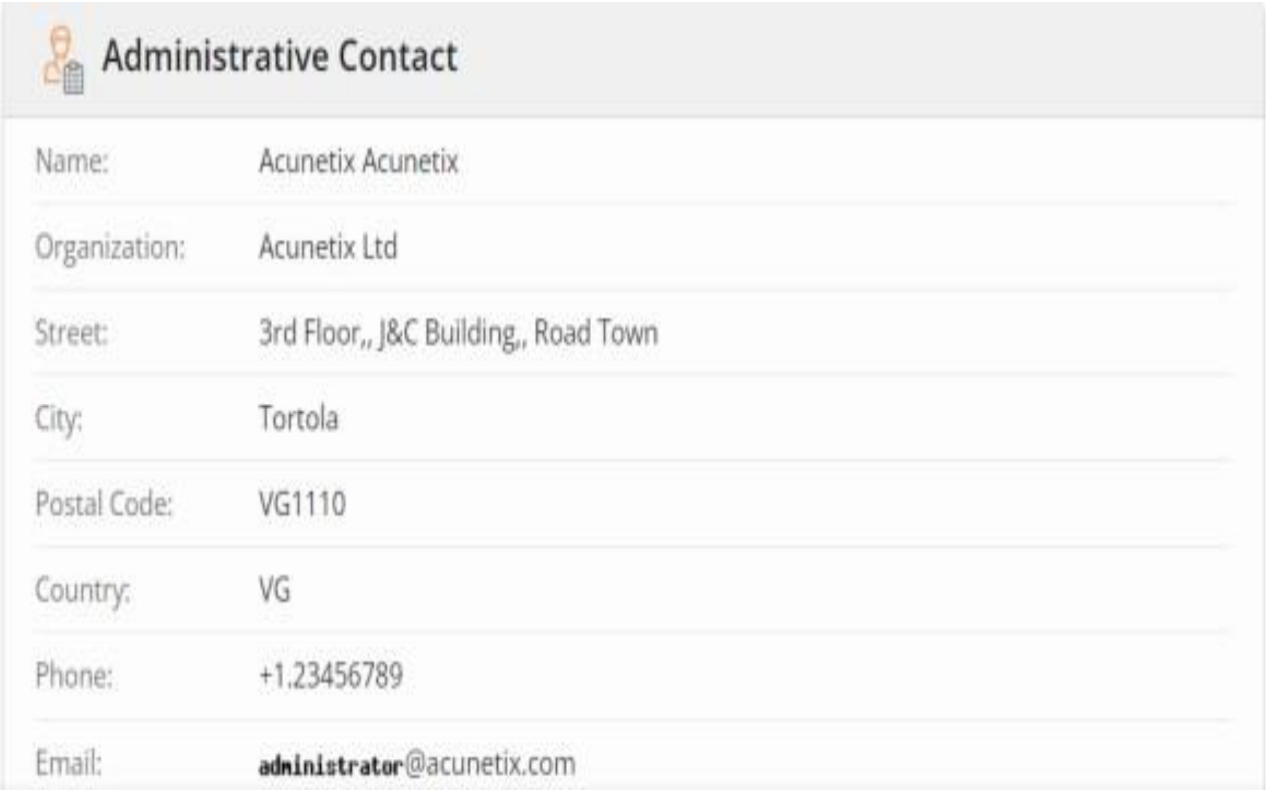


Registrant Contact

Name:	Acunetix Acunetix
Organization:	Acunetix Ltd
Street:	3rd Floor,, J&C Building,, Road Town
City:	Tortola
Postal Code:	VG1110
Country:	VG
Phone:	+1.23456789
Email:	administrator@acunetix.com

Administrative Contact:

They receive important notifications regarding the domain name's expiration. Approval for domain transfers often requires their consent.

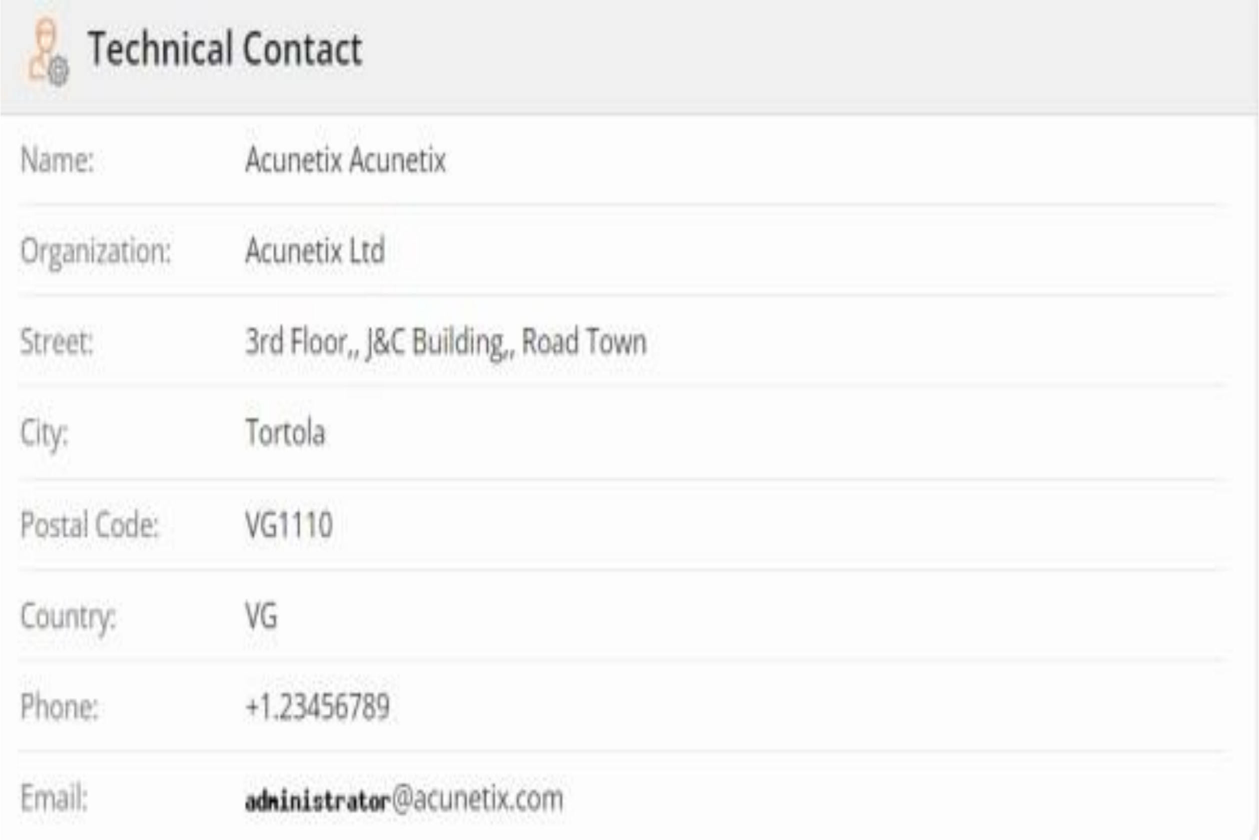


Administrative Contact

Name:	Acunetix Acunetix
Organization:	Acunetix Ltd
Street:	3rd Floor,, J&C Building,, Road Town
City:	Tortola
Postal Code:	VG1110
Country:	VG
Phone:	+1.23456789
Email:	administrator@acunetix.com

Technical Contact:

A technical contact is the individual or organization responsible for managing the technical aspects of a domain name. This includes the maintenance of the domain name's DNS records and contact information.



Technical Contact

Name:	Acunetix Acunetix
Organization:	Acunetix Ltd
Street:	3rd Floor,, J&C Building,, Road Town
City:	Tortola
Postal Code:	VG1110
Country:	VG
Phone:	+1.23456789
Email:	administrator@acunetix.com

Raw Whois Data

Domain Name: vulnweb.com

Registry Domain ID: D16000066-COM

Registrar WHOIS Server: whois.eurodns.com

Registrar URL: http://www.eurodns.com

Updated Date: 2023-05-26T10:04:20Z

Creation Date: 2010-06-14T00:00:00Z

Registrar Registration Expiration Date: 2025-06- 13T00:00:00Z

Registrar: Eurodns S.A.

Registrar IANA ID: 1052

Registrar Abuse Contact Email: legalservices @eurodns.com

Registrar Abuse Contact Phone: +352.27220150

Domain Status: clientTransferProhibited http://www.icann.org/epp#clientTransferProhibit ed

Registry Registrant ID:

Registrant Name: Acunetix Acunetix

Registrant Organization: Acunetix Ltd

Registrant Street: 3rd Floor,, J&C Building,, Road Town

Registrant City: Tortola

Registrant State/Province:

Registrant Postal Code: VG1110

Registrant Country: VG

Registrant Phone: +1.23456789

Registrant Fax:

Registrant Email: administrator@acunetix.com

Registry Admin ID:

Admin Name: Acunetix Acunetix

Admin Organization: Acunetix Ltd

Admin Street: 3rd Floor,, J&C Building,, Road Town

Admin City: Tortola

Admin State/Province:

Admin Postal Code: VG1110

Admin Country: VG

Admin Phone: +1.23456789

Admin Fax:

Admin Email: administrator @acunetix.com

Registry Admin ID:

Admin Name: Acunetix Acunetix

Admin Organization: Acunetix Ltd

Admin Street: 3rd Floor,, J&C Building,, Road Town

Admin City: Tortola

Admin State/Province:

Admin Postal Code: VG1110

Admin Country: VG

Admin Phone: +1.23456789

Admin Fax:

Admin Email: administrator @acunetix.com

Registry Tech ID:

Tech Name: Acunetix Acunetix

Tech Organization: Acunetix Ltd

Tech Street: 3rd Floor,, J&C Building,, Road Town

Tech City: Tortola

Tech State/Province:

Tech Postal Code: VG1110

Tech Country: VG

Tech Phone: +1.23456789

Tech Fax:

Tech Email: administrator @acunetix.com

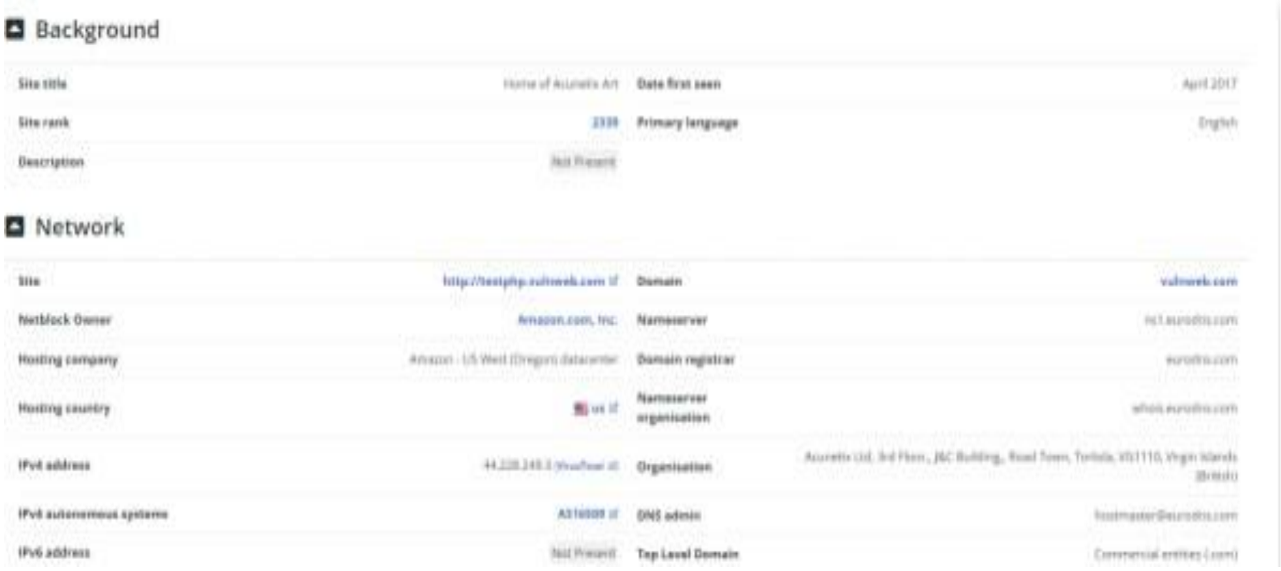
Name Server: ns1.eurodns.com

Name Server: ns2.eurodns.com

Name Server: ns3.eurodns.com

Name Server: ns4.eurodns.com

DNSSEC: unsigned

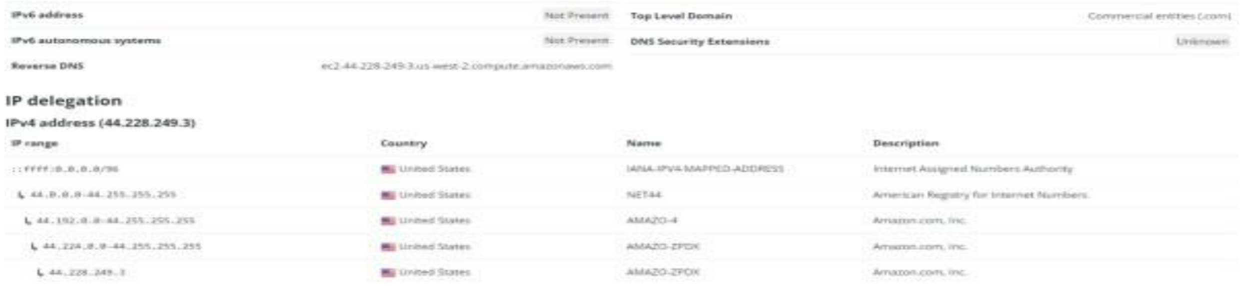


Background

Site title	Home of Acunetix Art	Date first seen	April 2017
Site rank	2339	Primary language	English
Description	Not Present		

Network

Site	http://testphp.vulnweb.com	Domain	vulnweb.com
Netblock Owner	Amazon.com, Inc.	Nameserver	ns1.eurodns.com
Hosting company	Amazon - US West (Oregon) datacenter	Domain registrar	eurodns.com
Hosting country	us	Nameserver organisation	whois.eurodns.com
IPv4 address	44.228.249.3 (VirusTotal)	Organisation	Acunetix Ltd, 3rd Floor,, J&C Building,, Road Town, Tortola, VG1110, Virgin Islands (British)
IPv4 autonomous systems	AS16509	DNS admin	hostmaster@eurodns.com
IPv6 address	Not Present	Top Level Domain	Commercial entities (.com)



IPv6 address	Not Present	**Top Level Domain**	Commercial entities (.com)
IPv6 autonomous systems	Not Present	**DNS Security Extensions**	Unknown
Reverse DNS	ec2-44-228-249-3.us-west-2.compute.amazonaws.com		

IP delegation

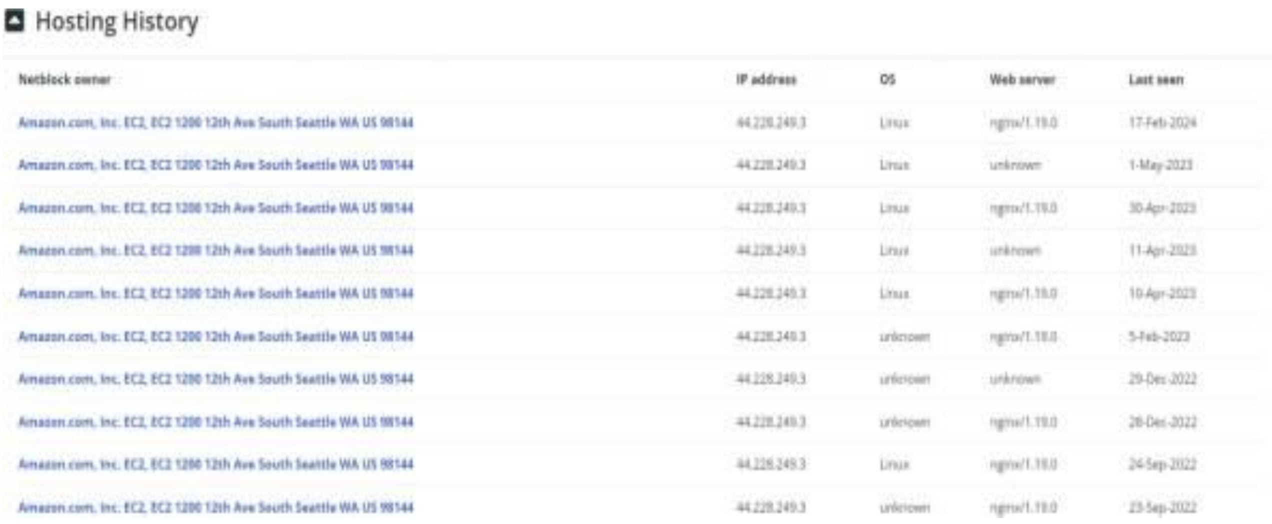
IPv4 address (44.228.249.3)

IP range	Country	Name	Description
::ffff:0.0.0.0/96	🇺🇸 United States	IANA-IPV4-MAPPED-ADDRESS	Internet Assigned Numbers Authority
↳ 44.0.0.0-44.255.255.255	🇺🇸 United States	NET44	American Registry for Internet Numbers
↳ 44.192.0.0-44.255.255.255	🇺🇸 United States	AMAZO-4	Amazon.com, Inc.
↳ 44.224.0.0-44.255.255.255	🇺🇸 United States	AMAZO-ZPDX	Amazon.com, Inc.
↳ 44.228.249.3	🇺🇸 United States	AMAZO-ZPDX	Amazon.com, Inc.

IP delegation

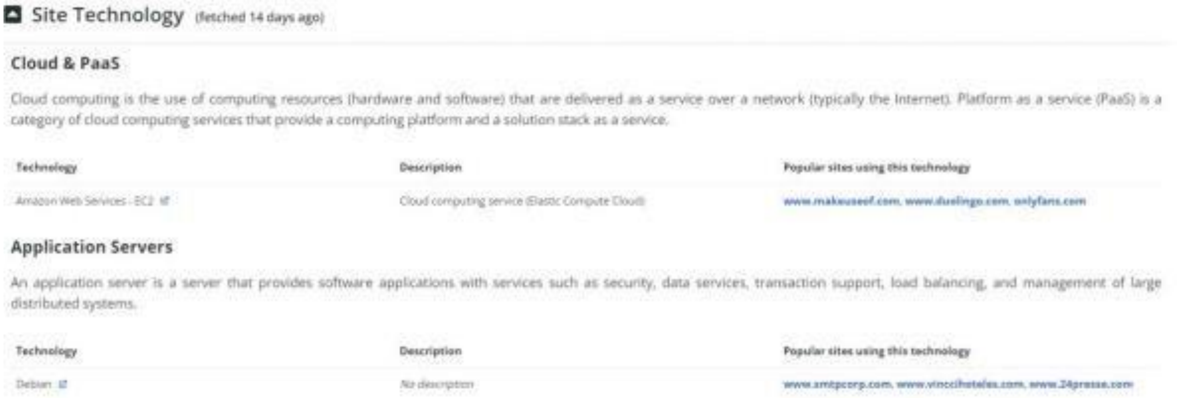
IPv4 address (44.228.249.3)

IP range	Country	Name	Description
::ffff:0.0.0.0/96	🇺🇸 United States	IANA-IPV4-MAPPED-ADDRESS	Internet Assigned Numbers Authority
↳ 44.0.0.0-44.255.255.255	🇺🇸 United States	NET44	American Registry for Internet Numbers
↳ 44.192.0.0-44.255.255.255	🇺🇸 United States	AMAZO-4	Amazon.com, Inc.
↳ 44.224.0.0-44.255.255.255	🇺🇸 United States	AMAZO-ZPDX	Amazon.com, Inc.
↳ 44.228.249.3	🇺🇸 United States	AMAZO-ZPDX	Amazon.com, Inc.



Hosting History

Netblock owner	IP address	OS	Web server	Last seen
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	Linux	nginx/1.19.0	17-Feb-2024
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	Linux	unknown	1-May-2023
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	Linux	nginx/1.19.0	30-Apr-2023
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	Linux	unknown	11-Apr-2023
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	Linux	nginx/1.19.0	10-Apr-2023
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	unknown	nginx/1.18.0	5-Feb-2023
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	unknown	unknown	29-Dec-2022
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	unknown	nginx/1.19.0	28-Dec-2022
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	Linux	nginx/1.19.0	24-Sep-2022
Amazon.com, Inc. EC2, EC2 1200 12th Ave South Seattle WA US 98144	44.228.249.3	unknown	nginx/1.19.0	23-Sep-2022



Site Technology (fetched 14 days ago)

Cloud & PaaS

Cloud computing is the use of computing resources (hardware and software) that are delivered as a service over a network (typically the Internet). Platform as a service (PaaS) is a category of cloud computing services that provide a computing platform and a solution stack as a service.

Technology	Description	Popular sites using this technology
Amazon Web Services - EC2	Cloud computing service (Elastic Compute Cloud)	www.makeuseof.com, www.duolingo.com, onlyfans.com

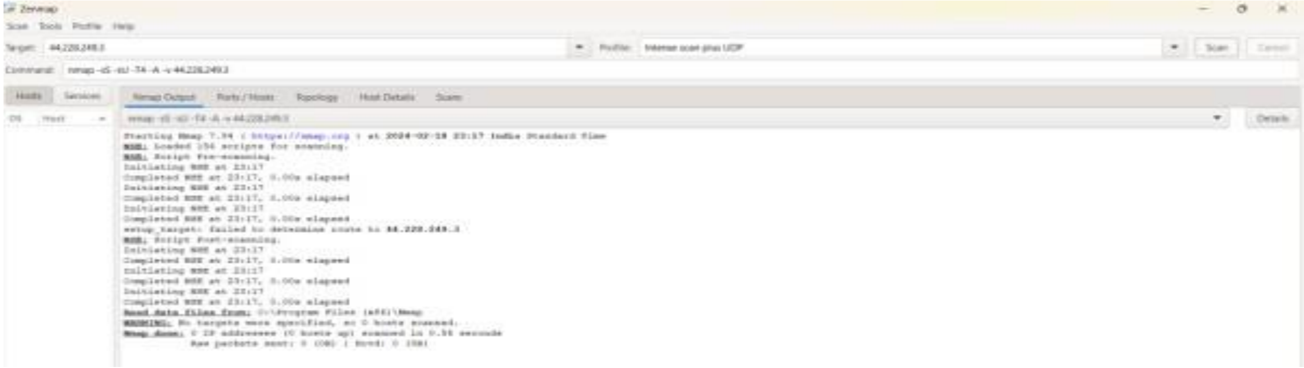
Application Servers

An application server is a server that provides software applications with services such as security, data services, transaction support, load balancing, and management of large distributed systems.

Technology	Description	Popular sites using this technology
Debian	No description	www.smtpcorp.com, www.vinccihoteles.com, www.24presse.com

Using Nmap Tool

Intense Scan

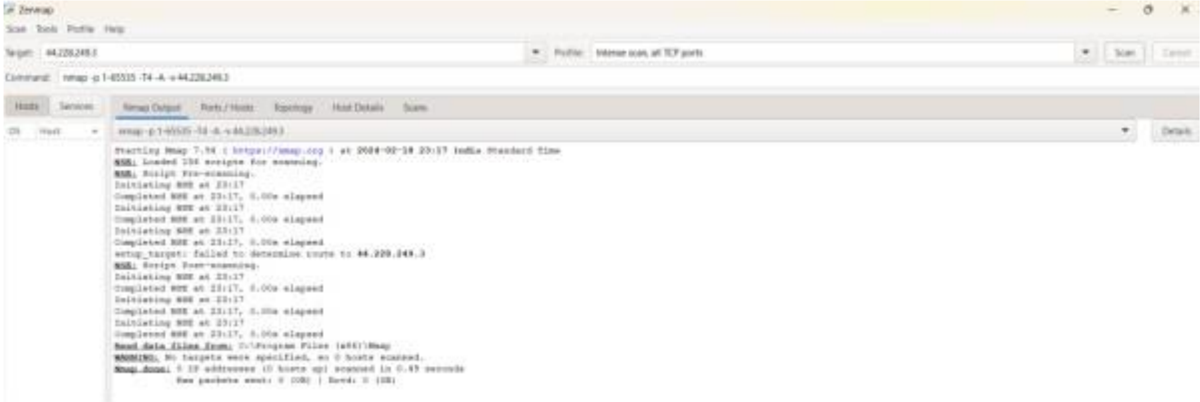


Target: 44.228.249.3

Profile: Intense scan plus UDP

Command: nmap -sS -sU -T4 -A -v 44.228.249.3

```
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-18 23:17 India Standard Time
NSE: Loaded 156 scripts for scanning.
NSE: Script Pre-scanning.
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
setup_target: failed to determine route to 44.228.249.3
NSE: Script Post-scanning.
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Read data files from: C:\Program Files (x86)\Nmap
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 0.38 seconds
           Raw packets sent: 0 (0B) | Rcvd: 0 (0B)
```

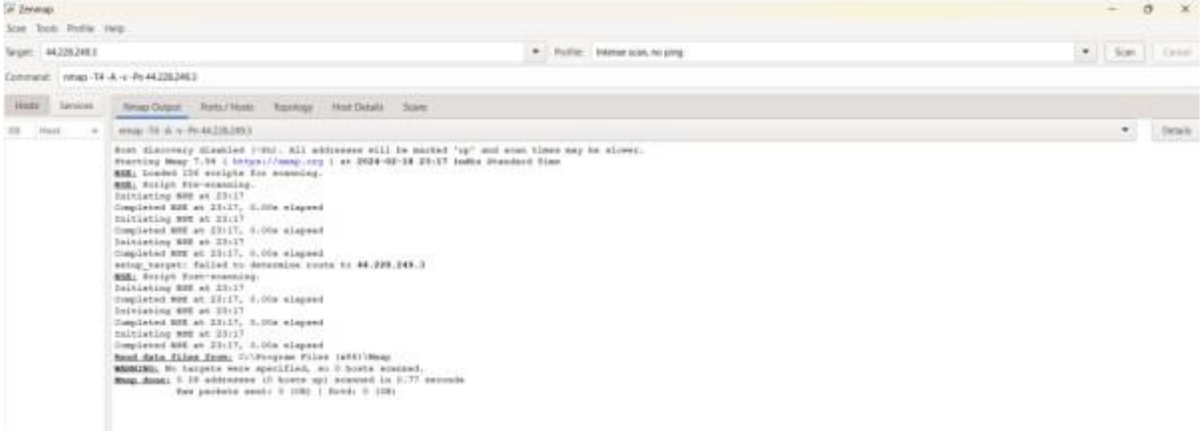


Target: 44.228.249.3

Profile: Intense scan, all TCP ports

Command: nmap -p 1-65535 -T4 -A -v 44.228.249.3

```
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-18 23:17 India Standard Time
NSE: Loaded 156 scripts for scanning.
NSE: Script Pre-scanning.
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
setup_target: failed to determine route to 44.228.249.3
NSE: Script Post-scanning.
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Read data files from: C:\Program Files (x86)\Nmap
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 0.45 seconds
           Raw packets sent: 0 (0B) | Rcvd: 0 (0B)
```



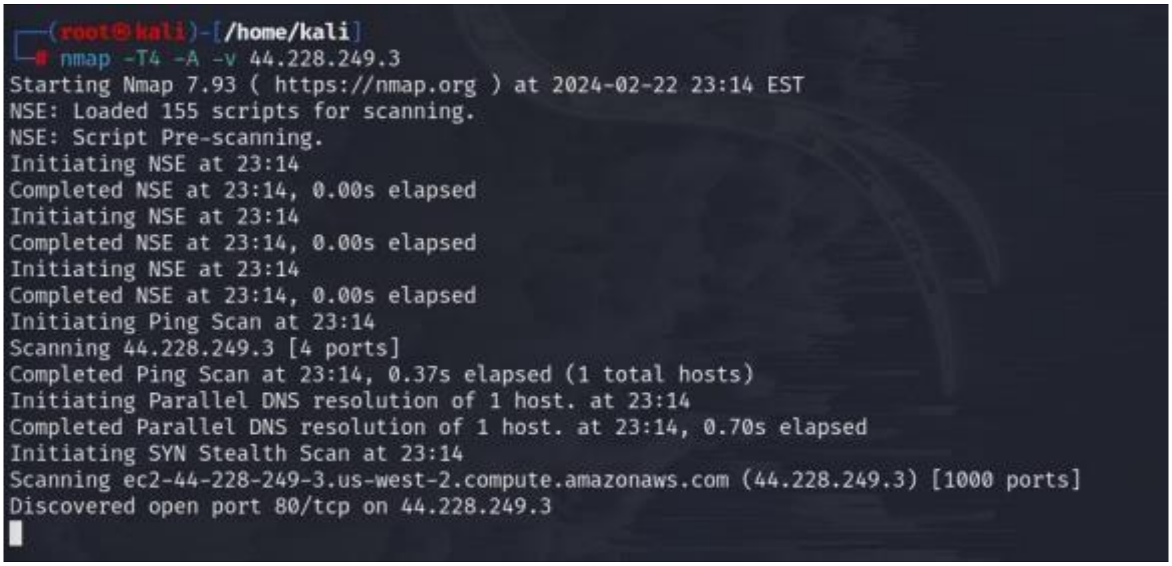
Target: 44.228.249.3

Profile: Intense scan, no ping

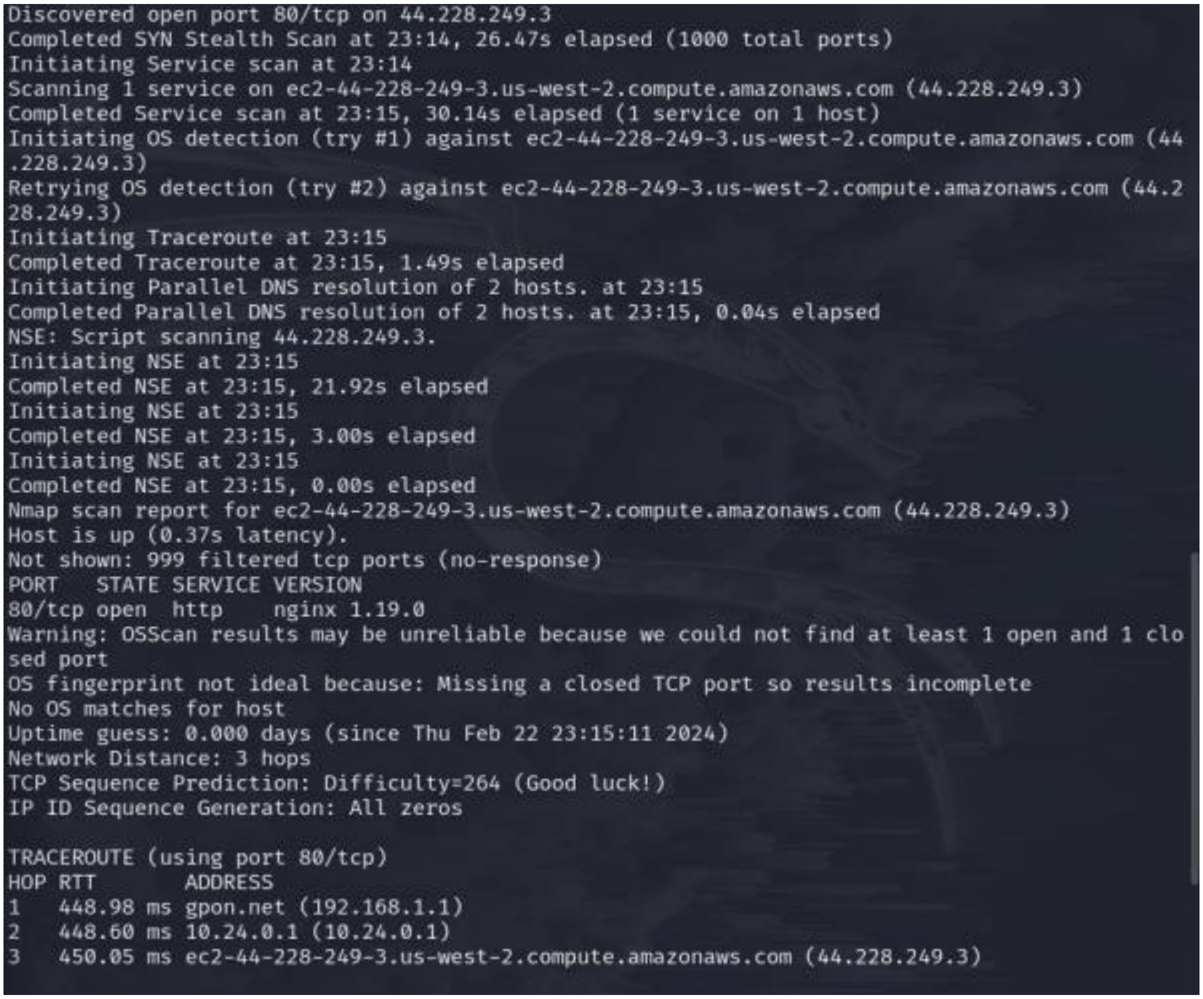
Command: nmap -T4 -A -v -Pn 44.228.249.3

```
Host discovery disabled (-Pn). All addresses will be marked 'up' and scan times may be slower.
Starting Nmap 7.94 ( https://nmap.org ) at 2024-02-18 23:17 India Standard Time
NSE: Loaded 156 scripts for scanning.
NSE: Script Pre-scanning.
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
setup_target: failed to determine route to 44.228.249.3
NSE: Script Post-scanning.
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Initiating NSE at 23:17
Completed NSE at 23:17, 0.00s elapsed
Read data files from: C:\Program Files (x86)\Nmap
WARNING: No targets were specified, so 0 hosts scanned.
Nmap done: 0 IP addresses (0 hosts up) scanned in 0.77 seconds
           Raw packets sent: 0 (0B) | Rcvd: 0 (0B)
```

In Kali linux Nmap

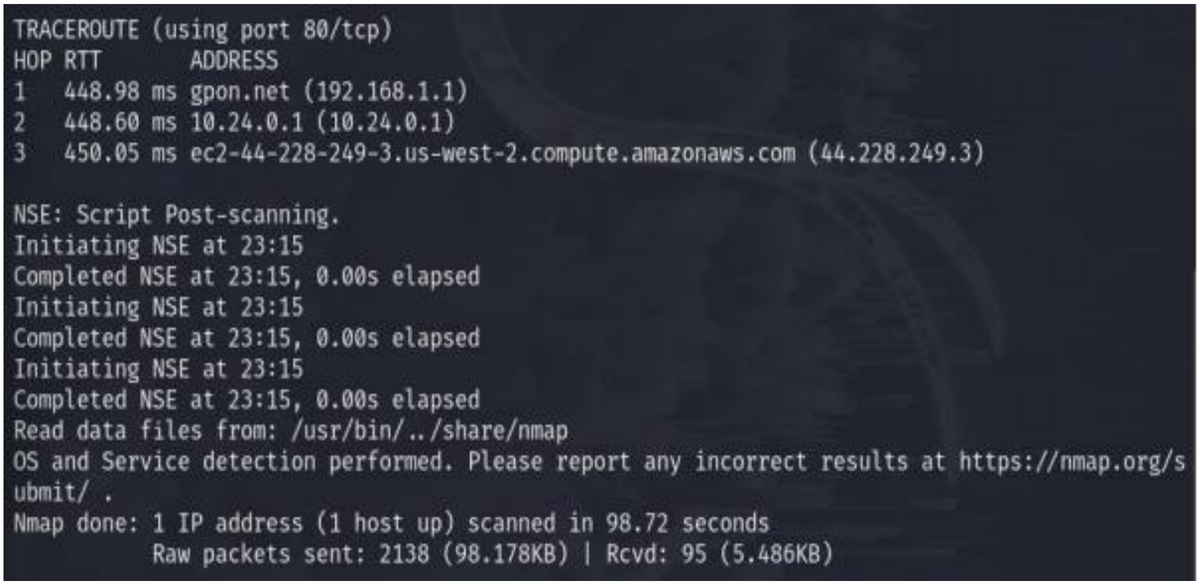


```
┌──(root㉿kali)-[/home/kali]
└─# nmap -T4 -A -v 44.228.249.3
Starting Nmap 7.93 ( https://nmap.org ) at 2024-02-22 23:14 EST
NSE: Loaded 155 scripts for scanning.
NSE: Script Pre-scanning.
Initiating NSE at 23:14
Completed NSE at 23:14, 0.00s elapsed
Initiating NSE at 23:14
Completed NSE at 23:14, 0.00s elapsed
Initiating NSE at 23:14
Completed NSE at 23:14, 0.00s elapsed
Initiating Ping Scan at 23:14
Scanning 44.228.249.3 [4 ports]
Completed Ping Scan at 23:14, 0.37s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 23:14
Completed Parallel DNS resolution of 1 host. at 23:14, 0.70s elapsed
Initiating SYN Stealth Scan at 23:14
Scanning ec2-44-228-249-3.us-west-2.compute.amazonaws.com (44.228.249.3) [1000 ports]
Discovered open port 80/tcp on 44.228.249.3
```



```
Discovered open port 80/tcp on 44.228.249.3
Completed SYN Stealth Scan at 23:14, 26.47s elapsed (1000 total ports)
Initiating Service scan at 23:14
Scanning 1 service on ec2-44-228-249-3.us-west-2.compute.amazonaws.com (44.228.249.3)
Completed Service scan at 23:15, 30.14s elapsed (1 service on 1 host)
Initiating OS detection (try #1) against ec2-44-228-249-3.us-west-2.compute.amazonaws.com (44
.228.249.3)
Retrying OS detection (try #2) against ec2-44-228-249-3.us-west-2.compute.amazonaws.com (44.2
28.249.3)
Initiating Traceroute at 23:15
Completed Traceroute at 23:15, 1.49s elapsed
Initiating Parallel DNS resolution of 2 hosts. at 23:15
Completed Parallel DNS resolution of 2 hosts. at 23:15, 0.04s elapsed
NSE: Script scanning 44.228.249.3.
Initiating NSE at 23:15
Completed NSE at 23:15, 21.92s elapsed
Initiating NSE at 23:15
Completed NSE at 23:15, 3.00s elapsed
Initiating NSE at 23:15
Completed NSE at 23:15, 0.00s elapsed
Nmap scan report for ec2-44-228-249-3.us-west-2.compute.amazonaws.com (44.228.249.3)
Host is up (0.37s latency).
Not shown: 999 filtered tcp ports (no-response)
PORT   STATE SERVICE VERSION
80/tcp open  http    nginx 1.19.0
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 clo
sed port
OS fingerprint not ideal because: Missing a closed TCP port so results incomplete
No OS matches for host
Uptime guess: 0.000 days (since Thu Feb 22 23:15:11 2024)
Network Distance: 3 hops
TCP Sequence Prediction: Difficulty=264 (Good luck!)
IP ID Sequence Generation: All zeros

TRACEROUTE (using port 80/tcp)
HOP RTT       ADDRESS
1   448.98 ms gpon.net (192.168.1.1)
2   448.60 ms 10.24.0.1 (10.24.0.1)
3   450.05 ms ec2-44-228-249-3.us-west-2.compute.amazonaws.com (44.228.249.3)
```



```
TRACEROUTE (using port 80/tcp)
HOP RTT       ADDRESS
1   448.98 ms gpon.net (192.168.1.1)
2   448.60 ms 10.24.0.1 (10.24.0.1)
3   450.05 ms ec2-44-228-249-3.us-west-2.compute.amazonaws.com (44.228.249.3)

NSE: Script Post-scanning.
Initiating NSE at 23:15
Completed NSE at 23:15, 0.00s elapsed
Initiating NSE at 23:15
Completed NSE at 23:15, 0.00s elapsed
Initiating NSE at 23:15
Completed NSE at 23:15, 0.00s elapsed
Read data files from: /usr/bin/../share/nmap
OS and Service detection performed. Please report any incorrect results at https://nmap.org/s
ubmit/ .
Nmap done: 1 IP address (1 host up) scanned in 98.72 seconds
           Raw packets sent: 2138 (98.178KB) | Rcvd: 95 (5.486KB)
```