

LETSUPGRADE - CYBERSECURITY ESSENTIALS ASSIGNMENT DAY 4

Question 1:

Find out the mail servers of the following domain :

Ibm.com

Wipro.com

Solution:

Open Win2016, Open cmd, Type **nslookup**

Then **set type=mx**

And then type the website. This will lookup on those websites for their mail servers.

```
C:\Users\Administrator>nslookup
Default Server: UnKnown
Address: 192.168.113.2

> set type=mx
> www.ibm.com
Server: UnKnown
Address: 192.168.113.2

Non-authoritative answer:
www.ibm.com canonical name = www.ibm.com.cs186.net
www.ibm.com.cs186.net canonical name = outer-ccdn-dual.ibmcom.edgekey.net
outer-ccdn-dual.ibmcom.edgekey.net canonical name = outer-ccdn-dual.ibmcom.edgekey.net.globalredir.akadns.net
outer-ccdn-dual.ibmcom.edgekey.net.globalredir.akadns.net canonical name = e2874.dscx.akamaiedge.net
dscx.akamaiedge.net
primary name server = n0dscx.akamaiedge.net
responsible mail addr = hostmaster.akamai.com
serial = 1598599572
refresh = 1000 (16 mins 40 secs)
retry = 1000 (16 mins 40 secs)
expire = 1000 (16 mins 40 secs)
default TTL = 1800 (30 mins)
```

When I searched for **www.ibm.com**, its gave **n0dscx.akamaiedge.net**

```
> set type=mx
> www.wipro.com
Server: UnKnown
Address: 192.168.113.2

Non-authoritative answer:
www.wipro.com canonical name = d361nqn33s63ex.cloudfront.net
d361nqn33s63ex.cloudfront.net
primary name server = ns-1658.awsdns-15.co.uk
responsible mail addr = awsdns-hostmaster.amazon.com
serial = 1
refresh = 7200 (2 hours)
retry = 900 (15 mins)
expire = 1209600 (14 days)
default TTL = 86400 (1 day)
```

When I searched for **www.wipro.com**, it gave **ns-1658.awsdns-15.co.uk**

Question 2:

Find the locations, where these email servers are hosted.

Solution:

Head over to <https://check-host.net/ip-info?host=> to get the location of those domains.

When I typed **n0dscx.akamaiedge.net**, I got its location as **Frankfurt, Germany**.


n0dscx.akamaiedge.net

Info
Ping
HTTP
TCP port
UDP port
DNS

IP and website location: n0dscx.akamaiedge.net

DB-IP (02.08.2020)

IP address	88.221.81.192
Host name	a88-221-81-192.deploy.static.akamaitechnologies.com
IP range	88.221.81.0-88.221.81.255 CIDR
ISP	Akamai Technologies
Organization	
Country	Germany (DE)
Region	Hesse
City	Frankfurt am Main
Time zone	Europe/Berlin, GMT+0200
Local time	09:40:32 (CEST) / 2020.08.28
Postal Code	60313



Powered by **DB-IP**

And when I typed **ns-1658.awsdns-15.co.uk**, I got the location as **Seattle, United States**.


ns-1658.awsdns-15.co.uk

Info
Ping
HTTP
TCP port
UDP port
DNS

IP and website location: ns-1658.awsdns-15.co.uk

DB-IP (02.08.2020)

IP address	205.251.198.122
Host name	ns-1658.awsdns-15.co.uk
IP range	205.251.198.0-205.251.201.255 CIDR
ISP	Amazon.com
Organization	Amazon.com, Inc.
Country	United States of America (US)
Region	Washington
City	Seattle (Downtown)
Time zone	America/Los_Angeles, GMT-0700
Local time	00:37:29 (PDT) / 2020.08.28
Postal Code	98101



Question 3:

Scan and find out port numbers open 203.163.246.23

Solution:

Open kali in VM, because we need to use **nmap to scan open ports**.

Open terminal

Type **nmap -Pn 203.163.246.23**

```
root@kali:~# nmap -Pn 203.163.246.23
Starting Nmap 7.80 ( https://nmap.org ) at 2020-08-28 13:24 IST
Nmap scan report for 203.163.246.23
Host is up.
All 1000 scanned ports on 203.163.246.23 are filtered
```

-Pn is a command to scan ports behind firewalls or that are protected by firewalls.

When we run the command we see there were 1000 scanned ports and are filtered. That means are the port are protected by firewall.

I even used the command, `nmap -Pn -sS -A -v 203.163.246.23` . But there results were same. All 1000 ports are filtered.

Question 4:

Install nessus in a VM and scan your laptop/desktop for CVE.

Solution:

I installed nessus on my Windows server 2016. Then scanned my kali linux. I found 0 Vulnerabilities.

The screenshot shows the Nessus Essentials web interface. On the left is a sidebar with 'FOLDERS' (My Scans, All Scans, Trash) and 'RESOURCES' (Policies, Plugin Rules, Scanners). The main area is titled 'Kali-18' with a 'Back to My Scans' link and a 'Configure' button. Below this are tabs for 'Hosts' (0), 'Vulnerabilities' (0), and 'History' (2). A search bar for history is present. A table lists scan histories:

<input type="checkbox"/>	Start Time	Last Modified	Status
<input type="checkbox"/>	Current Today at 3:27 AM	Today at 3:27 AM	✓ Completed
<input type="checkbox"/>	Today at 3:27 AM	Today at 3:27 AM	✓ Completed