

## **PASSIVE AND ACTIVE RECONNAISSANCE**

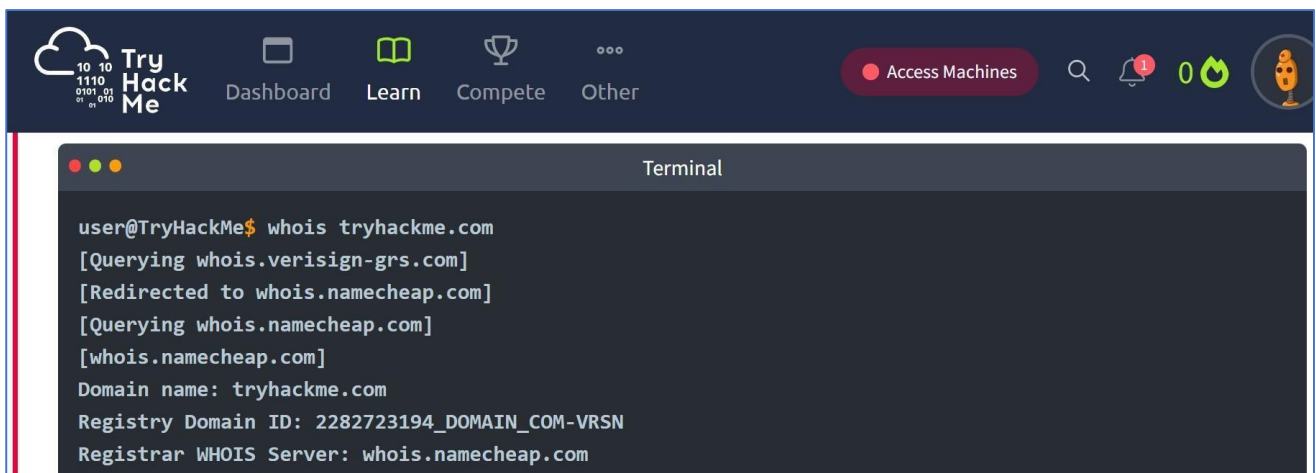
**Aim:**

To do perform passive and active reconnaissance in TryHackMe platform.

**Algorithm:**

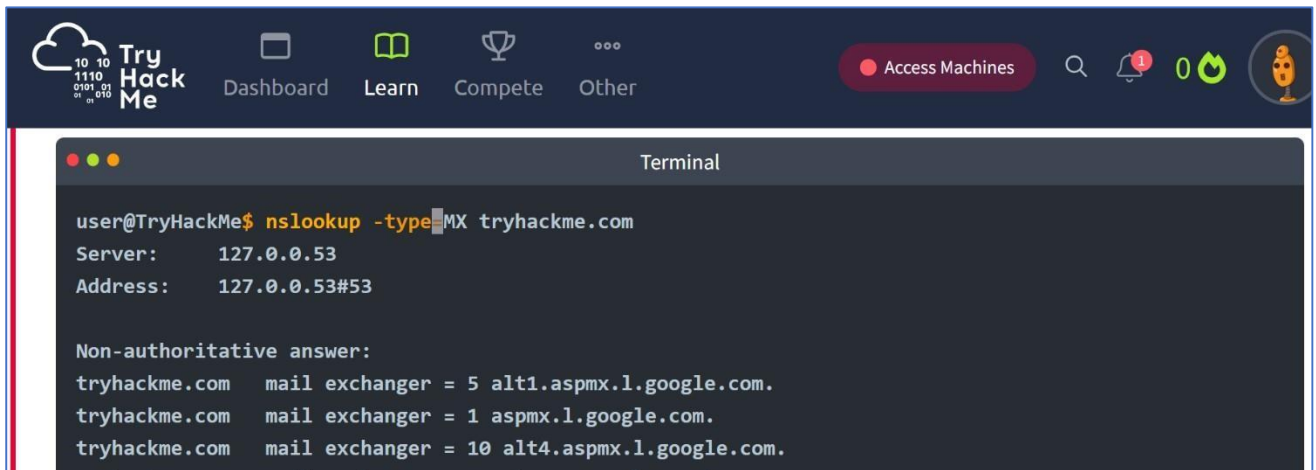
1. Access the Passive reconnaissance lab in TryHackMe platform using the link below-  
<https://tryhackme.com/r/room/passiverecon>
2. Click Start AttackBox to run the instance of Kali Linux distribution.
3. Run whois command on the website tryhackme.com and gather information about it.
4. Find the IP address of tryhackme.com using nslookup and dig command.
5. Find out the subdomain of tryhackme.com using DNSDumpster command.
6. Run shodan.io to find out the details- IP address, Hosting Company, Geographical location and Server type and version.
7. Access the Active reconnaissance lab in TryHackMe platform using the link below-  
<https://tryhackme.com/r/room/activerecon>
8. Click Start AttackBox to run the instance of Kalilinux distribution.
9. Perform active reconnaissance using the commands, traceroute, ping and netcat.

## Output:



The screenshot shows the TryHackMe dashboard with a dark theme. The top navigation bar includes the TryHackMe logo, a 'Dashboard' link, a 'Learn' link with a book icon, a 'Compete' link with a trophy icon, and an 'Other' link with a three-dot menu icon. On the right side of the dashboard, there is a red 'Access Machines' button, a search icon, a notification bell with a red '1' badge, a green '0' badge, and a user profile icon. Below the dashboard, a terminal window is open, displaying the output of a 'whois' command for 'tryhackme.com'.

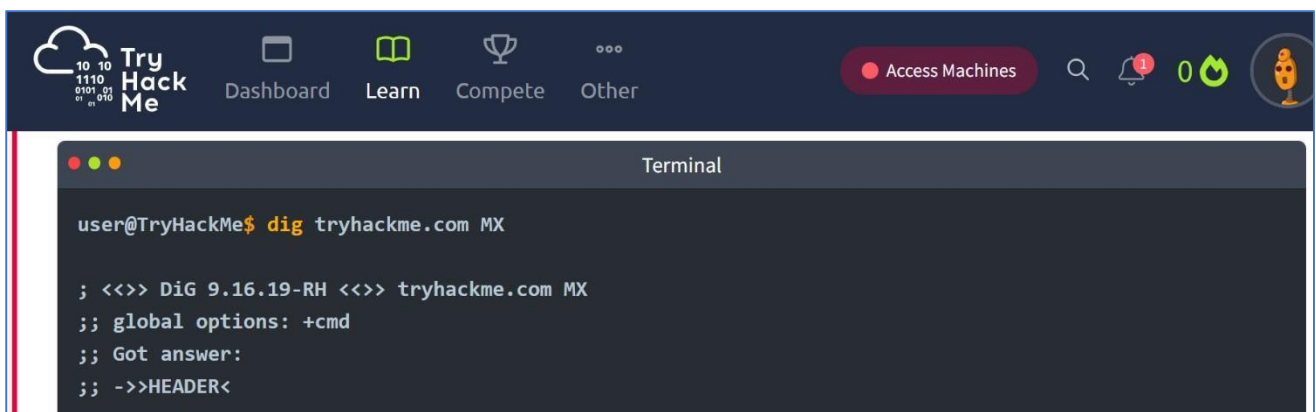
```
user@TryHackMe$ whois tryhackme.com
[Querying whois.verisign-grs.com]
[Redirected to whois.namecheap.com]
[Querying whois.namecheap.com]
[whois.namecheap.com]
Domain name: tryhackme.com
Registry Domain ID: 2282723194_DOMAIN_COM-VRSN
Registrar WHOIS Server: whois.namecheap.com
```



The screenshot shows the TryHackMe dashboard with a terminal window open. The terminal displays the output of the command `nslookup -type=MX tryhackme.com`. The output shows the server IP as 127.0.0.53 and the address as 127.0.0.53#53. It also lists three non-authoritative mail exchanger records for tryhackme.com.

```
user@TryHackMe$ nslookup -type=MX tryhackme.com
Server:      127.0.0.53
Address:     127.0.0.53#53

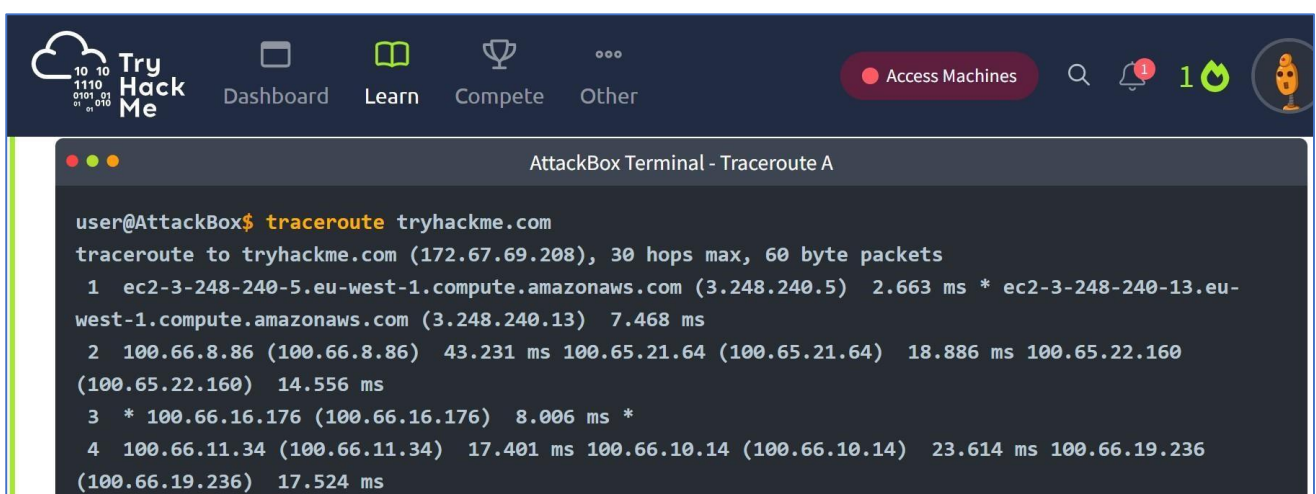
Non-authoritative answer:
tryhackme.com mail exchanger = 5 alt1.aspmx.l.google.com.
tryhackme.com mail exchanger = 1 aspmx.l.google.com.
tryhackme.com mail exchanger = 10 alt4.aspmx.l.google.com.
```



The screenshot shows the TryHackMe dashboard with a terminal window open. The terminal displays the output of the command `dig tryhackme.com MX`. The output shows the global options as +cmd and the header information for the DNS query.

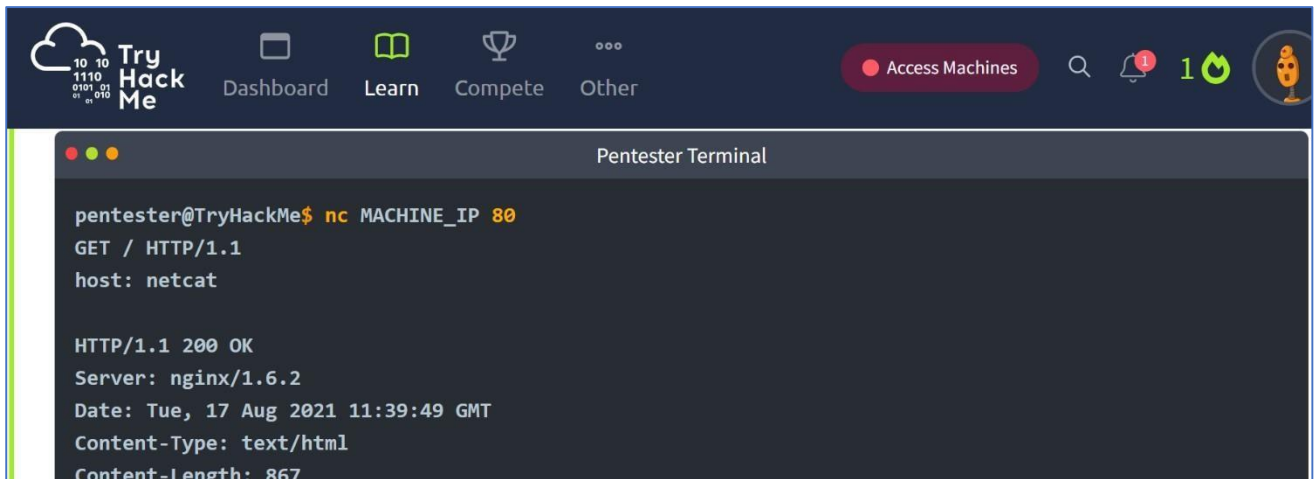
```
user@TryHackMe$ dig tryhackme.com MX

; <<>> DiG 9.16.19-RH <<>> tryhackme.com MX
;; global options: +cmd
;; Got answer:
;; ->>HEADER<
```



The screenshot shows the TryHackMe dashboard with a terminal window open. The terminal displays the output of the command `traceroute tryhackme.com`. The output shows the path from the user's machine to tryhackme.com, including the number of hops, the IP addresses of the intermediate routers, and the round-trip times for each hop.

```
user@AttackBox$ traceroute tryhackme.com
traceroute to tryhackme.com (172.67.69.208), 30 hops max, 60 byte packets
 1 ec2-3-248-240-5.eu-west-1.compute.amazonaws.com (3.248.240.5)  2.663 ms * ec2-3-248-240-13.eu-west-1.compute.amazonaws.com (3.248.240.13)  7.468 ms
 2 100.66.8.86 (100.66.8.86)  43.231 ms 100.65.21.64 (100.65.21.64)  18.886 ms 100.65.22.160 (100.65.22.160)  14.556 ms
 3 * 100.66.16.176 (100.66.16.176)  8.006 ms *
 4 100.66.11.34 (100.66.11.34)  17.401 ms 100.66.10.14 (100.66.10.14)  23.614 ms 100.66.19.236 (100.66.19.236)  17.524 ms
```



The screenshot shows the TryHackMe dashboard with navigation links for Dashboard, Learn, Compete, and Other. A red button labeled 'Access Machines' is visible. Below the dashboard is a terminal window titled 'Pentester Terminal'. The terminal shows a netcat listener on 'pentester@TryHackMe' waiting for a connection from 'nc MACHINE\_IP 80'. The connection is successful, and the server responds with an HTTP 200 OK status, indicating a web service is running on the target machine.

```
pentester@TryHackMe$ nc MACHINE_IP 80
GET / HTTP/1.1
host: netcat

HTTP/1.1 200 OK
Server: nginx/1.6.2
Date: Tue, 17 Aug 2021 11:39:49 GMT
Content-Type: text/html
Content-Length: 867
```

**Result:** Thus, the passive and active reconnaissance has been performed successfully in TryHackMe platform.

