

# **INTRODUCTION**

Task 3: TryHackMe Further Nmap Report

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Link to the room: [TryHackMe Further Nmap](#)

This report includes a tutorial for a beginner level TryHackMe room called FurtherNmap. The goal of this task was to learn advanced scanning techniques using Nmap, understand different scan types and apply them to identify vulnerabilities and services on a target machine.

## **TOOLS**

Nmap

Linux VM provided inbuilt with the TryHackMe room (IP: 10.201.10.52)

Attackbox provided inbuilt with the TryHackMe room (IP: 10.201.111.1)

## **TASK**

The task 5, task 6, task 7, task 10, task 11, task 13 answers could be easily found out by just reading the description part of the task. So, descriptions about them are not provided as it could be directly read out from the descriptions of the tasks.

In task 3 I was able to get a knowledge on what Nmap does and how to look up the commands used in Nmap. There were a few questions to check our understanding of Nmap at the end of the task whose answers could be easily be found out using the command `nmap -h`.

The image consists of two screenshots of a TryHackMe room interface, showing the progression from task 2 to task 3.

**Top Screenshot:**

- Task 2: Introduction** (Completed): Shows a brief introduction to Nmap, stating it is run from the terminal and is installed by default in Kali Linux and the TryHackMe Attack Box.
- Task 3: Nmap Switches** (In Progress): Contains several questions about Nmap switches. The first question asks for the first switch listed in the help menu for a 'Syn Scan'. The second question asks which switch would be used for a 'UDP scan'. The third question asks which switch would be used to detect the operating system. The fourth question asks which switch would be used to detect the version of the services running on the target. The fifth question asks how to increase the verbosity of the default output.
- Terminal:** Shows the command `nmap -h` being executed, displaying the Nmap 7.80 help menu. The output lists various options for target specification, host discovery, scan techniques, and scan order.

**Bottom Screenshot:**

- Task 2: Introduction** (Completed): Same as the top screenshot.
- Task 3: Nmap Switches** (In Progress): The same questions as the top screenshot, but with the first two questions answered correctly. The first question is answered with `-sS` and the second with `-sU`. The third, fourth, and fifth questions remain unanswered.
- Terminal:** Shows the command `nmap -h` being executed, displaying the Nmap 7.80 help menu. The output lists various options for target specification, host discovery, scan techniques, and scan order.

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Room progress (22%)

Answer the questions below

What is the first switch listed in the help menu for a 'Syn Scan' (more on this later)?

✓ Correct Answer

Which switch would you use for a 'UDP scan'?

✓ Correct Answer

If you wanted to detect which operating system the target is running on, which switch would you use?

✓ Correct Answer

Nmap provides a switch to detect the version of the services running on the target. What is this switch?

✓ Correct Answer

The default output provided by nmap often does not provide enough information for a pentester. How would you increase the verbosity?

✓ Correct Answer

Verbosity level one is good, but verbosity level two is better! How would you set the verbosity level to two? (Note: it's highly advisable to always use at least this option)

✓ Correct Answer

We should always save the output of our scans -- this means that we only need to run the scan once (reducing network traffic and thus chance of detection), and gives us a reference to use when writing reports for clients.

What switch would you use to save the nmap results in three major formats?

What switch would you use to save the nmap results in a "normal" format?

Applications Places System

root's Home

root@ip-10-201-10-52: ~

```
File Edit View Search Terminal Help
SERVICE/VERSION DETECTION:
-sV: Probe open ports to determine service/version info
--version-intensity <level>: Set from 0 (light) to 9 (try all probes)
--version-light: Limit to most likely probes (intensity 2)
--version-all: Try every single probe (intensity 9)
--version-trace: Show detailed version scan activity (for debugging)
SCRIPT SCAN:
-sC: equivalent to --script=default
--script=<lua scripts>: <lua scripts> is a comma separated list of
      directories, script-files or script-categories
--script-args=<n1=v1,[n2=v2,...]>: provide arguments to scripts
--script-args-file=filename: provide NSE script args in a file
--script-trace: Show all data sent and received
--script-updatedb: Update the script database.
--script-help=<lua scripts>: Show help about scripts.
      <lua scripts> is a comma-separated list of script-files or
      script-categories.
OS DETECTION:
-O: Enable OS detection
--osscan-limit: Limit OS detection to promising targets
--osscan-guess: Guess OS more aggressively
TIMING AND PERFORMANCE:
Options which take <time> are in seconds, or append 'ms' (milliseconds),
's' (seconds), 'm' (minutes), or 'h' (hours) to the value (e.g. 30m).
```

THM AttackBox 51min 43s

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Room progress (31%)

The default output provided by nmap often does not provide enough information for a pentester. How would you increase the verbosity?

✓ Correct Answer

Verbosity level one is good, but verbosity level two is better! How would you set the verbosity level to two? (Note: it's highly advisable to always use at least this option)

✓ Correct Answer

We should always save the output of our scans -- this means that we only need to run the scan once (reducing network traffic and thus chance of detection), and gives us a reference to use when writing reports for clients.

What switch would you use to save the nmap results in three major formats?

✓ Correct Answer

What switch would you use to save the nmap results in a "normal" format?

✓ Correct Answer

A very useful output format: how would you save results in a "grepable" format?

✓ Correct Answer

Sometimes the results we're getting just aren't enough. If we don't care about how loud we are, we can enable "aggressive" mode. This is a shorthand switch that activates service detection, operating system detection, a traceroute and common script scanning.

How would you activate this setting?

✓ Correct Answer

Nmap offers five levels of "timing" template. These are essentially used to increase the speed your scan runs at. Be careful though: higher speeds are noisier, and can incur errors!

How would you set the timing template to level 5?

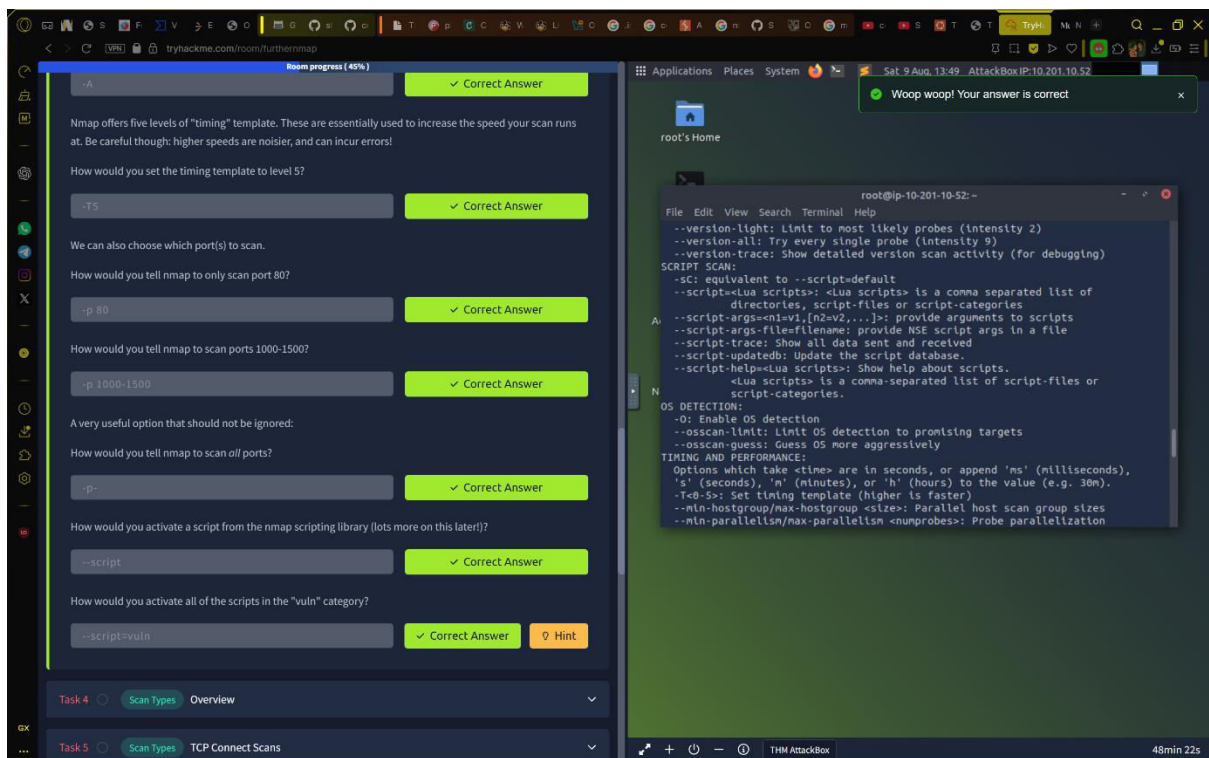
Applications Places System

root's Home

root@ip-10-201-10-52: ~

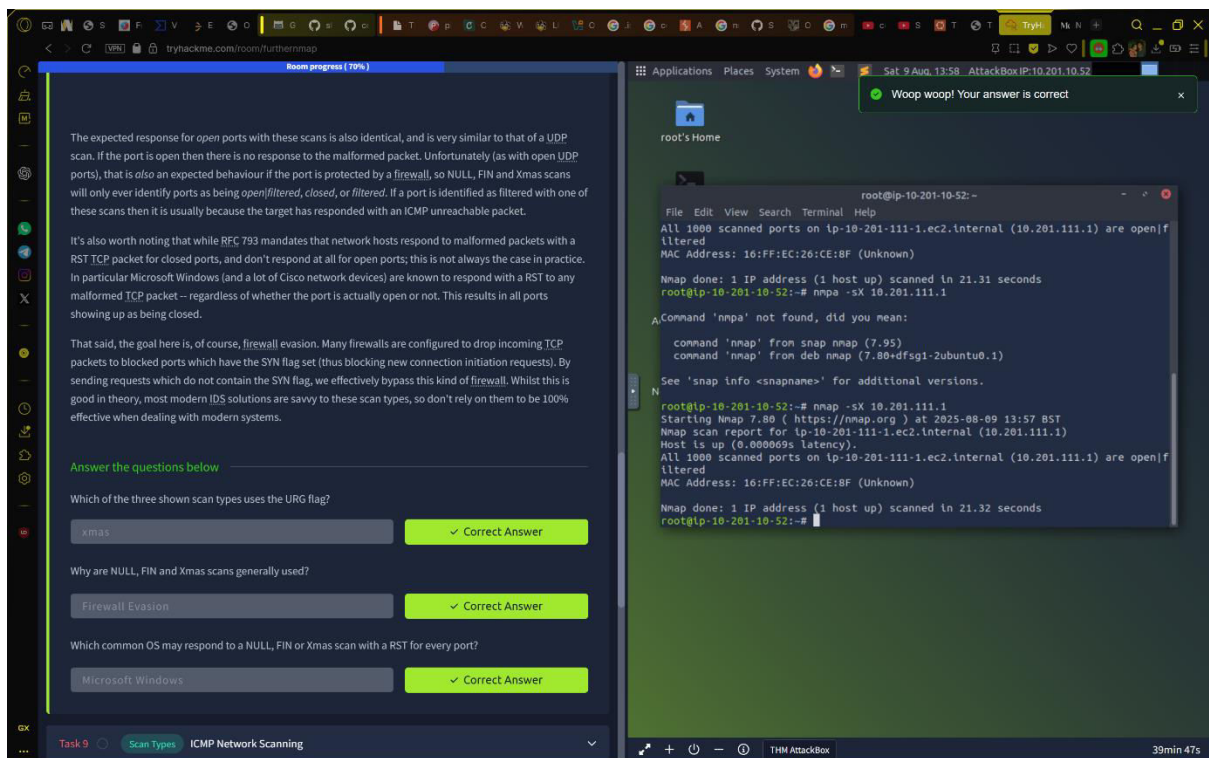
```
File Edit View Search Terminal Help
--reason: Display the reason a port is in a particular state
--open: Only show open (or possibly open) ports
--packet-trace: Show all packets sent and received
--iflist: Print host interfaces and routes (for debugging)
--append-output: Append to rather than clobber specified output files
--resume <filename>: Resume an aborted scan
--stylesheet <path/URL>: XSL stylesheet to transform XML output to HTML
--webxml: Reference stylesheet from Nmap.Org for more portable XML
--no-stylesheet: Prevent associating of XSL stylesheet w/XML output
MISC:
-o: Enable IPv6 scanning
-A: Enable OS detection, version detection, script scanning, and traceroute
--datadir <dirname>: Specify custom Nmap data file location
--send-eth/--send-ip: Send using raw ethernet frames or IP packets
--privileged: Assume that the user is fully privileged
--unprivileged: Assume the user lacks raw socket privileges
-V: Print version number
-h: Print this help summary page.
EXAMPLES:
nmap -v -A scanme.nmap.org
nmap -v -sn 192.168.0.0/16 10.0.0.0/8
nmap -v -iR 10000 -Pn -p 80
SEE THE MAN PAGE (https://nmap.org/book/man.html) FOR MORE OPTIONS AND EXAMPLES
root@ip-10-201-10-52: ~
```

THM AttackBox 50min 25s



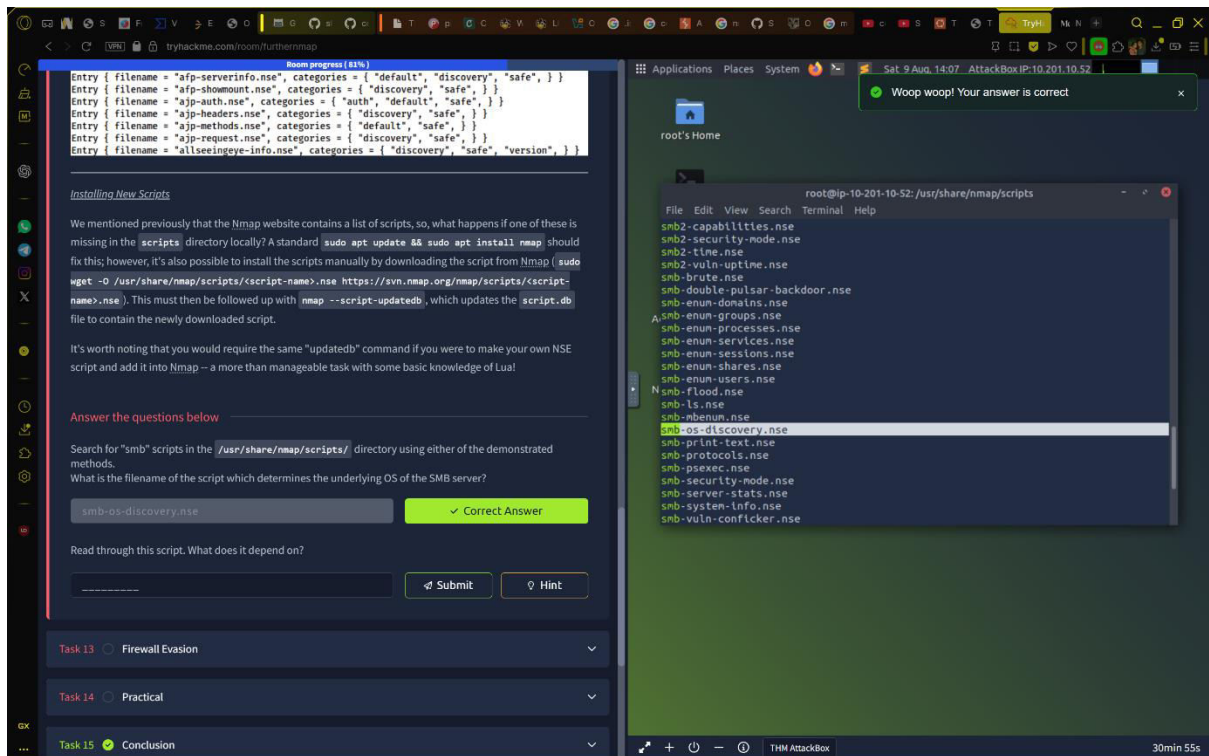
In task 8 I had to provide the command `nmap -sX 10.201.111.1` to obtain the answer.

In task 9 I had to do the `-sn` scan to obtain the answer to the question provided.



In task 12 first I had to go into the [ /usr/share/nmap/scripts/ ] directory and then had to run `ls | grep smb` in the terminal to obtain the answer.





In task 14 I had to run `nmap -p1-999 -sX 10.201.111.1 -vv` to identify how many ports are open, the reason for them to be open etc. I also had to run `nmap -sS -Pn 10.201.111.1` to perform a TCP SYN scan. Another command `nmap --script=ftp-anon 10.201.111.1 -Pn` to check whether Nmap can successfully login to FTP server on port 21.

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Room completed (100%)

Answer the questions below

Does the target ip respond to ICMP echo (ping) requests (Y/N)?

N

✓ Correct Answer

Perform an Xmas scan on the first 999 ports of the target -- how many ports are shown to be open or filtered?

999

✓ Correct Answer

There is a reason given for this -- what is it?

No Response

✓ Correct Answer

Hint

Perform a TCP SYN scan on the first 5000 ports of the target -- how many ports are shown to be open?

5

✓ Correct Answer

Open Wireshark (see Cryllic's Wireshark Room for instructions) and perform a TCP Connect scan against port 80 on the target, monitoring the results. Make sure you understand what's going on. Deploy the `ftp-anon` script against the box. Can Nmap login successfully to the FTP server on port 21? (Y/N)

Y

✓ Correct Answer

Task 15 Conclusion

How likely are you to recommend this room to others?

1

2

3

4

5

6

7

8

9

10

Applications Places System

Sat 9 Aug, 14:14 AttackBox IP: 10.201.10.52

root's Home

root@ip-10-201-10-52: ~

File Edit View Search Terminal Help

53/tcp open domain  
80/tcp open http  
135/tcp open msrpc  
3389/tcp open ms-wbt-server  
MAC Address: 16:FF:EC:26:CE:8F (Unknown)

Nmap done: 1 IP address (1 host up) scanned in 12.56 seconds

root@ip-10-201-10-52:~# nmap --script=ftp-anon 10.201.111.1 -Pn

Starting Nmap 7.80 ( https://nmap.org ) at 2025-08-09 14:13 BST

Nmap scan report for ip-10-201-111-1.ec2.internal (10.201.111.1)

Host is up (0.00026s latency).

Not shown: 995 filtered ports

PORT STATE SERVICE

21/tcp open ftp

| ftp-anon: Anonymous FTP login allowed (FTP code 230)

| Can't get directory listing: TIMEOUT

53/tcp open domain

80/tcp open http

135/tcp open msrpc

3389/tcp open ms-wbt-server

MAC Address: 16:FF:EC:26:CE:8F (Unknown)

Nmap done: 1 IP address (1 host up) scanned in 35.56 seconds

root@ip-10-201-10-52:~#

THW AttackBox 23min 36s