

Snort

EX-NO:13

AIM:

Learn how to use Snort to detect real-time threats, analyse recorded traffic files and identify anomalies.

PROCEDURE:

- Task 1 Introduction
- Task 2 Interactive Material and VM
- Task 3 Introduction to IDS/IPS
- Task 4 First Interaction with Snort
- Task 5 Operation Mode 1: Sniffer Mode
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- Task 8 Operation Mode 4: PCAP Investigation
- Task 9 Snort Rule Structure
- Task 10 Snort2 Operation Logic: Points to Remember
- Task 11 Conclusion

Task 1 Introduction :

Answer the questions below

Read the task above.

No answer needed

✓ Correct Answer

Task 2 Interactive Material and VM :

Answer the questions below

Navigate to the Task-Exercises folder and run the command `./easy.sh` and write the output

Too Easy!

✓ Correct Answer

Task 3 Introduction to IDS/IPS :

Answer the questions below

Which IDS or IPS type can help you stop the threats on a local machine?

Which IDS or IPS type can help you detect threats on a local network?

Which IDS or IPS type can help you detect the threats on a local machine?

Which IDS or IPS type can help you stop the threats on a local network?

Which described solution works by detecting anomalies in the network?

According to the official description of the snort, what kind of NIPS is it?

NBA training period is also known as ...

Task 4 First Interaction with Snort :

Answer the questions below

Run the Snort instance and check the build number.

Test the current instance with "/etc/snort/snort.conf" file and check how many rules are loaded with the current build.

Test the current instance with "/etc/snort/snortv2.conf" file and check how many rules are loaded with the current build.

Task 5 Operation Mode 1: Sniffer Mode :

Answer the questions below

You can practice the parameter combinations by using the traffic-generator script.

Task 6 Operation Mode 2: Packet Logger Mode :

Answer the questions below

Investigate the traffic with the default configuration file with **ASCII mode**.

```
sudo snort -dev -K ASCII -l .
```

Execute the traffic generator script and choose "**TASK-6 Exercise**". Wait until the traffic ends, then stop the Snort instance. Now analyse the output summary and answer the question.

```
sudo ./traffic-generator.sh
```

Now, you should have the logs in the current directory. Navigate to folder "**145.254.160.237**". What is the source port used to connect port 53?

✓ Correct Answer

🔍 Hint

Use **snort.log.1640048004**

Read the snort.log file with Snort; what is the IP ID of the 10th packet?

```
snort -r snort.log.1640048004 -n 10
```

✓ Correct Answer

🔍 Hint

Read the "**snort.log.1640048004**" file with Snort; what is the referer of the 4th packet?

✓ Correct Answer

🔍 Hint

Read the "**snort.log.1640048004**" file with Snort; what is the Ack number of the 8th packet?

✓ Correct Answer

Read the "**snort.log.1640048004**" file with Snort; what is the number of the "**TCP port 80**" packets?

✓ Correct Answer

🔍 Hint

Task 7 Operation Mode 3: IDS/IPS :

Answer the questions below

Investigate the traffic with the default configuration file.

```
sudo snort -c /etc/snort/snort.conf -A full -l .
```

Execute the traffic generator script and choose "**TASK-7 Exercise**". Wait until the traffic stops, then stop the Snort instance. Now analyse the output summary and answer the question.

```
sudo ./traffic-generator.sh
```

What is the number of the detected HTTP GET methods?

✓ Correct Answer

🔍 Hint

You can practice the rest of the parameters by using the traffic-generator script.

✓ Correct Answer

Task 8 Operation Mode 4: PCAP Investigation :

Answer the questions below

Investigate the **mx-1.pcap** file with the default configuration file.

```
sudo snort -c /etc/snort/snort.conf -A full -l . -r mx-1.pcap
```

What is the number of the generated alerts?

✓ Correct Answer

Keep reading the output. How many TCP Segments are Queued?

✓ Correct Answer

Keep reading the output. How many "HTTP response headers" were extracted?

✓ Correct Answer

```
sudo snort -c /etc/snort/snortv2.conf -A full -l . -r mx-1.pcap
```

What is the number of the generated alerts?

✓ Correct Answer

Investigate the **mx-2.pcap** file with the default configuration file.

```
sudo snort -c /etc/snort/snort.conf -A full -l . -r mx-2.pcap
```

What is the number of the generated alerts?

✓ Correct Answer

🔍 Hint

Keep reading the output. What is the number of the detected TCP packets?

✓ Correct Answer

Investigate the **mx-2.pcap** and **mx-3.pcap** files with the default configuration file.

```
sudo snort -c /etc/snort/snort.conf -A full -l . --pcap-list="mx-2.pcap mx-3.pcap"
```

What is the number of the generated alerts?

✓ Correct Answer

Task 9 Snort Rule Structure :

Answer the questions below

Use "task9.pcap". Write a rule to filter IP ID "35369" and run it against the given pcap file. What is the request name of the detected packet? You may use this command: "snort -c local.rules -A full -l . -r task9.pcap"

✓ Correct Answer

🔍 Hint

Clear the previous alert file and comment out the old rules. Create a rule to filter packets with **Syn** flag and run it against the given pcap file. What is the number of detected packets?

✓ Correct Answer

Clear the previous alert file and comment out the old rules. Write a rule to filter packets with **Push-Ack** flags and run it against the given pcap file. What is the number of detected packets?

✓ Correct Answer

Clear the previous alert file and comment out the old rules. Create a rule to filter **UDP** packets with the same source and destination IP and run it against the given pcap file. What is the number of packets that show the same source and destination address?

✓ Correct Answer

Case Example - An analyst modified an existing rule successfully. Which rule option must the analyst change after the implementation?

✓ Correct Answer

Task 10 Snort2 Operation Logic: Points to Remember :

Answer the questions below

Read the task above.

✓ Correct Answer

Task 11 Conclusion :

Answer the questions below

Read the task above.

✓ Correct Answer

RESULT:

Thus the Snort is completed using tryhackme platform.