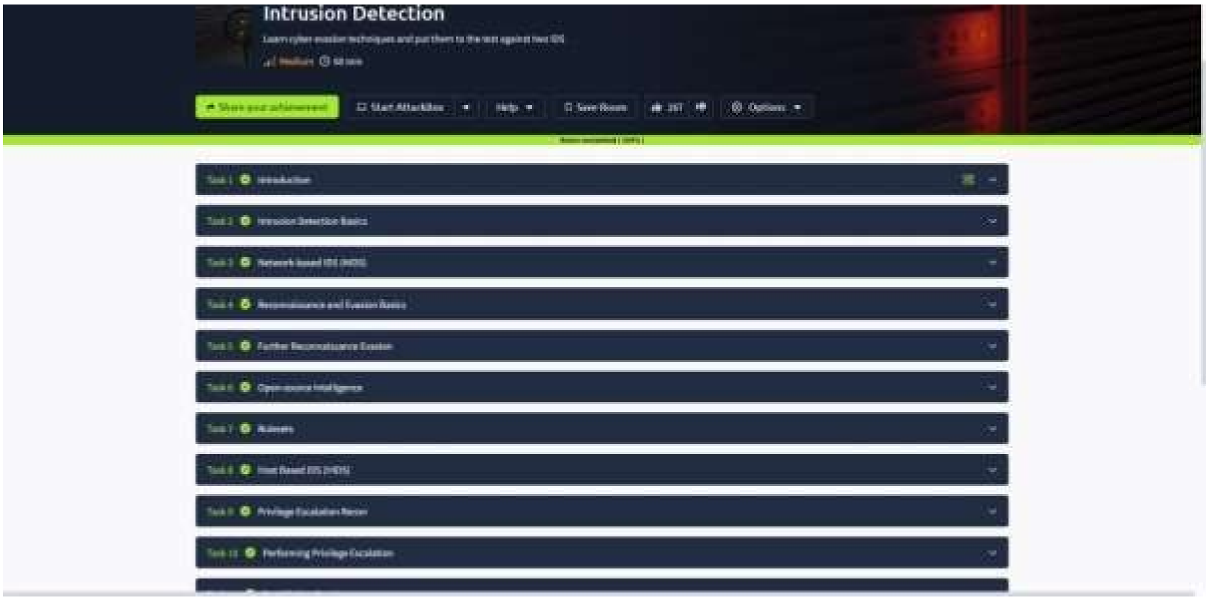
Demonstrate Cyber Evasion Techniques 231901005

AIM:

Learn cyber evasion techniques and put them to the test against two IDS



Intrusion Detection

Learn cyber evasion techniques and put them to the test against two IDS

Task 1 Introduction

Task 2 Intrusion Detection Basics

Task 3 Network-based IDS (NIDS)

Task 4 Reconnaissance and Evasion Basics

Task 5 Further Reconnaissance Evasion

Task 6 Open-source Intelligence

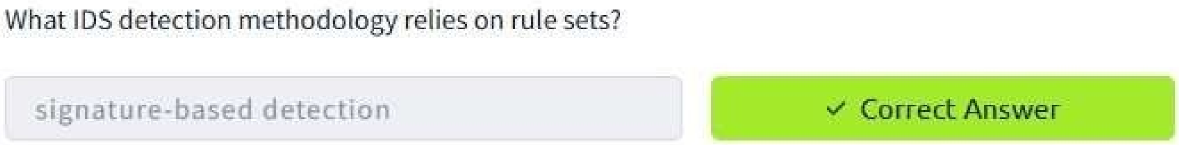
Task 7 Rulesets

Task 8 Host Based IDS (HIDS)

Task 9 Privilege Escalation Recon

Task 10 Performing Privilege Escalation

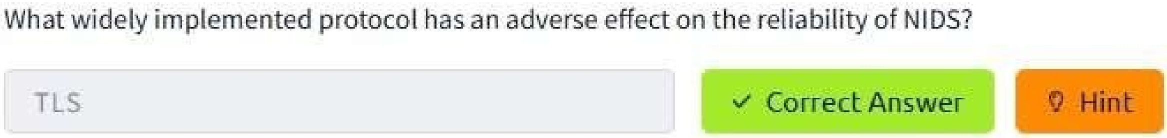
TASK 2 : INTRUSION DETECTION BASICS



What IDS detection methodology relies on rule sets?

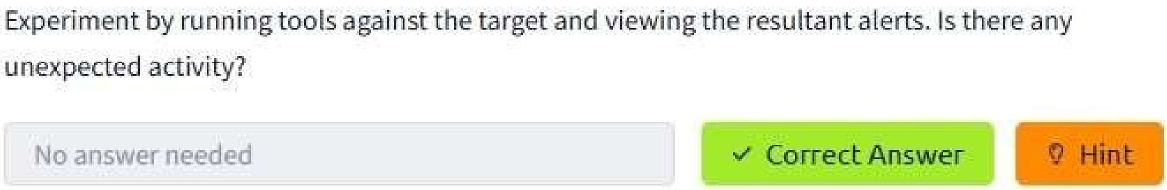
signature-based detection

TASK 3 : NETWORK-BASED IDS(NIDS)



What widely implemented protocol has an adverse effect on the reliability of NIDS?

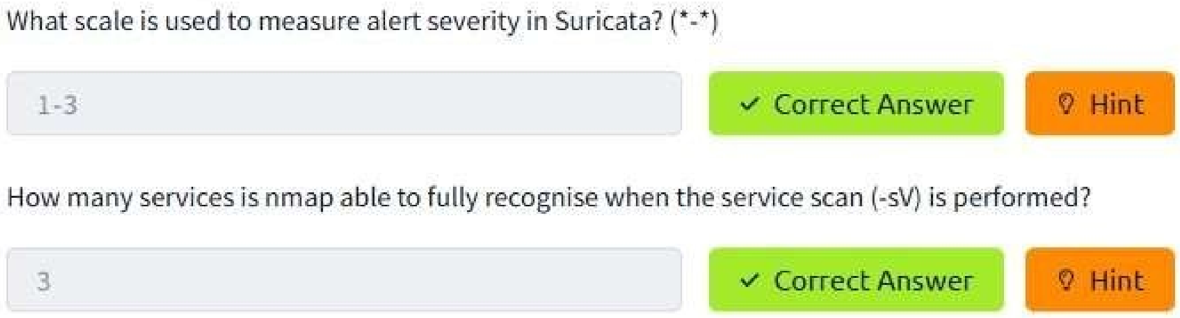
TLS



Experiment by running tools against the target and viewing the resultant alerts. Is there any unexpected activity?

No answer needed

TASK 4 RECONNAISSANCE AND EVASIOM BASICS



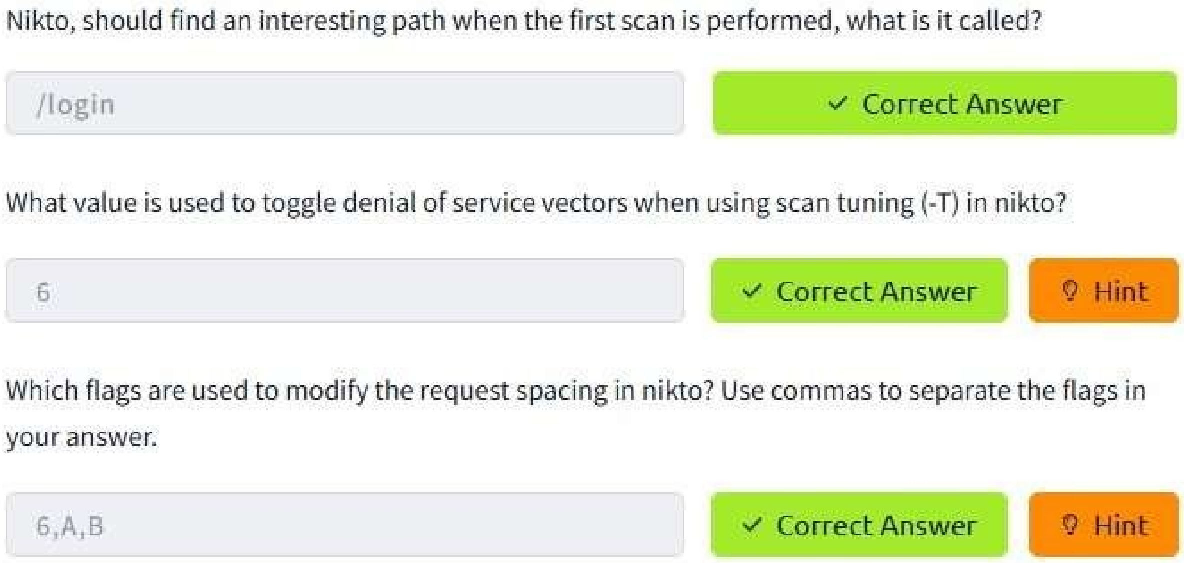
What scale is used to measure alert severity in Suricata? (*-*)

1-3

How many services is nmap able to fully recognise when the service scan (-sV) is performed?

3

TASK 5 : FURTHER RECONNAISSANCE EVASION



Nikto, should find an interesting path when the first scan is performed, what is it called?

/login

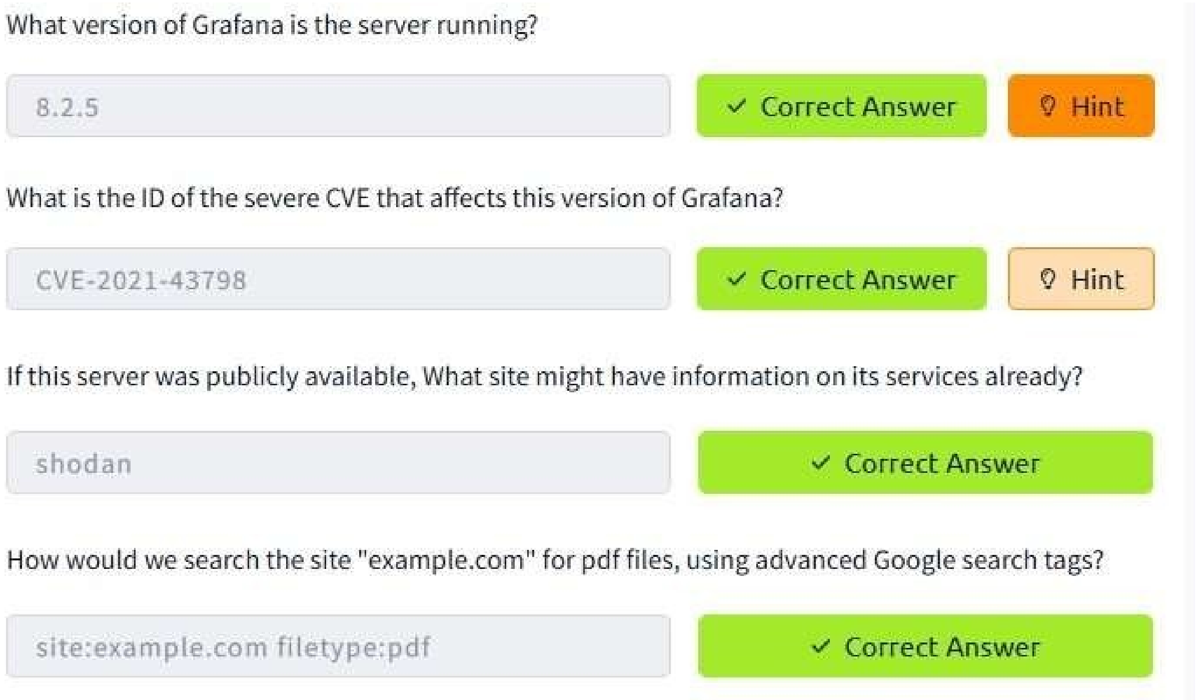
What value is used to toggle denial of service vectors when using scan tuning (-T) in nikto?

6

Which flags are used to modify the request spacing in nikto? Use commas to separate the flags in your answer.

6,A,B

TASK 6 : OPEN-SOURCE INTELLIGENCE



What version of Grafana is the server running?

8.2.5

What is the ID of the severe CVE that affects this version of Grafana?

CVE-2021-43798

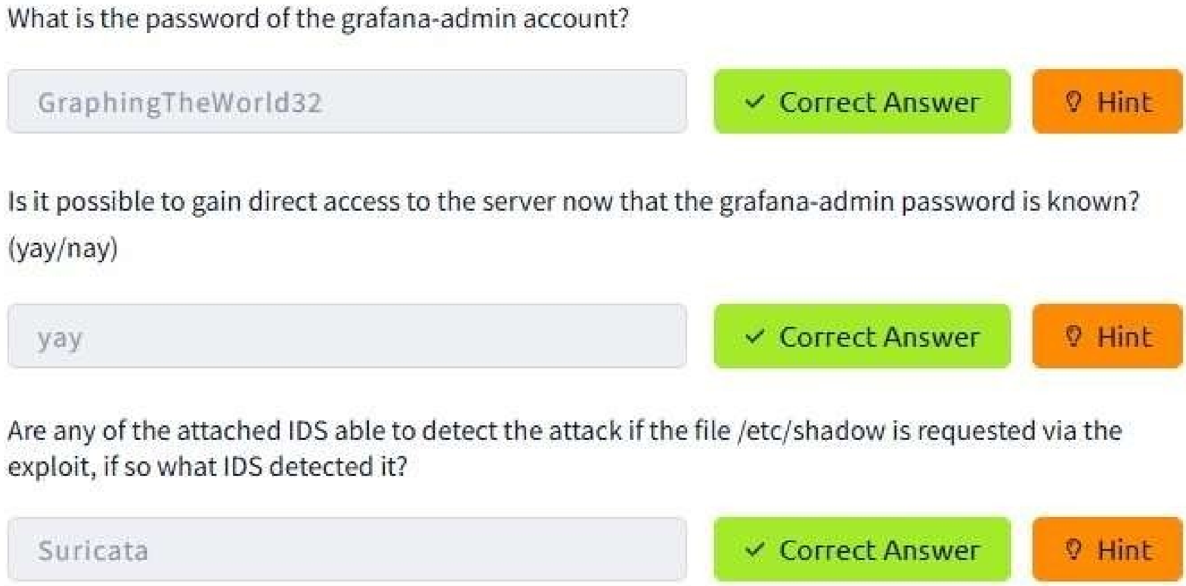
If this server was publicly available, What site might have information on its services already?

shodan

How would we search the site "example.com" for pdf files, using advanced Google search tags?

site:example.com filetype:pdf

TASK 7 : RULESETS



What is the password of the grafana-admin account?

GraphingTheWorld32

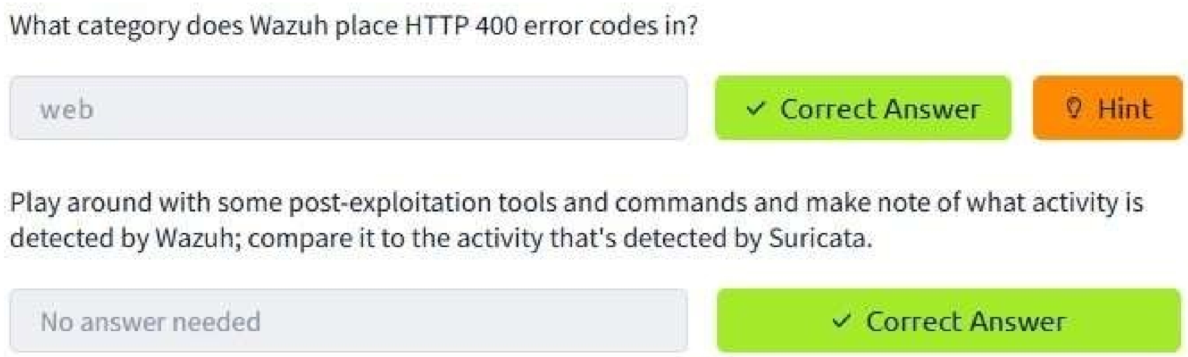
Is it possible to gain direct access to the server now that the grafana-admin password is known? (yay/nay)

yay

Are any of the attached IDS able to detect the attack if the file /etc/shadow is requested via the exploit, if so what IDS detected it?

Suricata

TASK 8 : HOST BASED IDS (HIDS)



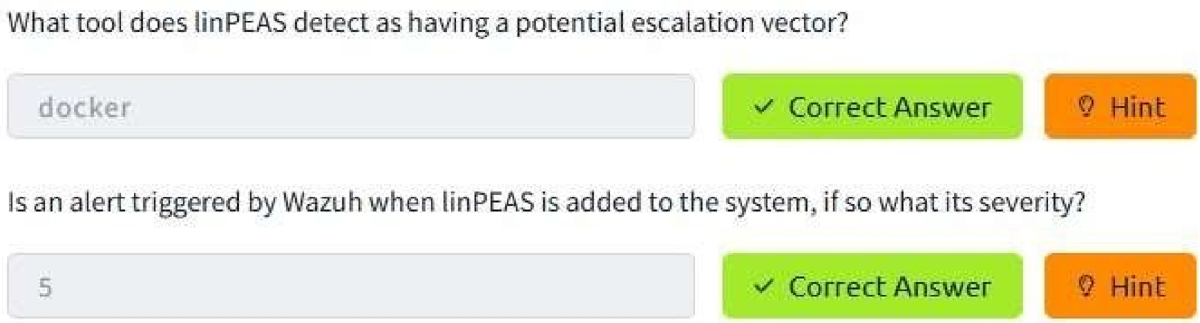
What category does Wazuh place HTTP 400 error codes in?

web

Play around with some post-exploitation tools and commands and make note of what activity is detected by Wazuh; compare it to the activity that's detected by Suricata.

No answer needed

TASK 9 : PRIVILEGE ESCALATION RECON



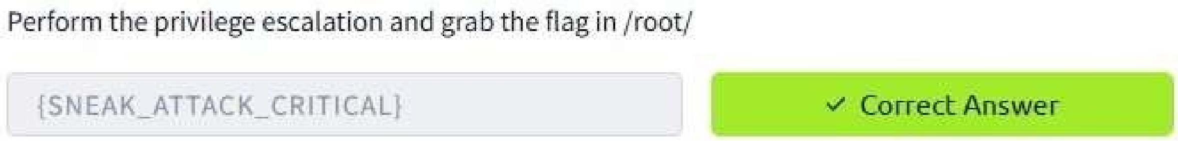
What tool does linPEAS detect as having a potential escalation vector?

docker

Is an alert triggered by Wazuh when linPEAS is added to the system, if so what its severity?

5

TASK 10: PERFORMING PRIVILEGE ESCALATION



Perform the privilege escalation and grab the flag in /root/

{SNEAK_ATTACK_CRITICAL}

RESULT :

Cyber evasion techniques and put them to the test against two IDS is successfully learned