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REG.NO: 20BIT0238

SUBJECT: CSE3502

FACULTY : SUMAYA THASEEN

DIGITAL – ASSIGNMENT 4

1. Perform a credential harvesting using setoolkit by cloning any web template like google/facebook using your Kali IP. (4 marks)

Give the snapshot of the following

- ❑ Kali IP in the browser
- ❑ Sniff the username as your registration number and password as your full name in the Kali Console
- ❑ Save the results in a .txt file and also in a google drive link

Command : setoolkit

```
Player | || | 1 2 3 4 | ↻
File Actions Edit View Help
root@kali: /home/kali/Desktop
[—]      The Social-Engineer Toolkit (SET)      [—]
[—]      Created by: David Kennedy (Re1K)      [—]
[—]          Version: 0.0.3                      [—]
[—]          Codename: 'Maverick'                 [—]
[—]      Follow us on Twitter: @TrustedSec       [—]
[—]      Follow me on Twitter: @HackingDave     [—]
[—]      Homepage: https://www.trustedsec.com   [—]
[—]      Welcome to the Social-Engineer Toolkit (SET). [—]
[—]      The one stop shop for all of your SE needs. [—]
[—]      The Social-Engineer Toolkit is a product of TrustedSec. [—]
[—]      Visit: https://www.trustedsec.com [—]
[—]      It's easy to update using the PenTesters Framework! (PTF)
[—]      Visit https://github.com/trustedsec/ptf to update all your tools!
[—]
Select from the menu:
1) Social-Engineering Attacks
2) Penetration Testing (Fast-Track)
3) Third Party Modules
4) Update the Social-Engineer Toolkit
5) Update SET configuration
6) Help, Credits, and About
99) Exit the Social-Engineer Toolkit
set> 20bit0238
```

The Social-Engineer Toolkit (SET) is a product of TrustedSec. Codename: 'Maverick'. Follow us on Twitter: @TrustedSec. Follow me on Twitter: @HackingDave. Homepage: https://www.trustedsec.com. Welcome to the Social-Engineer Toolkit (SET). The one stop shop for all of your SE needs.

The Social-Engineer Toolkit is a product of TrustedSec.

Visit: https://www.trustedsec.com

It's easy to update using the PenTesters Framework! (PTF) Visit https://github.com/trustedsec/ptf to update all your tools!

Select from the menu:

- 1) Social-Engineering Attacks
- 2) Penetration Testing (Fast-Track)
- 3) Third Party Modules
- 4) Update the Social-Engineer Toolkit
- 5) Update SET configuration
- 6) Help, Credits, and About

99) Exit the Social-Engineer Toolkit

```
set> 1
```

The Social-Engineer Toolkit (SET) is a product of TrustedSec. Created by: David Kennedy (ReL1K). Version: 8.0.3. Codename: 'Maverick'. Follow us on Twitter: @TrustedSec. Follow me on Twitter: @HackingDave. Homepage: https://www.trustedsec.com. Welcome to the Social-Engineer Toolkit (SET). The one stop shop for all of your SE needs.

The Social-Engineer Toolkit is a product of TrustedSec.

Visit: https://www.trustedsec.com

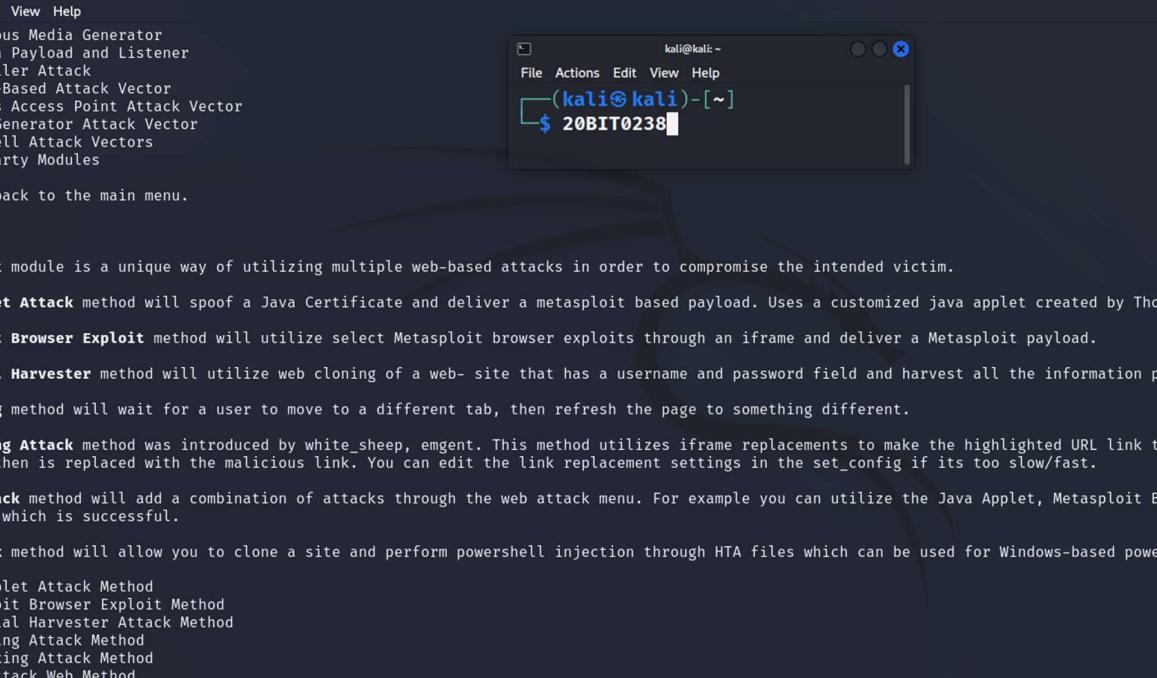
It's easy to update using the PenTesters Framework! (PTF) Visit https://github.com/trustedsec/ptf to update all your tools!

Select from the menu:

- 1) Spear-Phishing Attack Vectors
- 2) Website Attack Vectors
- 3) Infectious Media Generator
- 4) Create a Payload and Listener
- 5) Mass Mailer Attack
- 6) Arduino-Based Attack Vector
- 7) Wireless Access Point Attack Vector
- 8) QRCode Generator Attack Vector
- 9) Powershell Attack Vectors
- 10) Third Party Modules

99) Return back to the main menu.

```
set> 2
```



The screenshot shows a Kali Linux desktop environment with a terminal window open. The terminal window title is 'root@kali: /home/kali/Desktop'. Inside the terminal, there is a smaller window titled 'File Actions Edit View Help' with the text '(kali㉿kali)-[~] \$ 20BIT0238'. The main terminal window displays a menu for 'Infectious Media Generator' with various attack vectors listed, followed by a prompt to return to the main menu or set up a web attack module.

```
Player | || □ □ 
File Actions Edit View Help
3) Infectious Media Generator
4) Create a Payload and Listener
5) Mass Mailer Attack
6) Arduino-Based Attack Vector
7) Wireless Access Point Attack Vector
8) QRCode Generator Attack Vector
9) Powershell Attack Vectors
10) Third Party Modules
11) Return back to the main menu.

set> 2

The Web Attack module is a unique way of utilizing multiple web-based attacks in order to compromise the intended victim.

The Java Applet Attack method will spoof a Java Certificate and deliver a metasploit based payload. Uses a customized java applet created by Thomas.

The Metasploit Browser Exploit method will utilize select Metasploit browser exploits through an iframe and deliver a Metasploit payload.

The Credential Harvester method will utilize web cloning of a web- site that has a username and password field and harvest all the information post.

The TabNabbing method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method was introduced by white_sheep, emgent. This method utilizes iframe replacements to make the highlighted URL link to a new page when it is replaced with the malicious link. You can edit the link replacement settings in the set_config if its too slow/fast.

The Multi-Attack method will add a combination of attacks through the web attack menu. For example you can utilize the Java Applet, Metasploit Browser once to see which is successful.

The HTA Attack method will allow you to clone a site and perform powershell injection through HTA files which can be used for Windows-based powershell.

1) Java Applet Attack Method
2) Metasploit Browser Exploit Method
3) Credential Harvester Attack Method
4) Tabnabbing Attack Method
5) Web Jacking Attack Method
6) Multi-Attack Web Method
7) HTA Attack Method

99) Return to Main Menu

set:webattack>3
```

```
Player ▾ || ⌂ ⌂ ⌂ 1 2 3 4 | ⌂ ⓘ
File Actions Edit View Help
root@kali: /home/kali/Desktop

The Credential Harvester method will utilize web cloning of a web- site that has a username and password field and harvest all the information pos-
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2) Metasploit Browser Exploit Method
3) Credential Harvester Attack Method
4) Tabnabbing Attack Method
5) Web Jacking Attack Method
6) Multi-Attack Web Method
7) HTA Attack Method
99) Return to Main Menu

set:webattack>3
The first method will allow SET to import a list of pre-defined web
applications that it can utilize within the attack.

The second method will completely clone a website of your choosing
and allow you to utilize the attack vectors within the completely
same web application you were attempting to clone.

The third method allows you to import your own website, note that you
should only have an index.html when using the import website
functionality.

1) Web Templates
2) Site Cloner
3) Custom Import

99) Return to Webattack Menu

set:webattack>1
```

```
Player ▾ || ⌂ ⌂ ⌂ 1 2 3 4 | ⌂ ⓘ
File Actions Edit View Help
root@kali: /home/kali/Desktop
— * IMPORTANT * READ THIS BEFORE ENTERING IN THE IP ADDRESS * IMPORTANT * —
The way that this works is by cloning a site and looking for form fields to
rewrite. If the POST fields are not usual methods for posting forms this
could fail. If it does, you can always save the HTML, rewrite the forms to
be standard forms and use the "IMPORT" feature. Additionally, really
important:

If you are using an EXTERNAL IP ADDRESS, you need to place the EXTERNAL
IP address below, not your NAT address. Additionally, if you don't know
basic networking concepts, and you have a private IP address, you will
need to do port forwarding to your NAT IP address from your external IP
address. A browser doesn't know how to communicate with a private IP
address, so if you don't specify an external IP address if you are using
this from an external perspective, it will not work. This isn't a SET issue
this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabnabbing [192.168.42.130]:
-----
**** Important Information ****
For templates, when a POST is initiated to harvest
credentials, you will need a site for it to redirect.

You can configure this option under:
/etc/setoolkit/set.config

Edit this file, and change HARVESTER_REDIRECT and
HARVESTER_URL to the sites you want to redirect to
after it is posted. If you do not set these, then
it will not redirect properly. This only goes for
templates.

1. Java Required
2. Google
3. Twitter

set:webattack> Select a template:2
```

```
Player ▾ || ⌂ ⌂ 1 2 3 4 | ⌂ ⓘ
File Actions Edit View Help
address. A browser doesn't know how to communicate with a private IP
address, so if you don't specify an external IP address if you are using
this from an external perspective, it will not work. This isn't a SET issue
this is how networking works.

set:webattack> IP address for the POST back in Harvester/Tabnabbing [192.168.42.130]: 
**** Important Information ****
For templates, when a POST is initiated to harvest
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HARVESTER_URL to the sites you want to redirect to
after it is posted. If you do not set these, then
it will not redirect properly. This only goes for
templates.



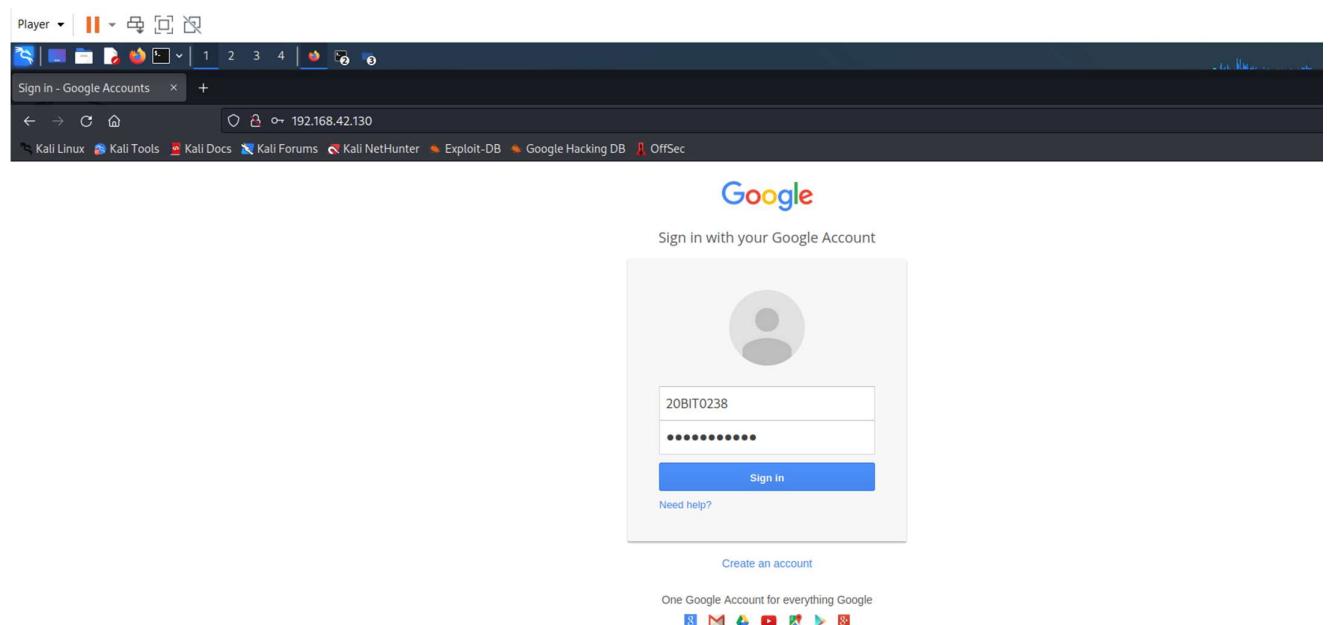
---


1. Java Required
2. Google
3. Twitter

set:webattack> Select a template:2 
[*] Cloning the website: http://www.google.com
[*] This could take a little bit...

The best way to use this attack is if username and password form fields are available. Regardless, this captures all POSTs on a website.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
192.168.42.130 - - [24/Mar/2023 06:05:13] "GET / HTTP/1.1" 200 -
192.168.42.130 - - [24/Mar/2023 06:05:14] "GET /favicon.ico HTTP/1.1" 404 -
192.168.42.130 - - [24/Mar/2023 06:06:11] "GET / HTTP/1.1" 200 -
```

VICTIM OPENING THE LINK AND ENTERING CREDENTIALS



CREDENTIALS-CAPTURED SUCCESSFULLY

```
Player | || | 1 2 3 4 | root@kali: /home/kali/Desktop
File Actions Edit View Help

1. Java Required
2. Google
3. Twitter

set:webattack> Select a template:2

[*] Cloning the website: http://www.google.com
[*] This could take a little bit...

The best way to use this attack is if username and password form fields are available. Regardless, this captures all POSTs on a website.
[*] The Social-Engineer Toolkit Credential Harvester Attack
[*] Credential Harvester is running on port 80
[*] Information will be displayed to you as it arrives below:
127.0.0.1 - - [24/Mar/2023 13:25:45] "GET / HTTP/1.1" 200 -
127.0.0.1 - - [24/Mar/2023 13:25:46] "GET /favicon.ico HTTP/1.1" 404 -
[*] WE GOT A HIT! Printing the output:
PARAM: GALX=SJLCkfgaqoM
PARAM: continue=https://accounts.google.com/o/oauth2/auth?zt=ChRsWFBwd2JmV1hIcDhtUFldzBENhIfVWsxSTdNLW9MdThibW1TMFQzVUZFc1BBaURuWmLRSQ%E2%88%
AUy4_qD7Hbfz38w8kxnaNouLcRiD3YTjX
PARAM: service=also
PARAM: dsh=-7381887106725792428
PARAM: _utf8=â
PARAM: bgrresponse=js_disabled
PARAM: pstMsg=1
PARAM: dnConn=
PARAM: checkConnection=
PARAM: checkedDomains=youtube
POSSIBLE USERNAME FIELD FOUND: Email=20BIT0238
POSSIBLE PASSWORD FIELD FOUND: Passwd=MUKU
PARAM: signIn=Sign+in
PARAM: PersistentCookie=yes
[*] WHEN YOU'RE FINISHED, HIT CONTROL-C TO GENERATE A REPORT.

127.0.0.1 - - [24/Mar/2023 13:25:54] "POST /ServiceLoginAuth HTTP/1.1" 302 -
```

GOOGLE DRIVE LINK(setoolkit victim post details captured)

https://drive.google.com/drive/folders/1v39kBkcz81LjFIHG3iyKWUI_ZD42eG2J?usp=sharing

2. Perform a Web application scan using Nessus on metasploitable ip and identify the vulnerabilities. The login snapshot should be shared. Export the report in a pdf format and share it in the google drive. (Date of the scan should be 7-3-23). (6 marks).

Player | || | 1 2 3 4 | Firefox | ↻

File Actions Edit View Help

AES_GCM : (KAT_Cipher) : Pass
AES_ECB_Decrypt : (KAT_Cipher) : Pass
RSA : (KAT_Signature) : RNG : (Continuous_RNG_Test) : Pass
Pass
ECDSA : (PCT_Signature) : Pass Docs ▶ Kali Forums ▶ Kali NetHunter ▶ Exploit-DB ▶ Google Hacking DB ▶ OffSec
ECDSA : (PCT_Signature) : Pass
DSA : (PCT_Signature) : Pass
TLS13_KDF_EXTRACT : (KAT_KDF) : Pass
TLS13_KDF_EXPAND : (KAT_KDF) : Pass
TLS12_PRF : (KAT_KDF) : Pass
PBKDF2 : (KAT_KDF) : Pass
SSHKDF : (KAT_KDF) : Pass
BHKDF : (KAT_KDF) : Pass
HKDF : (KAT_KDF) : Pass
SSKDF : (KAT_KDF) : Pass
X963KDF : (KAT_KDF) : Pass
X942KDF : (KAT_KDF) : Pass
HASH : (DRBG) : Pass
CTR : (DRBG) : Pass
HMAC : (DRBG) : Pass
DH : (KAT_KA) : Pass
ECDH : (KAT_KA) : Pass
RSA_Encrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
RSA_Decrypt : (KAT_AsymmetricCipher) : Pass
INSTALL PASSED

Unpacking Nessus Scanner Core Components ...

- You can start Nessus Scanner by typing /bin/systemctl start nessusd.service
- Then go to https://kali:8834/ to configure your scanner

(root㉿kali)-[~/home/kali/Downloads]
systemctl start nessusd.service

(root㉿kali)-[~/home/kali/Downloads]
systemctl status nessusd.service

● nessusd.service - The Nessus Vulnerability Scanner
 Loaded: loaded (/lib/systemd/system/nessusd.service; disabled; preset: disabled)
 Active: active (running) since Fri 2023-03-24 10:12:51 EDT; 10s ago
 Main PID: 8583 (nessus-service)
 Tasks: 18 (limit: 4615)
 Memory: 339.3M
 CPU: 13.194s
 CGroup: /system.slice/nessusd.service
 └─8583 /opt/nessus/sbin/nessus-service -q
 └─8584 nessusd -q

Mar 24 10:12:51 kali systemd[1]: Started The Nessus Vulnerability Scanner.

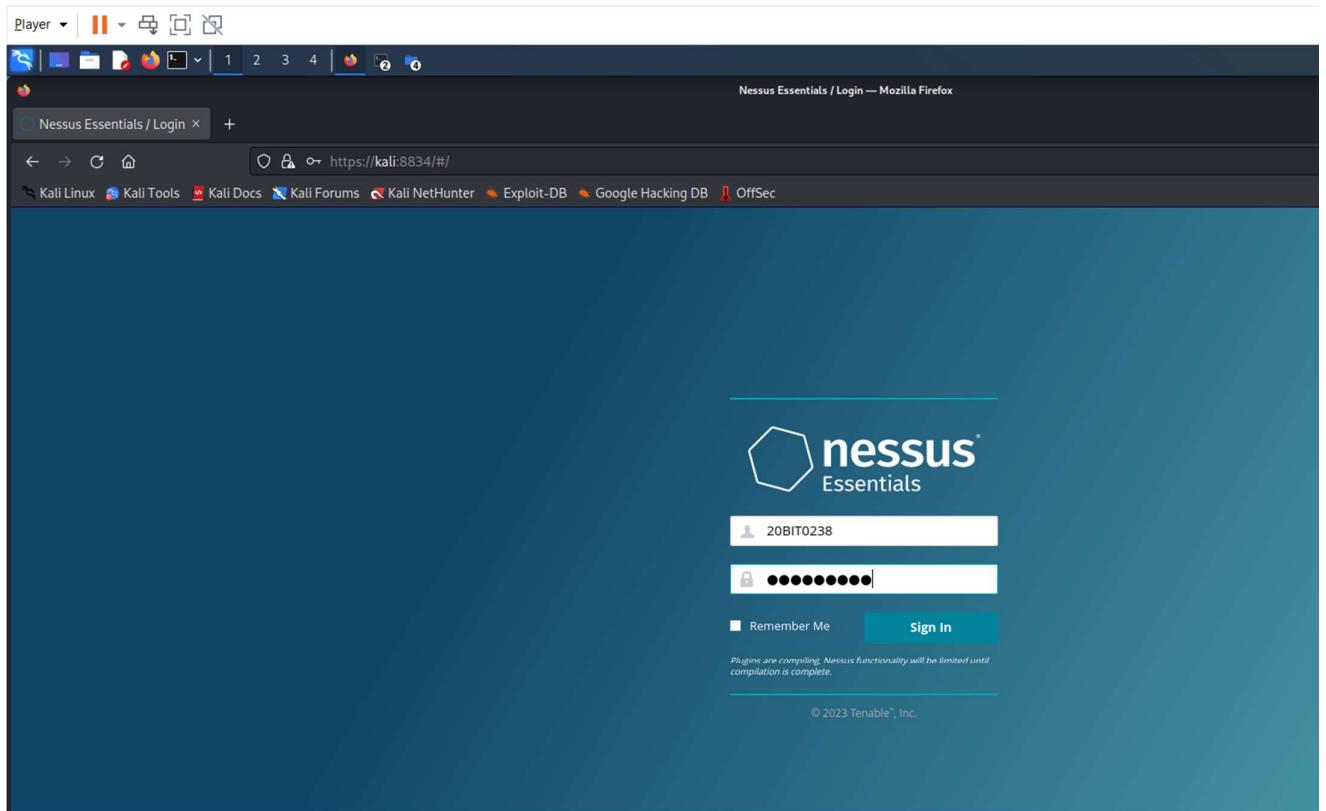
(root㉿kali)-[~/home/kali/Downloads]

root@kali:/home/kali/Downloads

nessus
Essentials

208/T0238

Remember Me Sign In



The screenshot shows the Nessus Essentials Scan Templates page. The URL in the address bar is https://kali:8834/#/scans/reports/new. The page has a dark theme with a sidebar on the left containing "My Scans", "All Scans", "Trash", "Policies", "Plugin Rules", and "Terrascan". The main area is titled "Scan Templates" and includes sections for "DISCOVERY" (Host Discovery), "VULNERABILITIES" (Basic Network Scan, Advanced Scan, Advanced Dynamic Scan, Malware Scan, Mobile Device Scan, Web Application Tests, Credentialed Patch), and "Tenable News" (Cybersecurity Snapshot: CISAA Pinpoints Vulnerabilities...). A message at the top right says "There's an error with your feed. Click here to view your license information." A note in the top right corner says "Plugins are doing their thing".

Nessus Essentials / Folders / My Scans — Mozilla Firefox

20BIT0238 - Google Search

Kali Linux Kali Tools Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB OffSec

There's an error with your feed. Click here to view your license information.

nessus

Scans Settings

FOLDERS My Scans 1 All Scans Trash

RESOURCES Policies Plugin Rules Terrascan

My Scans

Search Scans 1 Scan

Name Schedule Last Scanned

20BIT0238 On Demand Today at 10:24 AM

Tenable News

OpenAI's ChatGPT and GPT-4 Used as Lure in Phishin... Read More

29°C Partly cloudy

Search

7:54 PM 3/24/2023

Plugins are done compiling.

Import New Folder New Scan

Nessus Essentials / Folders / View Scan — Mozilla Firefox

20BIT0238 - Google Search

Kali Linux Kali Tools Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB OffSec

There's an error with your feed. Click here to view your license information.

nessus

Scans Settings

FOLDERS My Scans 1 All Scans Trash

RESOURCES Policies Plugin Rules Terrascan

20BIT0238

< Back to My Scans

Hosts 1 Vulnerabilities 1 History 1

Filter Search Hosts 1 Host

Host	Vulnerabilities
192.168.42.129	25

Scan Details

Policy: Web Application Tests
Status: Running
Severity Base: CVSS v3.0
Scanner: Local Scanner
Start: Today at 10:23 AM

Vulnerabilities

Critical
High
Medium
Low
Info

29°C Partly cloudy

Search

7:55 PM 3/24/2023

SCAN-RESULTS

SEVERITY	CVSS V3.0	VPR SCORE	PLUGIN	NAME
Critical	9.8	8.9	134862	Apache Tomcat AJP Connector Request Injection (Ghostcat)
Critical	9.8	5.9	125855	phpMyAdmin prior to 4.8.6 SQLi vulnerability (PMASA-2019-3)
High	8.8	8.9	70728	Apache PHP-CGI Remote Code Execution
High	8.8	7.4	19704	TWiki 'rev' Parameter Arbitrary Command Execution
High	7.5*	-	39469	CGI Generic Remote File Inclusion
High	7.5*	8.9	59088	PHP PHP-CGI Query String Parameter Injection Arbitrary Code Execution
High	7.5*	6.7	36171	phpMyAdmin Setup Script Configuration Parameters Arbitrary PHP Code Injection (PMASA-2009-4)
Medium	5.3	-	12085	Apache Tomcat Default Files
Medium	5.3	-	40984	Browsable Web Directories

GOOGLE-DRIVE LINK (nessus scan results - exported pdf uploaded)

https://drive.google.com/drive/folders/1v39kBkcz81LjFIHG3iyKWUI_ZD42eG2J?usp=sharing

3. Perform a search on Shodan to identify the list of devices using Apache and http port:443 in your birth city. If your city is not listed, then select the nearest city. [3 marks]

command: apache http port:443 city:mumbai

Create Account

Username
20bit0238

Password

Confirm Password

Email
deveban655@galcake.com

CREATE

apache http port:443 city:mumbai - Shodan Search — Mozilla Firefox

apache http port:443 city:mumbai

TOTAL RESULTS: 83,261

TOP ORGANIZATIONS

- Amazon Data Services India 56,092
- Amazon.com, Inc. 5,194
- GoDaddy.com, LLC 2,675
- Google LLC 1,983
- Linode 1,764
- More...

TOP PRODUCTS

- Apache httpd 75,788
- Apache Tomcat/Coyote JSP engine 870
- Apache Tomcat 298
- Sophos SSL VPN User Portal 80
- Nextcloud 57
- More...

TOP OPERATING SYSTEMS

- Windows 21
- Linux 1

View Report View on Map

Partner Spotlight: Looking for a place to store all the Shodan data? Check out Gravwell

301 Moved Permanently

SSL Certificate

Issued By:
- Common Name: Sectigo RSA Domain Validation Secure Server CA

Issued To:
- Common Name: cashpays.store

Supported SSL Versions:
TLSv1, TLSv1.1, TLSv1.2

Diffie-Hellman Fingerprint:
RFC3526/Oakley Group 14

HTTP/1.1 301 Moved Permanently

Date: Fri, 24 Mar 2023 14:37:05 GMT

Server: Apache/2.4.46 () OpenSSL/1.0.2k-fips PHP/7.2.34

Location: <https://www.13.127.60.126/>

Content-Length: 234

Content-Type: text/html; charset=iso-8859-1

HTTP/1.1 200 OK

Date: Fri, 24 Mar 2023 14:36:47 GMT

Server: Apache

X-Frame-Options: SAMEORIGIN

X-Page-Name: Home

X-From-Cache: False

Link: </assets/frappe/js/lib/jquery/jquery.min.js>; rel=preload; as=script,</assets/js/frappe.web

4. Perform an image forensics on exif.tools to gather meta data about the photo wherein you are present and provide information about the place, geo coordinates, date of photo captured etc. [2 marks]

Image



EXIF / File Metadata Viewer | https://exif.tools

EXIF.tools Upload File http://scan.this/url.pdf Get URL

EXIF.tools

A multimedia file metadata tool

EXIF.tools runs `exiftool` to extract all metadata about an uploaded or internet-located object. Exif.tools is not associated with Phil Harvey (the creator of `exiftool`) but is here to be a simple web-wrapper for the tool for online use. Questions/comments can be sent to me@luke.lol

View File Metadata via Upload

DSC00658.JPG

View File Metadata and HTTP Headers via URL

Get URL

Domain DNS and WHOIS

Metadata For DSC00658.JPG x 20bit028 - Search x +

EXIF.tools Upload File http://scan.this/url.pdf Get URL

DSC00658.JPG

File Metadata

File Type: Image/jpeg
Error: 0
Upload Size: 166730
exiftool:

Name	Value
ExifTool Version Number	12.25
File Name	php2ObtG5
Directory	/tmp
File Size	163 KiB
File Modification Date/Time	2023-03-24 14:42:51+00:00
File Access Date/Time	2023-03-24 14:42:51+00:00
File Inode Change Date/Time	2023-03-24 14:42:51+00:00
File Permissions	-rw-----
File Type	JPEG
File Type Extension	jpg

Metadata For 20230319_182740.jpg x 20bit028 - Search x +

https://exif.tools/upload.php

Create Date	2023-03-19 18:27:40.477
Date/Time Original	2023-03-19 18:27:40.477+04:00
Modify Date	2023-03-19 18:27:40.477+04:00
GPS Altitude	8 m Below Sea Level
GPS Latitude	25° 1' 11.94" N
GPS Longitude	55° 14' 42.04" E
Circle Of Confusion	0.006 mm
Field Of View	69.4 deg
Focal Length	5.4 mm (35 mm equivalent: 26.0 mm)
GPS Position	25° 1' 11.94" N, 55° 14' 42.04" E
	
Hyperfocal Distance	2.60 m
Light Value	9.0

26°C Mostly cloudy

Search

ENG IN 10:09 PM 3/24/2023