

CEGEP VANIER COLLEGE

CENTRE FOR CONTINUING EDUCATION

Cybersecurity

420- 950-VA

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Lab 7

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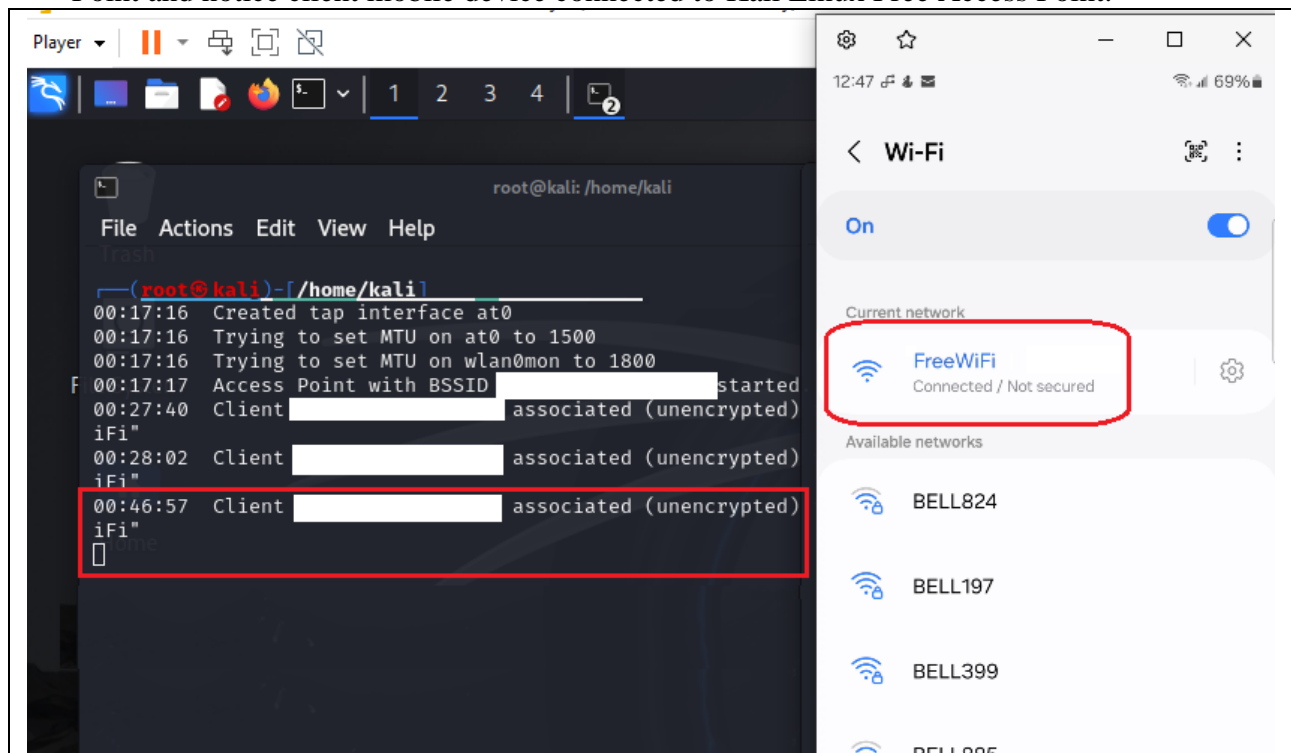
Lab 7: Wireless Security, XSS Attacks, Nessus Network Vulnerability Assessment & SQL Injection Attacks (Cont)

Complete all these following sections as explained in **class**. All *steps* were presented during class time.

Create and Submit a Word file *Lab7CybersecurityYourName.doc* which contains answers of Book Exercises and output screenshots for every project. Submit all Python scripts.

1. Wireless Security:

- Always prioritize the ethical and legal use of Free Access Point. Security tester can provide secured Wireless access point while hacker can configure free Unsecured Wireless access point as Rogue Access Point (Do not connect to unknown Free Wireless access point).**
- Do research and show steps toward creating **free Wireless access point** on Kali Linux as shown hereafter.
- Provide Internet access to mobile device wishing to connect to created Free Wireless Access Point and notice client mobile device connected to Kali Linux Free Access Point.



2. XSS Attacks in PortSwigger Web Security:

- Navigate to <https://portswigger.net/> and select the following XSS Attack labs to test different web application vulnerabilities as shown hereafter.

- b) Create a text file explaining all steps toward solving listed XSS attack labs in Web shopping application following the format shown in class.

Describe the problem:

Highlight the end goal:

Lay down the analysis:

- c) Provide Python scripting attacks for each XSS attack. Using Burp Suite proxy, you need to script the above attack using Python by sending appropriate http request and parsing the http response to display requested data if the XSS attack is successful.

Cross-site scripting

LAB APPRENTICE

Reflected XSS into HTML context with nothing encoded →

✓ Solved

```
(kali@kali) - [~/PythonSecurityProjects/XSS]
$ python3 Lab1XSSSwagger.py "https://0a33005c0496bc30840191a900d800eb.web-security-academy.net"
[+] XSS Attack Summary...
[+] XSS Attack successful!
```

LAB APPRENTICE

Stored XSS into HTML context with nothing encoded →

✓ Solved

```
(kali@kali) - [~/PythonSecurityProjects/XSS]
$ python3 Lab2XSSSwagger.py "https://0aaa00fb03b494e1811511d000520029.web-security-academy.net"
[+] XSS Attack Summary...
[+] XSS Attack successful!
```

LAB APPRENTICE

DOM XSS in document.write sink using source location.search →

✓ Solved

```
(kali@kali) - [~/PythonSecurityProjects/XSS]
$ python3 Lab3XSSSwagger.py "https://0a5000e2038c43f68168d4f900c200ad.web-security-academy.net"
[+] XSS Attack Summary...
[+] XSS Attack successful!
```

3. SQL Injection in PortSwagger Web Security:

- a) Navigate to <https://portswigger.net/> and select the following SQL injection labs to test different web application vulnerabilities.

LAB PRACTITIONER

SQL injection attack, querying the database type and version on Oracle →

✓ Solved

LAB PRACTITIONER

SQL injection attack, querying the database type and version on MySQL and Microsoft →

✓ Solved

LAB PRACTITIONER

SQL injection attack, listing the database contents on non-Oracle databases →

✓ Solved

- b) Create a text file explaining all steps toward solving above listed labs using SQL Injection UNION attacks in Web shopping application following the format shown in class.
Describe the problem:
Highlight the end goal:
Lay down the analysis:
- c) Provide Python scripting attacks for each SQL injection listed above. Using Burp Suite proxy, you need to script the above attack using Python by sending appropriate http request and parsing the http response to display requested data if the SQL Injection attack is successful.

LAB

PRACTITIONER

SQL injection attack, querying the database type and version on Oracle →

✓ Solved

```

.venv └─(.venv)─(kali@kali)─[~/PythonSecurityProjects/SQLInjection]
└─$ python3 Lab7Swagger.py "https://0a9000e03b6f78482ed388900c800fd.web-security-academy.net"
[+] Finding the Oracle database version ...
[+] Found the Database version
[+] The database version is Oracle Database 11g Express Edition Release 11.2.0.2.0 - 64bit Production

```

LAB

PRACTITIONER

SQL injection attack, querying the database type and version on MySQL and Microsoft →

✓ Solved

```

.venv └─(.venv)─(kali@kali)─[~/PythonSecurityProjects/SQLInjection]
└─$ python3 Lab8Swagger.py "https://0aa3000603529b29bdd00c63000f00c2.web-security-academy.net"
[+] Finding the MySQL database version ...
[+] The database version is 8.0.39-0ubuntu0.20.04.1

```

LAB

PRACTITIONER

SQL injection attack, listing the database contents on non-Oracle databases →

✓ Solved

```

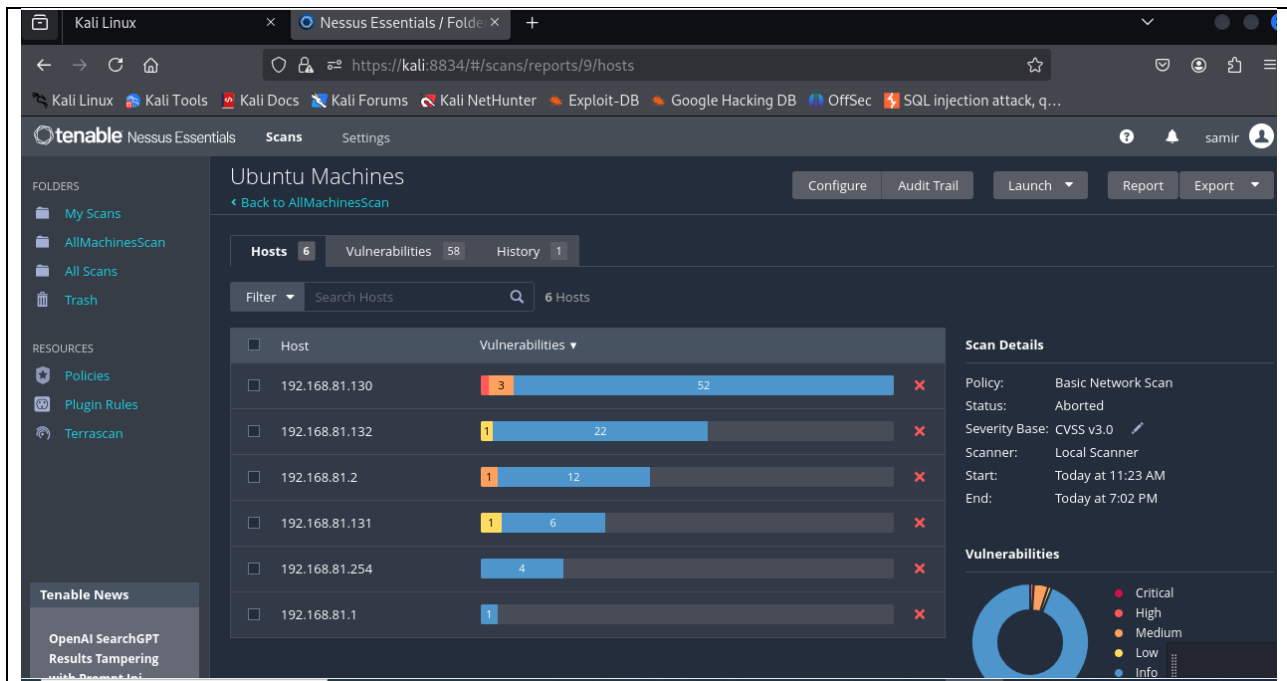
.venv └─(.venv)─(kali@kali)─[~/PythonSecurityProjects/SQLInjection]
└─$ python3 Lab9Swagger.py "https://0a02002f03d6bfe38014622a001d00e0.web-security-academy.net"
[+] Looking for users table ...
[+] Found users table name: users_glwseb
[+] Found username column: username_iwxmwq
[+] Found password column: password_usanqz
[+] Found admin password: lfmrillpnz2fz7t33ud4

```

4. Network Vulnerability Assessment Using Nessus:

- a) Install Nessus Essentials on Kali Linux as shown hereafter.

- b) Start VM Linux Ubuntu machines. Create new folder and scan all Linux machines available on your network using Basic Networking Scan feature.



- c) Save Scan report in pdf format as shown hereafter.

