AI for Cyber Security with IBM Qradar

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Q. What is burp suite and explain its features.

Burp Suite is a popular cybersecurity tool designed for web application security testing and penetration testing. Developed by PortSwigger, Burp Suite is widely used by security professionals, ethical hackers, and developers to identify and address security vulnerabilities in web applications. It provides a comprehensive set of features for web security assessment, including:

1. Scanning and Crawling: Burp Suite can crawl websites to discover all accessible pages and analyse the web application's structure. It helps identify various components, such as forms, links, and parameters.

2. Web Application Scanning: Burp Suite can automatically scan web applications for common security vulnerabilities, including SQL injection, Cross-Site Scripting (XSS), Cross-Site Request Forgery (CSRF), and more. It tests the application's inputs and behaviour to find potential security flaws.

3. Manual Testing: One of the key features of Burp Suite is its Proxy tool, which allows security professionals to intercept and modify web traffic between the browser and the web application. This enables manual testing of inputs, requests, and responses, making it easier to identify and exploit vulnerabilities.

4. Intruder: Burp Suite's Intruder tool facilitates automated attacks on web applications, helping identify vulnerabilities through various attack payloads and techniques. It can be used for tasks like brute force attacks, fuzzing, and parameter manipulation.

5. Repeater: The Repeater tool allows users to manipulate and replay individual HTTP requests, making it useful for testing specific functionalities and verifying the impact of changes on the application.

6. Sequencer: Burp Suite's Sequencer tool is used to analyse the randomness and quality of tokens or session identifiers, which can be crucial for understanding the security of authentication mechanisms.

7. Extensibility: Burp Suite can be extended using custom plugins and scripts. This extensibility allows security professionals to create their own tools or integrate with other security testing frameworks.

8. Reporting: After testing, Burp Suite generates detailed reports that highlight identified vulnerabilities, potential risks, and recommended remediation steps. These reports are valuable for communicating security findings to development and security teams.

Burp Suite is available in both free and commercial versions. The free version, known as "Burp Suite Community Edition," provides basic functionality and is often used by individuals for educational and personal purposes. The commercial version, "Burp Suite Professional," offers advanced features and is commonly used by organisations for professional security testing and assessment of their web applications.

It's important to note that Burp Suite should be used responsibly and within the boundaries of legal and ethical guidelines. Unauthorised and malicious use of such tools on websites and applications without proper authorization is illegal and unethical. Security professionals and ethical hackers should always obtain proper permissions before conducting security assessments using Burp Suite or similar tools.

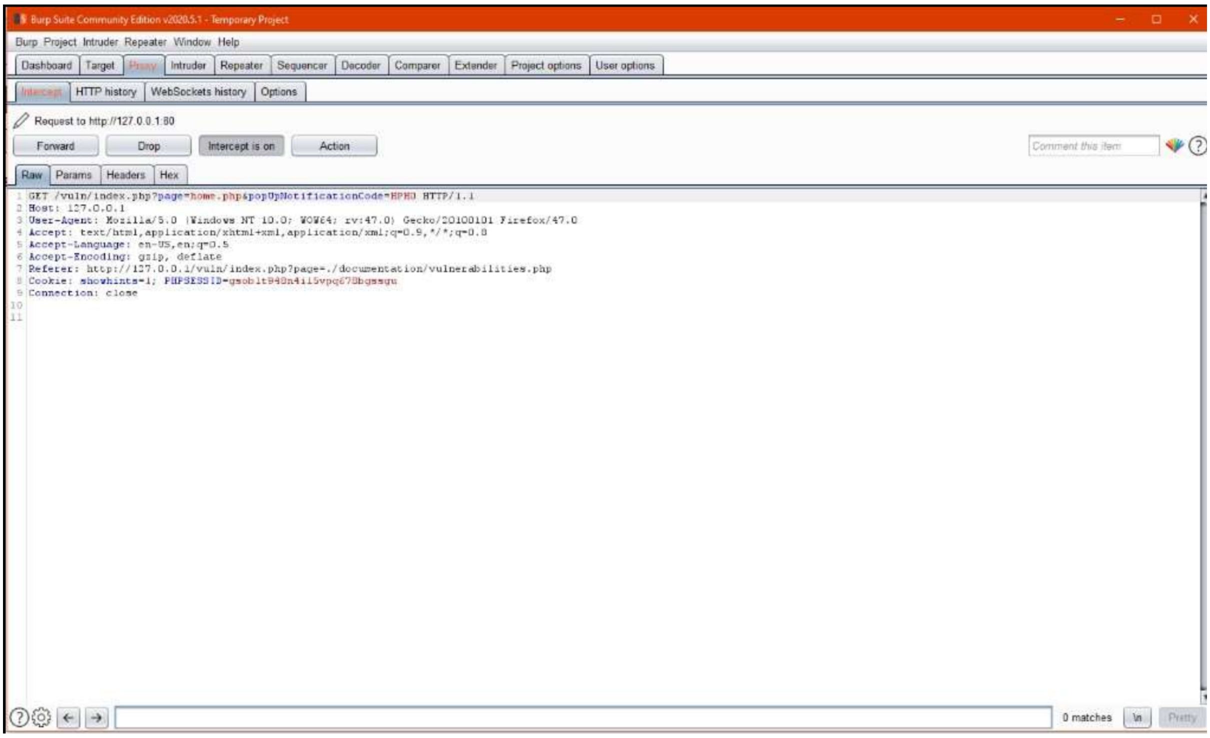
Test the vulnerabilities of testfire.net

Testing Environment:

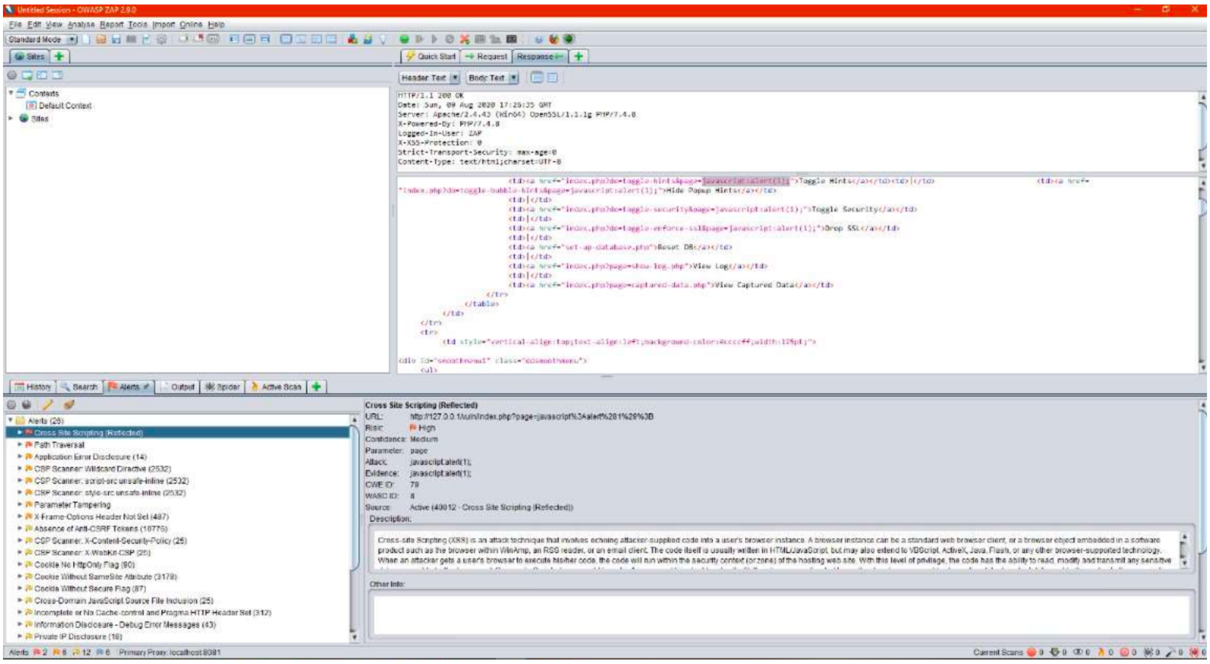
1. Altoro Mutual [demo.testfire.net]

Tools Used:

1. Burp Suite



2. OWASP Zap Vulnerability Scanner

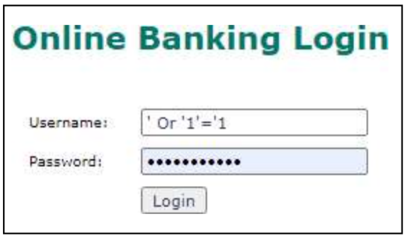


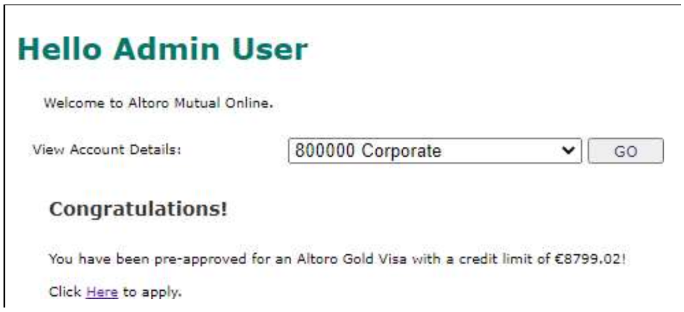
Location / URL - http://demo.testfire.net/login.jsp

Steps and Description:

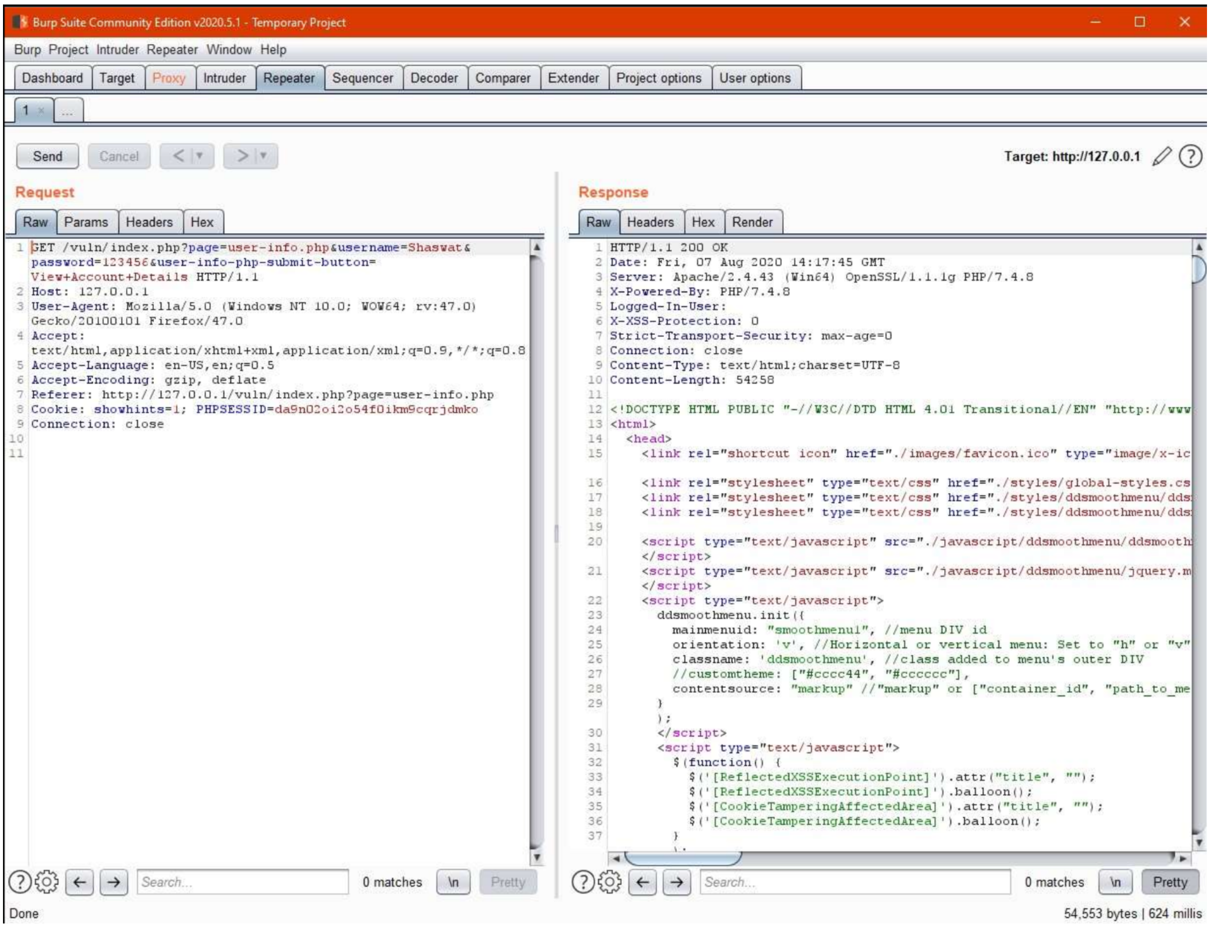
I was able to easily get through the login page of demo.testfire.net, accessible at http://demo.testfire.net/login.jsp by using the payload ' Or '1'='1.

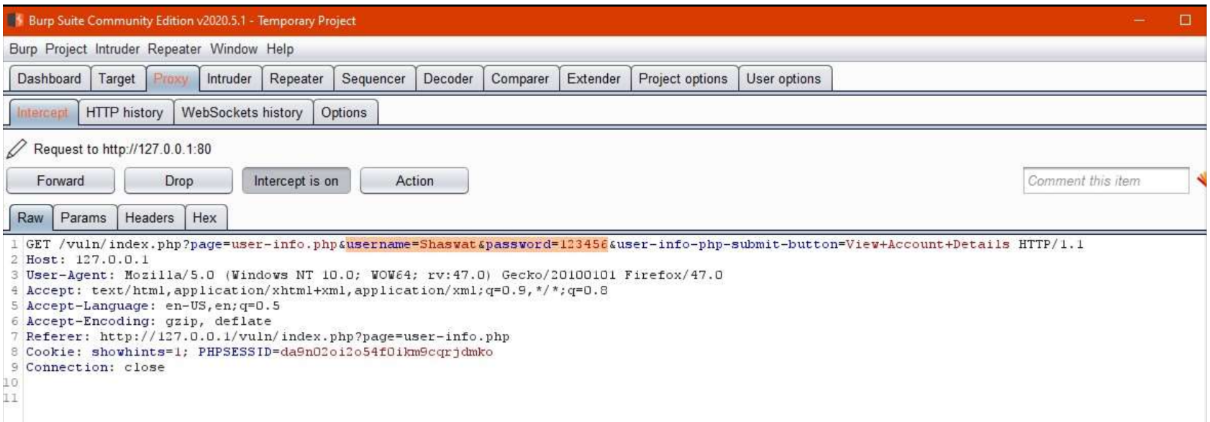
(Ignored the ' after the last character of the payload, as it was found as already being added by the web app.)





1. We take the request and forward it to the repeater.





Burp Suite Community Edition v2020.5.1 - Temporary Project
Burp Project Intruder Repeater Window Help
Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Extender Project options User options
Intercept HTTP history WebSockets history Options
Request to http://127.0.0.1:80
Forward
Drop
Intercept is on
Action
Comment this item
Raw Params Headers Hex
GET /vuln/index.php?page=user-info.php&username=Shaswat&password=123456&user-info-php-submit-button=View+Account+Details HTTP/1.1
Host: 127.0.0.1
User-Agent: Mozilla/5.0 (Windows NT 10.0; WOW64; rv:47.0) Gecko/20100101 Firefox/47.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Referer: http://127.0.0.1/vuln/index.php?page=user-info.php
Cookie: showhints=1; PHPSESSID=da9n02oi2o54f0ikm9cqrjdmko
Connection: close