



# V-Scanner

Web-based Assessment Tool For Web Applications

## Scan Report

July 10, 2022

### Summary

This document reports on the results of an automatic security scan. The scan started at 2022:07:10 14:50:15 and ended at 2022:07:10 14:50:51. The report first summarises the results found. Then, for target host, the report describes every issue found. Please consider the advice given in each description, in order to rectify the issue.

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# Results Overview

## High

This level indicates that an attacker can fully compromise the confidentiality, integrity, or availability of a system without specialized access, user interaction, or circumstances that are beyond the attacker's control. It is very likely that the attacker may be able to escalate the attack to the operating system and other systems.

## Medium

This level indicates that an attacker can partially compromise the confidentiality, integrity, or availability of a target system. They may need specialized access, user interaction, or circumstances that are beyond the attacker's control. Such vulnerabilities may be used together with other vulnerabilities to escalate an attack.

## Low

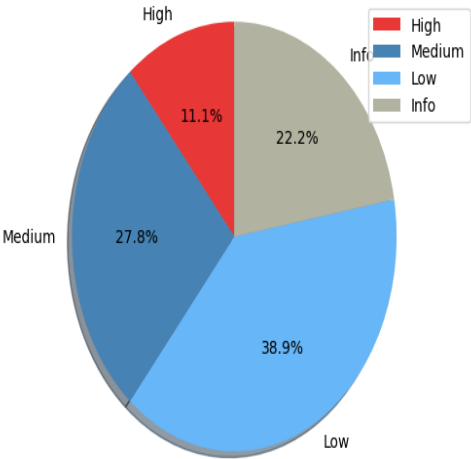
This level indicates that an attacker can compromise the confidentiality, integrity, or availability of a target system in a limited way. They need specialized access, user interaction, or circumstances that are beyond the attacker's control. To escalate an attack, such vulnerabilities must be used together with other vulnerabilities.

<https://ue.edu.pk>

### Overall risk level:

Low

### Issues Ratio:



### Scan Information:

Start Time: 2022:07:10 14:50:15  
Finish Time: 2022:07:10 14:50:51  
Scan Duration: 0 min, 35 sec  
Crawled Pages: 136  
Scan Status: **Finished**

# Results For Target

➔ 5.9.157.157 ➔ Headers

## Content-Security-Policy

### Description:

Control the loading of resources in a website and block any request that is intended for malicious or unknown resource.

### Result:

It was detected that target website is missing Content-Security-Policy header.

### Impact:

Absence of 'Content-Security-Policy' increases the chances of Cross-site Scripting (XSS) and other data injection attacks which lead to data theft, site defacement and malware distribution.

### Solution:

There can be various possible directives for Content-Security-Policy header and these vary according to the nature of the website. Here is a guide to find suitable directives for your website [Content-Security-Policy](#)

### Reference:

<https://developer.mozilla.org/en-US/docs/Web/HTTP/CSP>

## Strict-Transport-Security (HSTS)

### Description:

HSTS ensures that website will only be accessible over HTTPS, It protects the website from ssl-stripping attacks.

### Result:

It was detected that target website is missing Strict-Transport-Security header.

### Impact:

Absence of Strict-Transport-Security caused ssl-stripping which in turn leads to Man-in-the-middle (MITM) and other eavesdropping attacks that can result in data theft, credential stealing and payload delivery.

### Solution:

Recommended directive for HSTS is 'Strict-Transport-Security: max-age=expire-time'. There are also some other optional directives can be used with recommended directive. For detail guide check it out [Strict-Transport-Security](#)

### Reference:

<https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Strict-Transport-Security>

## X-Content-Type-Options

### Description:

X-Content-Type-Options header protect against MIME type sniffing attacks.

### Result:

It was detected that target website is using X-Content-Type-Options header.

### Reference:

<https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Content-Type-Options>

## X-Frame-Options

### Description:

X-Frame-Options header protect against attacks like ClickJacking or Frame Injection. It tells browser that whether it allowed to load the website in an iframe or not.

### Result:

It was detected that target website is using X-Frame-Options header.

### Reference:

<https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options>

## X-XSS-Protection

### Description:

X-XSS-Protection header protect against Cross-site Scripting (XSS) attacks. It enable XSS-filtering in the browser and block page from rendering if it contain any malicious javascript.

### Result:

It was detected that target website is using X-XSS-Protection header.

### Reference:

<https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-XSS-Protection>

# Results For Target

➡ 5.9.157.157 ➡ Vulnerabilities

## Cross-site Scripting (XSS)

### Description:

Cross-site scripting is a vulnerability that comes under the category of injections, it allows an attacker to compromise the interactions of the user with the vulnerable application. XSS ranked among one of the top 10 security risks by Owasp. [OWASP Top 10:2021](#)

### Result:

It was detected that target website is not vulnerable to XSS.

### Reference:

<https://www.acunetix.com/websitesecurity/cross-site-scripting/>

## SQL Injection (SQLi)

### Description:

SQL injection is one of the most notorious vulnerabilities still found in web applications, although it's a very old vulnerability still it is included in the top 10 most common web application vulnerabilities. SQLi ranked among one of the top 10 security risks by Owasp. [OWASP Top 10:2021](#)

### Result:

It was detected that target website is not vulnerable to SQL Injection.

### Reference:

<https://www.acunetix.com/websitesecurity/sql-injection/>

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## Cross-site Request Forgery (CSRF)

### Description:

This vulnerability forces users of the vulnerable application to perform unintended actions without their consent, it bypasses the same-origin policy which avoid different websites to interfere with each other. CSRF ranked among one of the top 10 security risks by Owasp. [OWASP Top 10:2021](#)

### Result:

It was detected that target website is vulnerable to Cross-site Request Forgery (CSRF).

### Impact:

By exploiting CSRF an attacker can perform actions like changing email, and password or making funds transfer by sending malicious requests to the application by the authenticated user without knowing about it.

### Solution:

Use anti-csrf tokens to mitigate the CSRF attacks. For securing cookies from CSRF, use Samesite directive in the Set-Cookie response header. For further detail check it out [CSRF Prevention](#).

### Reference:

<https://owasp.org/www-community/attacks/csrf>

Medium

Severity

Hard

Exploitability

95%

Confidence

## ClickJacking (Frame Injection)

### Description:

Clickjacking is an attack that fools users into thinking they are clicking on one thing when they are actually clicking on another. Users think they are using a web page's normal UI, but in fact there is a hidden UI in control; in other words, the UI has been redressed. When users click something they think is safe, the hidden UI performs a different action.

### Result:

It was detected that target website is not vulnerable to ClickJacking.

### Reference:

<https://owasp.org/www-community/attacks/Clickjacking>

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# Results For Target

➡ 5.9.157.157 ➡ Footprinting

Port	Status	Service	Banner
21	Open	FTP	220----- Welcome to Pure-FTPd [privsep] [TLS] ----- 220-You are user number 1 of 50 allowed. 220-Local time is now 14:50. Server port: 21. 220-This is a private system - No anonymous login 220-IPv6 connections are also welcome on this server. 220 You will be disconnected after 15 minutes of inactivity.
143	Open	IMAP2	* OK [CAPABILITY IMAP4rev1 SASL-IR LOGIN-REFERRALS ID ENABLE IDLE NAMESPACE LITERAL+ STARTTLS AUTH=PLAIN AUTH=LOGIN] Dovecot ready.
26	Open	NONE	None
53	Open	DOMAIN	None
80	Open	HTTP	None
25	Open	SMTP	None
465	Open	SUBMISSIONS	None
587	Open	SUBMISSION	None
443	Open	HTTPS	None
993	Open	IMAPS	None
3306	Open	MYSQL	None

Recommendation:  
Keep unnecessary ports close because open ports are like open doors for the attacker. An attacker can launch various attacks against services running on these open ports. For best practices set custom banner to the service running on each port so that attacker cant get an idea about the running service and its version. [More](#)

# Results For Target

➡ 5.9.157.157 ➡ Warnings

Name	Value	Warning
Framework	! Modernizr	Sensitive information is being leaked
Server	! Apache	Sensitive information is being leaked
Technology	! Twitter Bootstrap	Sensitive information is being leaked
Jquery	! 3.2.1	Outdated version detected
OS	! Unknown	Sensitive information is being leaked

Recommendation:

Above information help an attacker to build an effective attack against the target.

- Use HTTPS or HSTS to avoid MITM attacks and it will also improve target SEO as well. [More](#)
- Server field in the headers must not leak any useful information. Set custom value to Server field. [More](#)
- Any information related to underlying technology should be hidden. Set custom value in the headers (X-Powered-By) to hide the leakage. [More](#)
- Cookies must have safe flags in order to avoid cookie stealing attacks. Some recommended flags are Secure, HttpOnly and SameSite. [More](#)