## **OWASP ZAP**



### What is OWASP ZAP?

OWASP ZAP (Zed Attack Proxy) is a free, open-source web application security scanner maintained by the Open Web Application Security Project (OWASP). It's designed to help both beginners and professionals find security vulnerabilities in web applications during development and testing phases.

## **Objectives of the Test**

- ➤ Identify security vulnerabilities (e.g., SQL Injection, XSS).
- Evaluate the application's resistance to common web-based attacks.
- > Recommend security best practices to enhance protection.

### **OWASP ZAP Features:**

- Passive scanning (non-intrusive detection of vulnerabilities)
- Active scanning (more aggressive tests)
- Spidering (crawling site links automatically)
- Intercepting proxy (manually inspect and modify traffic)
- Report generation (HTML, XML, JSON, Markdown)



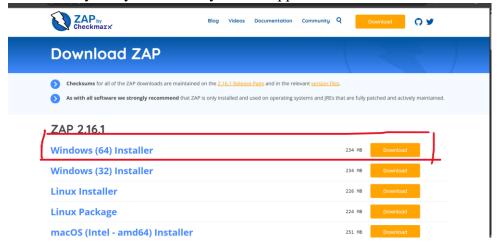
# **Testing Methodology**

Phase	Description
Passive Scan	Observed application behavior without sending malicious requests.
Spidering	Crawled the application to discover all reachable pages and input fields.
Active Scan	Simulated common attacks like XSS, SQL Injection, missing headers, etc.
Report Gen	Created a detailed report outlining discovered vulnerabilities.

## **Step-by-Step Guide to Use ZAP for Security Testing**

### 1. Install OWASP ZAP

- ✓ Download it from: https://www.zaproxy.org/download/
- ✓ Install it on your system like any normal application.

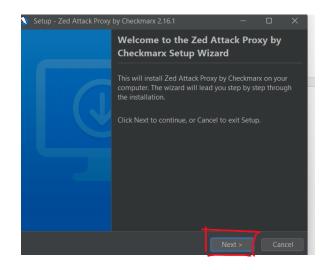


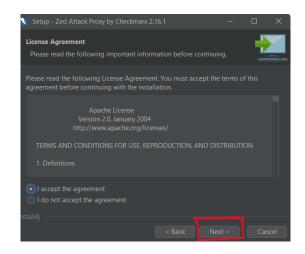
#### 2. Launch ZAP

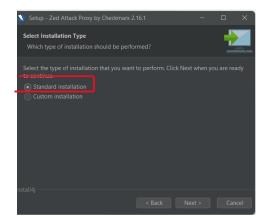
When zap is launching screen display like this

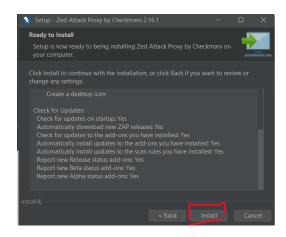


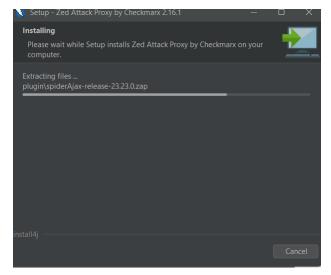
After launching screen display you will receive welcome screen









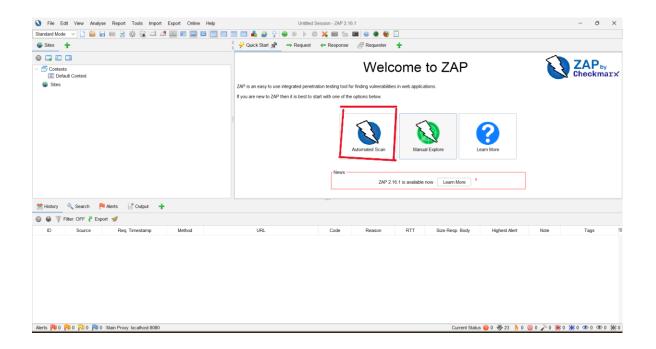


will display like this

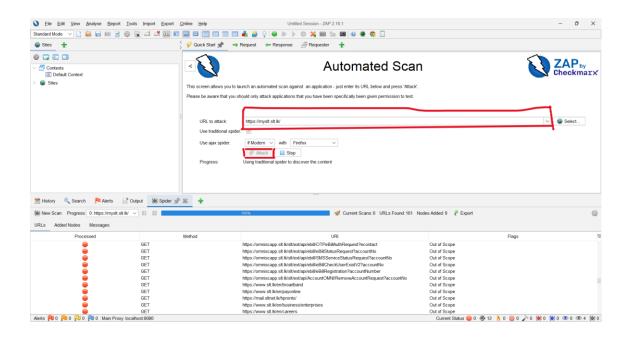
After finishing the launching screen



### Then Choose "Automated Scan"

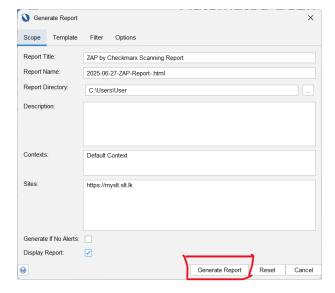


After enter the url & click on attack button . Then result will display below of the screen



### **ZAP Test Report Generation**

To generate test report click on report button & then you will receive screen like this .When you receive this screen click on **Generate Report button** .Then you will get report in new window



## Zap test report

## **Summaries**

#### Alert counts by risk and confidence

This table shows the number of alerts for each level of risk and confidence included in the report.

(The percentages in brackets represent the count as a percentage of the total number of alerts included in the report, rounded to one decimal place.)

		Confidence						
		User Confirmed	High	Medium	Low	Total		
	High	0	0	0	0	0		
		(0.0%)	(0.0%)	(0.0%)	(0.0%)	(0.0%)		
	Medium	0	1	0	0	1		
		(0.0%)	(12.5%)	(0.0%)	(0.0%)	(12.5%)		
	Low	0	2	1	1	4		
Risk		(0.0%)	(25.0%)	(12.5%)	(12.5%)	(50.0%)		
	Informational	0	0	1	2	3		
		(0.0%)	(0.0%)	(12.5%)	(25.0%)	(37.5%)		
	Total	0	3	2	3	8		
		(0.0%)	(37.5%)	(25.0%)	(37.5%)	(100%)		
		(0.0%)	(37.5%)	(25.0%)	(37.5%)	(100%		