## **Information Gathering & Web Enumeration Project**

## Objective

To perform information gathering and web enumeration on vulnerable web applications hosted on OWASP BWA using tools like Nikto, Nmap, Ping, Nslookup, Host, Google Dorks, WhatWeb, and Dirb.

#### **Tools Used**

- OWASP BWA (target VM)
- Kali Linux (attacker machine)
- Nikto
- Nmap
- Ping
- Nslookup
- Host
- Google Dorks
- WhatWeb
- Dirb

#### Lab Setup

- 1. Download and run OWASP BWA in VMware/VirtualBox using Bridged Adapter.
- 2. Find OWASP BWA IP using 'ip a' on BWA terminal.
- 3. Ensure Kali and OWASP BWA can ping each other.

#### **Project Steps**

## 1. Ping the Target

ping < OWASP-BWA-IP>

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#### 2. DNS Enumeration

a. Nslookup: nslookup <OWASP-BWA-IP>

b. Host Lookup: host <OWASP-BWA-IP>

## 3. Nmap Scan

a. Basic Scan: nmap -sS < OWASP-BWA-IP>

b. Aggressive: nmap -A <OWASP-BWA-IP>

c. Vulnerability: nmap --script vuln <OWASP-BWA-IP>

#### 4. WhatWeb Scan

whatweb http://<OWASP-BWA-IP>

#### 5. Directory Brute Forcing (Dirb)

dirb http://<OWASP-BWA-IP>

## 6. Vulnerability Scan with Nikto

nikto -h http://<OWASP-BWA-IP>

## 7. Google Dorks (Browser)

Examples:

- site:<target>
- inurl:admin
- intitle:index of

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- filetype:php

## **Deliverables**

- 1. Screenshots of each command and result.
- 2. Documented observations (open ports, web tech, dirs, vulnerabilities).
- 3. Final Report (.pdf or .docx):
- Introduction
- Methodology
- Tools Used
- Findings
- Conclusion

## **Bonus Tips**

- Use '-oN result.txt' with Nmap to save results.
- Compare results across tools.
- Add mitigation suggestions or charts if desired.