

# Penetration Testing Cheat Sheet 2024



## What is Penetration testing?

Penetration testing is a simulated cyberattack aimed at identifying and exploiting vulnerabilities in systems, networks, or applications to assess their security posture and resilience against real-world threats.

### Types of Penetration Tests:

**External Testing**  
Targets internet-visible assets like websites and servers.

**Internal Testing**  
Simulates internal threats, assessing potential damage.

**Web Application Testing**  
Identifies vulnerabilities in web apps, APIs, and servers.

**Wireless Testing**  
Evaluates WLAN security and related protocols (Bluetooth, ZigBee).

**Mobile Application Testing**  
Finds vulnerabilities in mobile apps on smartphones and tablets.

### When to Conduct a Penetration Test:

- After Significant Changes to Your IT Infrastructure
- Regularly Scheduled Intervals **(at least once annually)**
- In Response to New Threats
- Compliance Requirements
- Prior to Launch of New Services

### The 5 Stages of a Penetration Test:

1. **Reconnaissance:** Gather essential info about systems (Black, White, Grey Box Testing).

2. **Scanning:** Use tools to find vulnerabilities like open ports and services.

3. **Vulnerability Assessment:** Identify and analyze vulnerabilities using collected data.

4. **Exploitation:** Actively attempt to exploit identified vulnerabilities.

5. **Reporting:** Produce a detailed report with findings and recommendations.

## Essential Pen-Testing Tools:

**OP Innovate WASP**  
Continuous penetration testing with attack surface management (ASM).

**Network Scanning**  
Nmap, Wireshark, Aircrack-ng, Cobalt Strike

**Vulnerability Scanning**  
Nessus, OpenVAS.

**Social Engineering**  
Social Engineer Toolkit (SET).

**Password Cracking**  
John the Ripper, Hashcat.

**Exploitation Frameworks**  
Metasploit.

### OP Innovate’s Penetration Testing as a Service (PTaaS):

OP Innovate’s PTaaS offering combines expert manual penetration testing with cutting-edge automated testing and Attack Surface Management (ASM) to enable continuous security for applications.

With routine pen test sprints conducted by a CREST-certified offensive security team and the innovative WASP platform providing continuous scanning and reconnaissance, you can stay one step ahead of cyber threats while maximizing your resources.