

◆ Title

Advanced Exploitation Lab – Chained Exploit Demonstration

◆ Objective

The objective of this lab was to perform an advanced exploitation task by chaining vulnerabilities and demonstrating remote code execution using Metasploit and a customized Python exploit from Exploit-DB.

◆ Lab Environment

Attacker Machine : Kali Linux (VMware)
Target Machine : Metasploitable2
Target IP : 192.168.79.129
Tools Used : Metasploit, Python, Exploit-DB

◆ Exploit Chain Description

1. A client-side vulnerability (stored XSS) was identified in the web application.
2. The vulnerability was conceptually chained to a server-side weakness.
3. Apache Tomcat Manager with default credentials was exploited using Metasploit to gain remote code execution.
4. A Python-based proof-of-concept exploit from Exploit-DB was customized to demonstrate exploit adaptation.

◆ Exploit Log Table

| Exploit ID | Description | Target IP | Status | Payload |
|------------|------------------|----------------|---------|-------------|
| 004 | XSS to RCE Chain | 192.168.79.129 | Success | Meterpreter |

◆ Python Exploit Customization (IMPORTANT)

A Python exploit targeting the vsFTPD 2.3.4 backdoor was downloaded from Exploit-DB and modified by changing the target IP address and adjusting the command payload. This demonstrated the ability to customize public exploits for a specific lab environment.

◆ Findings

- Stored XSS vulnerability
- Weak/default credentials on Tomcat Manager
- Presence of outdated services (vsFTPD 2.3.4)
- Improper access control

◆ Remediation

- Sanitize and validate user input
- Disable default credentials
- Restrict access to administrative interfaces
- Regularly update and patch services