

ChoclataFactory_THM

Enumeration

We see many ports open which was perculiar so manually tried nc connect with each of them but no luck

We got the key which was required on question 1 from port 113 which disclosed us the filename of the key present on webserver this port disclosed us that key is on http://localhost:/key_rev_key so i visted this on web server and downloaded the key.

THen i used strings command with this file which gave us a name and key

Now on ftp server we got a picture which contained hidden contents

Cracked the passphrase using stegseek and got a base64 output

This was basically contents of /etc/passwd and /etc/shadow mixed

We got hash for user Charlie

We got Charlie password which is cn7824

We try ssh with it but doesnt work. We then login web form with this and there we have a web shell already. we enumerate the machine from webshell and find a private key in charlies home directory

We login as charlie using that key

NMAP

```
nmap -p21,22,80,100-125 -sS -sV -A -T4 10.10.102.226
Starting Nmap 7.91 ( https://nmap.org ) at 2021-04-18 06:51 EDT
Nmap scan report for 10.10.102.226
Host is up (0.43s latency).

PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 3.0.3
|_auth-owners: ERROR: Script execution failed (use -d to debug)
|ftp-anon: Anonymous FTP login allowed (FTP code 230)
|_rw-rw-r-- 1 1000 1000 208838 Sep 30 2020 gum_room.jpg
|ftp-syst:
|STAT:
|FTP server status:
|Connected to ::ffff:10.4.30.255
|Logged in as ftp
|TYPE: ASCII
|No session bandwidth limit
|Session timeout in seconds is 300
|Control connection is plain text
|Data connections will be plain text
|At session startup, client count was 1
|vsFTPD 3.0.3 - secure, fast, stable
|_End of status
22/tcp    open  ssh          OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
|_auth-owners: ERROR: Script execution failed (use -d to debug)
|ssh-hostkey:
|2048 16:31:bb:b5:1f:cc:cc:12:14:8f:f0:d8:33:b0:08:9b (RSA)
|256 e7:1f:c9:db:3e:aa:44:b6:72:10:3c:ee:db:1d:33:90 (ECDSA)
|_256 b4:45:02:b6:24:8e:a9:06:5f:6c:79:44:8a:06:55:5e (ED25519)
80/tcp    open  http         Apache httpd 2.4.29 ((Ubuntu))
|_http-server-header: Apache/2.4.29 (Ubuntu)
|_http-title: Site doesn't have a title (text/html).
```



```
| GenericLines, NULL:  
| "Welcome to chocolate room!!  
| _____.  
| :.'_____. \r  
| _:\x20 |:. \x20 ____ \r  
| \'_____.\_\' \x20 ____ \r  
| \'_\x20_\';-----  
| \|_____;  
| small hint from Mr.Wonka : Look somewhere else, its not here! ;)  
| hope you wont drown Augustus"
```

```

119/tcp open  nntp?
|_auth-owners: ERROR: Script execution failed (use -d to debug)
| fingerprint-strings:
|   GenericLines, NULL:
|     "Welcome to chocolate room!!
|
|     _._.'-----'.
|     .'._____.',. ____ _\r
|     _:\x20 |:.\x20 ____\r
|     \'_____._.|\'.\x20 ____\r
|     \'_____\x20_';-----'.
|
|     \|_____;_____
|
| small hint from Mr.Wonka : Look somewhere else, its not here! ;)
| hope you wont drown Augustus"

```

```

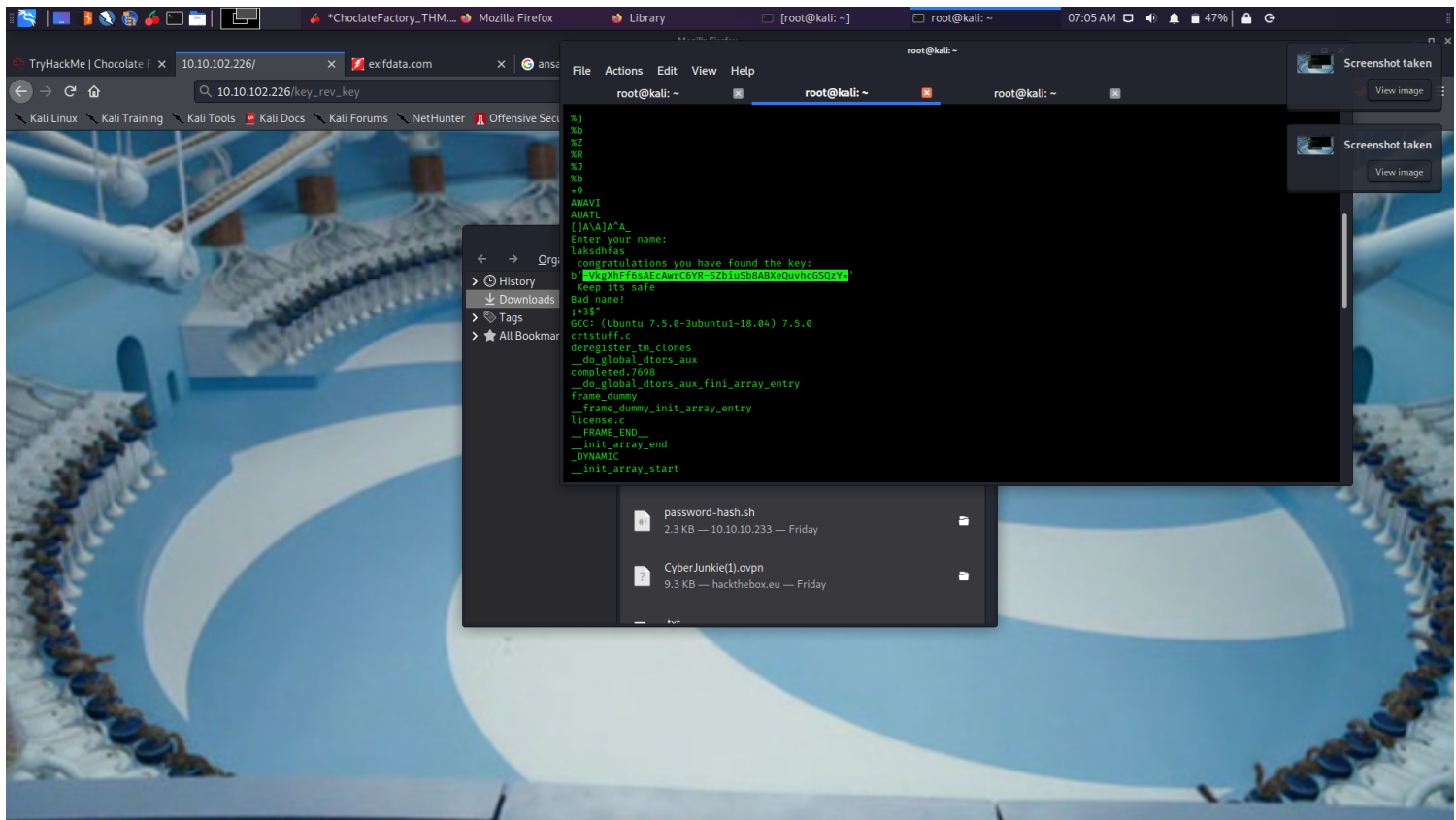
121/tcp open  erpc?
|_auth-owners: ERROR: Script execution failed (use -d to debug)
| fingerprint-strings:
|   GenericLines, NULL:
|     "Welcome to chocolate room!!
|
|     _____
|     .'_____.', . ____ \r
|     _:\x20 |:.\x20 ____ \r
|     \'_____.', _|\x20 ____ \r
|     \'_____\x20_';-----
|
|     \|_____ ; _____|
|
|     small hint from Mr.Wonka : Look somewhere else, its not here! ;)
|
|     hope you wont drown Augustus"

```


#

Key(Leaked port113)

We got the key which was required on question 1 from port 113 which disclosed us the filename of the key present on webserver this port disclosed us that key is on http://localhost:/key_rev_key so i visted this on web server and downloaded the key. Then i used strings command with this file which gave us a name and key



#

Exploitation

Post Exploitation

After LOGging as charlie with his private key we look to esclate our priveleges

Sudo -l showed us that we can utilise vi editor as root ,without passwd

```
# We spawn a interactive shell on vi by
vi
:set shell=/bin/sh
:shell
```

Now we visit root folder and see that w=instead of a flag we have a python file

Upon reading the code it basically is a decrypting file which decrypts a encrypted text based on our given key

Now remmeber we got a key in start of enumeration so we input that key and get our flag

tss:*.18382:0:99999:7:::
shellinabox:*.18382:0:99999:7:::
strongswan:*.18382:0:99999:7:::
ntp:*.18382:0:99999:7:::
messagebus:*.18382:0:99999:7:::
arpwatch:!.18382:0:99999:7:::
Debian-exim:!.18382:0:99999:7:::
uuid:*.18382:0:99999:7:::
debian-tor:*.18382:0:99999:7:::
redsocks:!.18382:0:99999:7:::
freerad:*.18382:0:99999:7:::
iodine:*.18382:0:99999:7:::
tcpdump:*.18382:0:99999:7:::
miredo:*.18382:0:99999:7:::
dnsmasq:*.18382:0:99999:7:::
redis:*.18382:0:99999:7:::
usbmux:*.18382:0:99999:7:::
rtkit:*.18382:0:99999:7:::
sshd:*.18382:0:99999:7:::
postgres:*.18382:0:99999:7:::
avahi:*.18382:0:99999:7:::
stunnel4:!.18382:0:99999:7:::
ssllh:!.18382:0:99999:7:::
nm-openvpn:*.18382:0:99999:7:::
nm-openconnect:*.18382:0:99999:7:::
pulse:*.18382:0:99999:7:::
saned:*.18382:0:99999:7:::
inetsim:*.18382:0:99999:7:::
colord:*.18382:0:99999:7:::
i2psvc:*.18382:0:99999:7:::
dradis:*.18382:0:99999:7:::
beef-xss:*.18382:0:99999:7:::
geoclue:*.18382:0:99999:7:::
lightdm:*.18382:0:99999:7:::
king-phisher:*.18382:0:99999:7:::
systemd-coredump:!:18396::::::
_rpc:*.18451:0:99999:7:::
statd:*.18451:0:99999:7:::
_gvm:*.18496:0:99999:7:::
charlie:\$6\$CZjnCPeQWp9/jpNx\$khGIFdICJnr8R3JC/JTR2r7DrbFLp8zq8469d3c0.zuKN4se61F0bwWGxcHZqO2RJHkkL1jjPYeeGyIJWE82X/-
18535:0:99999:7:::

Charlie Credentials

charlie:cn7824

These credentials are not for ssh but for web form

CHarlie private key

-----BEGIN RSA PRIVATE KEY-----
MIIEowIBAAKCAQEA4adrPc3Uh98RYDrZ8CUBDgWLENUybF60IMk9YQOBDR+gpuRW
1AzL12K35/Mi3Vwtp0NSwmIS7ha4y9sv2kPXv8IFOmLi1FV2hqlQPLw/unnEFwUb
L4KBqBemIDefV5pxMmCqgguJXlkzklAIXNYhfxLr8cBS/HJoh/7qmLqrDoXNhwYj
B3zgov7RUtk15Jv11D0ltsyr54pvYhCQgdoorU7I42EZJaylomHKon1jkofd1/oY
fOBWgz6JOINH1jFJoylZg2OmEhnSjUltZ9mSzmQyv3M4AORQo3ZeLb+zbnSjycEE
RaObPIb0dRy3KoN79lt+dh+jSg/dM/TYye5L4wIDAQABAoIBAD2TzjQDYyfgu4Ej
Di32Kx+Ea7qgMy5XebfQYquCpUjLhK+GSBt9knKoQb9OHgmCCgNG3+Klkzfdg3g9
zAUUn1kxDxFx2d6ex2rJMqdSpGkrx5HwlsaUOoWATpkkFjt3TcSNIITquQVDe4tF
w8JxvJpMs445CWxSXcWgaCxdZCiF33C0CtVw6zvOdF6MoOimVZf36UkXI2FmdZF
Ikr7MGsagAwRn1moCvQ7INpYcqDDNf6jKnX5Sk83R5bVAAjV6ktZ9uEN8NltM/ppZ
j4PM6/IIPw2jQ8WzUoi/JG7aXjnBE4bm53qo2B4oVu3PihZ7tKkLZq3Oclrrkbn2
EY0ndcECgYEA/29MMD3FEYcMCy+KQfEU2h9manqQmRMDDaBHKajq20KvGvnT1U/T

RcbPNBaQMoSj6YrVhvgY3xtEdEHhBJO5qnq8TsLaSovQZxDifaGTaLaWgswc0biF
uAKE2uKcpVCTSeWbjyNewwTljhV9mMyn/piAtRIGXkzeyZ9/muZdtesCgYEA4idA
KuEj2FE7M+MM/+ZeIZvLjKSNbiYYUPuDcsoWYxQCp0q8HmtjyAQizKo6DIXIPCCQ
RZSvmU1T3nk9MoTgDjkNO1xxbF2N7ihnBkHjOffod+zkNQbvzIDa4Q2owpeHZL19
znQV98mrRaYDb5YsaEj0YoKfb8xhZJPyEb+v6+kCgYAZwE+vAVsvtCyrqARJN5PB
la7Oh0Kym+8P3Zu5fI0lw8VBc/Q+KgkDnNJgzvGEIkiSD7oNHFKMmYQiMEtvE7GB
FVSMoCo/n67H5TTgM3zX7qhn0UoKfo7EiUR5iKUAKYpfxnTKUk+IW6ME2vfjgsBg
82DuYPjultPHAdRsellYNwKBgH77Rv5MI9HYGoPR0vTEpwRhI/N+WaMIZLXj4zTK
37MWAz9nqSTza31dRSTh1+NAq0OHjTpkeAx97L+YF5KMJTbXMqTIDS+pgA3fRamv
ySQ9XJwpuSFFGdQb7co73ywT5QPdmgwYBIWxOKfMxVUcXybW/9FoQpmFipHsuBjb
Jq4xAoGBAIQnMPLpKqBk/ZV+HXmdJYSrf2MACWwL4pQO9bQUeta0rZA6iQwvLrkM
Qxg3IN2/1dnebKK5IEd2qFP1WLQUJqypo5TznXQ7tv0Uuw7o0cy5XNMFVwn/BqQm
G2QwOAGbsQHcl0P19XgHTOB7Dm69rP9j1wIRBOF7iGfwhWdi+vln
-----END RSA PRIVATE KEY-----

#

flags

User Flag

flag{cd5509042371b34e4826e4838b522d2e}

Root Flag

flag{cec59161d338fef787fcb4e296b42124}