

```
File Actions Edit View Help
GNU nano 7.2 config.inc.php *
<?php
# If you are having problems connecting to the MySQL database and all of the variables below are correct
# try changing the 'db_server' variable from localhost to 127.0.0.1. Fixes a problem due to sockets.
# Thanks to @digininja for the fix.

# Database management system to use
$dbms = 'MySQL';
# $dbms = 'PGSQL'; // Currently disabled

# Database variables
# WARNING: The database specified under db_database WILL BE ENTIRELY DELETED during setup.
# Please use a database dedicated to DVWA.

# If you are using MariaDB then you cannot use root, you must use create a dedicated DVWA user.
# See README.md for more information on this.
$_DVWA[ 'db_server' ] = getenv( 'DB_SERVER' ) ? '127.0.0.1';
$_DVWA[ 'db_database' ] = 'dvwa';
$_DVWA[ 'db_user' ] = 'kali';
$_DVWA[ 'db_password' ] = 'kali!';
$_DVWA[ 'db_port' ] = '3306';

# ReCAPTCHA settings
# Used for the 'Insecure CAPTCHA' module
# You'll need to generate your own keys at: https://www.google.com/recaptcha/admin
$_DVWA[ 'recaptcha_public_key' ] = '';
$_DVWA[ 'recaptcha_private_key' ] = '';

# Default security level
# Default value for the security level with each session.
# The default is 'impossible'. You may wish to set this to either 'low', 'medium', 'high' or impossible'.
$_DVWA[ 'default_security_level' ] = 'impossible';

# Default locale
# Default locale for the help page shown with each session.
# The default is 'en'. You may wish to set this to either 'en' or 'zh'.
$_DVWA[ 'default_locale' ] = 'en';

# Disable authentication
# Some tools don't like working with authentication and passing cookies around
# so this setting lets you turn off authentication.
$_DVWA[ 'disable_authentication' ] = false;

define( 'MYSQL', 'mysql' );
define( 'SQLITE', 'sqlite' );

# SQLi DB Backend
# Use this to switch the backend database used in the SQLi and Blind SQLi labs.
# This does not affect the backend for any other services, just these two labs.
# If you do not understand what this means, do not change it.
$_DVWA[ 'SQLI_DB' ] = MYSQL;
$_DVWA[ 'SQLITE_DB' ] = SQLITE;
$_DVWA[ 'SQLITE_DB' ] = 'sqlite.db';

?>

~C Help ~O Write Out ~W Where Is ~K Cut ~T Execute ~G Location ~M-U Undo ~M-A Set Mark
~X Exit ~R Read File ~N Replace ~P Paste ~J Justify ~V Go To Line ~M-E Redo ~M-C Copy

-rwxrwxrwx 1 root root 191 Feb 6 08:41 security.txt
-rwxrwxrwx 1 root root 3251 Feb 6 08:41 setup.php
drwxrwxrwx 2 root root 4096 Feb 6 08:41 tests
drwxrwxrwx 18 root root 4096 Feb 6 08:41 vulnerabilities

(root@kali)-[/var/www/html/DVWA]
# cd config
(root@kali)-[/var/www/html/DVWA/config]
# nano config.inc.php.dist
(root@kali)-[/var/www/html/DVWA/config]
# cp config.inc.php.dist config.inc.php
(root@kali)-[/var/www/html/DVWA/config]
# nano config.inc.php
(root@kali)-[/var/www/html/DVWA/config]
# service mysql start

(root@kali)-[/var/www/html/DVWA/config]
# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 31
Server version: 10.11.5-MariaDB-3 Debian n/a

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```

```
root@kali: /etc/php/8.2/apache2
File Actions Edit View Help
mysql -u root -p
Enter password:
Welcome to the MariaDB monitor. Commands end with ; or \g.
Your MariaDB connection id is 31
Server version: 10.11.5-MariaDB-3 Debian n/a

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> create user 'kali'@'127.0.0.1' identified by 'kali';
Query OK, 0 rows affected (0.004 sec)

MariaDB [(none)]> grant all privileges on dvwa.* to 'kali'@'127.0.0.1' identified by 'kali';
Query OK, 0 rows affected (0.002 sec)

MariaDB [(none)]> exit
Bye

root@kali) [/var/www/html/DVWA/config]
service apache2 start

root@kali) [/var/www/html/DVWA/config]
service apache2 status
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; disabled; preset: disabled)
   Active: active (running) since Tue 2024-02-06 10:00:01 EST; 26s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 558974 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 558990 (apache2)
     Tasks: 6 (limit: 6902)
    Memory: 19.6M
       CPU: 105ms
   CGroup: /system.slice/apache2.service
           └─558990 /usr/sbin/apache2 -k start
             └─558993 /usr/sbin/apache2 -k start
               └─558994 /usr/sbin/apache2 -k start
                 └─558995 /usr/sbin/apache2 -k start
                   └─558996 /usr/sbin/apache2 -k start
                     └─558997 /usr/sbin/apache2 -k start

Feb 06 10:00:01 kali systemd[1]: Starting apache2.service - The Apache HTTP Server ...
Feb 06 10:00:01 kali apachectl[558989]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, usi
Feb 06 10:00:01 kali systemd[1]: Started apache2.service - The Apache HTTP Server.
... skipping ...
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; disabled; preset: disabled)
   Active: active (running) since Tue 2024-02-06 10:00:01 EST; 26s ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 558974 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 558990 (apache2)
     Tasks: 6 (limit: 6902)
    Memory: 19.6M
       CPU: 105ms
   CGroup: /system.slice/apache2.service
           └─558990 /usr/sbin/apache2 -k start
             └─558993 /usr/sbin/apache2 -k start
               └─558994 /usr/sbin/apache2 -k start
                 └─558995 /usr/sbin/apache2 -k start
                   └─558996 /usr/sbin/apache2 -k start
                     └─558997 /usr/sbin/apache2 -k start
```

Setup :: Damn Vulnerable

127.0.0.1/DVWA/setup.php

Kali LinuxKali ToolsKali DocsKali ForumsKali NetHunterExploit-DBGoogle Hacking DBOffSec

Setup DVWA

Instructions

About

## Database Setup

Click on the 'Create / Reset Database' button below to create or reset your database.  
If you get an error make sure you have the correct user credentials in: `/var/www/html/DVWA/config/config.inc.php`

If the database already exists, **it will be cleared and the data will be reset**.  
You can also use this to reset the administrator credentials ("**admin**" // **password**") at any stage.

### Setup Check

Web Server SERVER\_NAME: 127.0.0.1

Operating system: **\*nix**

PHP version: **8.2.10**  
PHP function display\_errors: **Disabled**  
PHP function display\_startup\_errors: **Disabled**  
PHP function allow\_url\_include: **Enabled**  
PHP function allow\_url\_fopen: **Enabled**  
PHP module gd: **Missing - Only an issue if you want to play with captchas**  
PHP module mysql: **Installed**  
PHP module pdo\_mysql: **Installed**

Backend database: **MySQL/MariaDB**  
Database username: **kali**  
Database password: **\*\*\*\*\***  
Database database: **dvwa**  
Database host: **127.0.0.1**  
Database port: **3306**

reCAPTCHA key: **Missing**

Writable folder `/var/www/html/DVWA/hackable/uploads/`: **Yes**  
Writable folder `/var/www/html/DVWA/config/`: **Yes**

**Status in red**, indicate there will be an issue when trying to complete some modules.

If you see disabled on either `allow_url_fopen` or `allow_url_include`, set the following in your `php.ini` file and restart Apache.

```
allow_url_fopen = On
allow_url_include = On
```

These are only required for the file inclusion labs so unless you want to play with those, you can ignore them.

Create / Reset Database

[Home](#)[Instructions](#)[Setup / Reset DB](#)[Brute Force](#)[Command Injection](#)[CSRF](#)[File Inclusion](#)[File Upload](#)[Insecure CAPTCHA](#)[SQL Injection](#)[SQL Injection \(Blind\)](#)[Weak Session IDs](#)[XSS \(DOM\)](#)[XSS \(Reflected\)](#)[XSS \(Stored\)](#)[CSP Bypass](#)[JavaScript](#)[Authorisation Bypass](#)[Open HTTP Redirect](#)[DVWA Security](#)[PHP Info](#)[About](#)[Logout](#)

## Welcome to Damn Vulnerable Web Application!

Damn Vulnerable Web Application (DVWA) is a PHP/MySQL web application that is damn vulnerable. Its main goal is to be an aid for security professionals to test their skills and tools in a legal environment, help web developers better understand the processes of securing web applications and to aid both students & teachers to learn about web application security in a controlled class room environment.

The aim of DVWA is to **practice some of the most common web vulnerabilities**, with **various levels of difficulty**, with a simple straightforward interface.

### General Instructions

It is up to the user how they approach DVWA. Either by working through every module at a fixed level, or selecting any module and working up to reach the highest level they can before moving onto the next one. There is not a fixed object to complete a module; however users should feel that they have successfully exploited the system as best as they possible could by using that particular vulnerability.

Please note, there are **both documented and undocumented vulnerability** with this software. This is intentional. You are encouraged to try and discover as many issues as possible.

There is a help button at the bottom of each page, which allows you to view hints & tips for that vulnerability. There are also additional links for further background reading, which relates to that security issue.

### WARNING!

Damn Vulnerable Web Application is damn vulnerable! **Do not upload it to your hosting provider's public html folder or any Internet facing servers**, as they will be compromised. It is recommend using a virtual machine (such as [VirtualBox](#) or [Vmware](#)), which is set to NAT networking mode. Inside a guest machine, you can download and install [XAMPP](#) for the web server and database.

### Disclaimer

We do not take responsibility for the way in which any one uses this application (DVWA). We have made the purposes of the application clear and it should not be used maliciously. We have given warnings and taken measures to prevent users from installing DVWA on to live web servers. If your web server is compromised via an installation of DVWA it is not our responsibility it is the responsibility of the person/s who uploaded and installed it.

### More Training Resources

DVWA aims to cover the most commonly seen vulnerabilities found in today's web applications. However there are plenty of other issues with web applications. Should you wish to explore any additional attack vectors, or want more difficult challenges, you may wish to look into the following other projects:

- [Mutillidae](#)
- [OWASP Vulnerable Web Applications Directory](#)



Username

Password

Dashboard Target Proxy Intruder Repeater Collaborator Sequencer Decoder Comparer Logger Organizer Extensi

Intercept HTTP history WebSockets history Proxy settings

Request to http://127.0.0.1:80

Forward Drop Intercept is on Action Open browser Add not

Pretty Raw Hex

```
1 POST /DVWA/login.php HTTP/1.1
2 Host: 127.0.0.1
3 Content-Length: 88
4 Cache-Control: max-age=0
5 sec-ch-ua: "Chromium";v="119", "Not?A_Brand";v="24"
6 sec-ch-ua-mobile: ?0
7 sec-ch-ua-platform: "Linux"
8 Upgrade-Insecure-Requests: 1
9 Origin: http://127.0.0.1
10 Content-Type: application/x-www-form-urlencoded
11 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
    Chrome/119.0.6045.159 Safari/537.36
12 Accept:
    text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/si
    gned-exchange;v=b3;q=0.7
13 Sec-Fetch-Site: same-origin
14 Sec-Fetch-Mode: navigate
15 Sec-Fetch-User: ?1
16 Sec-Fetch-Dest: document
17 Referer: http://127.0.0.1/DVWA/login.php
18 Accept-Encoding: gzip, deflate, br
19 Accept-Language: en-US,en;q=0.9
20 Cookie: security=impossible; PHPSESSID=L49gmp75bhuhp8m63pdm0849bb
21 Connection: close
22
23 username=admin&password=password&Login=Login&user_token=9efd346433f15032ced057eb3e149d63
```

Connection: close

sername=admin&password=passwordSbagliata&Login=Login&user\_

Request

Pretty Raw Hex

```
1 GET /DVWA/login.php HTTP/1.1
2 Host: 127.0.0.1
3 Cache-Control: max-age=0
4 sec-ch-ua: "Chromium";v="119", "Not?A_Brand";v="24"
5 sec-ch-ua-mobile: ?0
6 sec-ch-ua-platform: "Linux"
7 Upgrade-Insecure-Requests: 1
8 Origin: http://127.0.0.1
9 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
    AppleWebKit/537.36 (KHTML, like Gecko)
    Chrome/119.0.6045.159 Safari/537.36
10 Accept:
    text/html,application/xhtml+xml,application/xml;q=0.9
    ,image/avif,image/webp,image/apng,*/*;q=0.8,applicati
    on/signed-exchange;v=b3;q=0.7
11 Sec-Fetch-Site: same-origin
12 Sec-Fetch-Mode: navigate
13 Sec-Fetch-User: ?1
14 Sec-Fetch-Dest: document
15 Referer: http://127.0.0.1/DVWA/login.php
16 Accept-Encoding: gzip, deflate, br
17 Accept-Language: en-US,en;q=0.9
18 Cookie: security=impossible; PHPSESSID=
    n492gcljhifmoLuU566n7jp49q
19 Connection: close
```

Response

Pretty Raw Hex Render

```
1 HTTP/1.1 200 OK
2 Date: Tue, 06 Feb 2024 16:52:17 GMT
3 Server: Apache/2.4.58 (Debian)
4 Expires: Tue, 23 Jun 2009 12:00:00 GMT
5 Cache-Control: no-cache, must-revalidate
6 Pragma: no-cache
7 Vary: Accept-Encoding
8 Content-Length: 1342
9 Connection: close
10 Content-Type: text/html; charset=utf-8
11
12 <!DOCTYPE html>
13
14 <html lang="en-GB">
15
16 <head>
17
18 <meta http-equiv="Content-Type" content="
    text/html; charset=UTF-8" />
19
20 <title>
    Login :: Damn Vulnerable Web Application (DVWA)
    </title>
21
22 <link rel="stylesheet" type="text/css" href="
    dvwa/css/login.css" />
23
24 </head>
25
26 <body>
27
28 <div id="wrapper">
29
30 <div id="header">
31
32 <br />
33
34 <p>
35 
36 </p>
37
38 <br />
39 </div>
40 <!--div id="header">-->
41
42 <div id="content">
43
44 <form action="login.php" method="post">
45 <fieldset>
```