



Installing sWADAH

On OS that binary-compatible release using RHEL OS source code.

Requirement

- A server installed with
 - PHP 7.1 or above,
 - APACHE/HTTPD 2.4 or above,
 - MariaDB 10.5 or above,
 - Composer 2.3 or above



Check PHP

```
[root@fedora ~]# dnf install php
Last metadata expiration check: 0:52:35 ago on Tue 21 Jun 2022 08:41:34 AM +08.
Package php-8.1.7-1.fc36.remi.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@fedora ~]# php -v
PHP 8.1.7 (cli) (built: Jun  7 2022 18:21:38) (NTS gcc x86_64)
Copyright (c) The PHP Group
Zend Engine v4.1.7, Copyright (c) Zend Technologies
    with Zend OPcache v8.1.7, Copyright (c), by Zend Technologies
[root@fedora ~]#
```

Check for required PHP extensions

```
[root@fedora ~]# dnf install php-cli php-gd php-curl php-zip php-mbstring php-common php-mysqlnd php
+xml php-json
Last metadata expiration check: 0:30:11 ago on Tue 21 Jun 2022 08:41:34 AM +08.
Package php-cli-8.1.7-1.fc36.remi.x86_64 is already installed.
Package php-gd-8.1.7-1.fc36.remi.x86_64 is already installed.
Package php-common-8.1.7-1.fc36.remi.x86_64 is already installed.
Package php-pecl-zip-1.20.1-1.fc36.remi.8.1.x86_64 is already installed.
Package php-mbstring-8.1.7-1.fc36.remi.x86_64 is already installed.
Package php-common-8.1.7-1.fc36.remi.x86_64 is already installed.
Package php-mysqlnd-8.1.7-1.fc36.remi.x86_64 is already installed.
Package php-xml-8.1.7-1.fc36.remi.x86_64 is already installed.
Package php-common-8.1.7-1.fc36.remi.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
```

Check MariaDB

```
[root@fedora ~]# dnf install mariadb-server mariadb
Last metadata expiration check: 0:40:12 ago on Tue 21 Jun 2022 08:41:34 AM +08.
Package mariadb-server-3:10.7.4-1.module_f36+14514+7992dc6f.x86_64 is already installed.
Package mariadb-3:10.7.4-1.module_f36+14514+7992dc6f.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@fedora ~]# mariadb -v
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 3
Server version: 10.7.4-MariaDB MariaDB Server

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

Reading history-file /root/.mysql_history
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> _
```

Check Apache HTTPD

```
[root@fedora ~]# dnf install httpd
Last metadata expiration check: 0:39:12 ago on Tue 21 Jun 2022 08:41:34 AM +08.
Package httpd-2.4.53-1.fc36.x86_64 is already installed.
Dependencies resolved.
Nothing to do.
Complete!
[root@fedora ~]# httpd -v
Server version: Apache/2.4.53 (Fedora Linux)
Server built:   Mar 17 2022 00:00:00
[root@fedora ~]# _
```

Check Composer

```
[root@fedora ~]# composer about
Do not run Composer as root/super user! See https://getcomposer.org/root for details
Continue as root/super user [yes]?
Composer - Dependency Manager for PHP - version 2.3.5
Composer is a dependency manager tracking local dependencies of your projects and libraries.
See https://getcomposer.org/ for more information.
```

– if not installed, follow installation instruction at getcomposer.org

Things to Google:

- Set SELINUX to `permissive` (from `enforcing`).
- Set LINUX Firewall to allow HTTP/80 and HTTPS/443 permanently
- Set `php.ini` file `post_max_size` and `upload_max_filesize` to your desired upload file size.
- Configure `httpd.conf` to `AllowOverride` from `None` to `All` for the serving directory

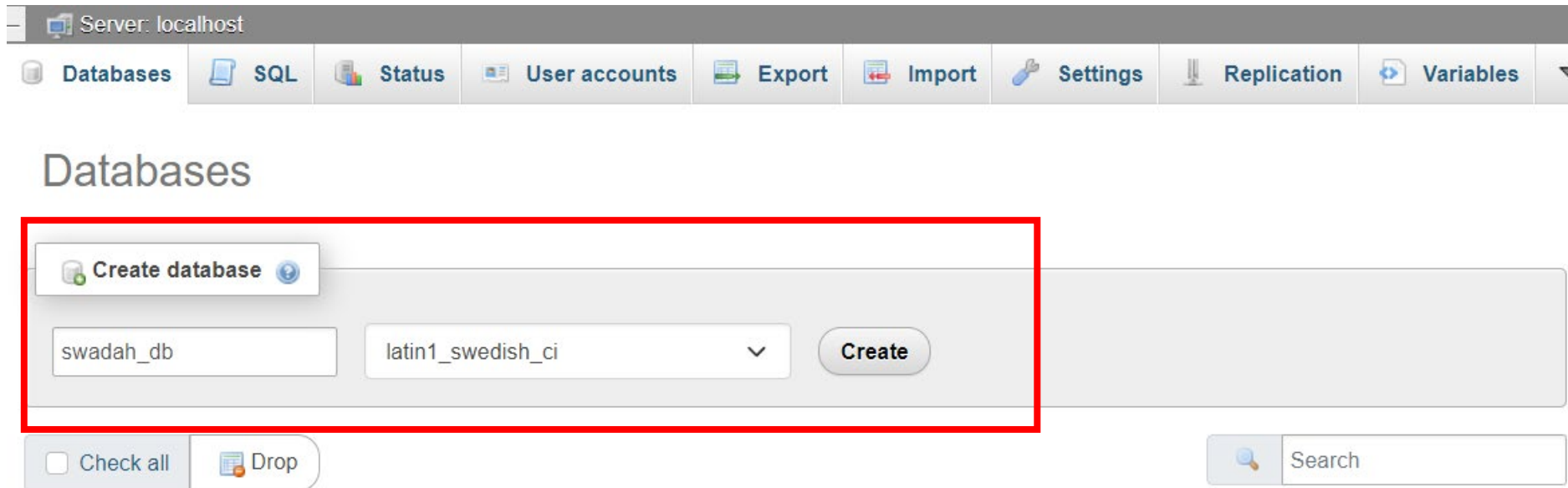
Download required files to install sWADAH

 [swadah_2022Y_LTS_database_install.sql.zip](#)

 [swadah_2022Y_LTS_files_install.zip](#)

Installing database sql file to the server.

We will be using phpMyAdmin



The screenshot shows the phpMyAdmin interface for a local server. The top navigation bar includes tabs for Databases, SQL, Status, User accounts, Export, Import, Settings, Replication, and Variables. The main content area is titled 'Databases' and features a 'Create database' button. Below this button, there is a form with a text input field containing 'swadah_db', a dropdown menu set to 'latin1_swedish_ci', and a 'Create' button. A red rectangular box highlights the 'Create database' button and the form fields. At the bottom left, there are 'Check all' and 'Drop' buttons, and at the bottom right, there is a search bar.

Installing database sql file to the server. We will be using phpMyAdmin



Importing into the database "swadah_db"

File to import:

File may be compressed (gzip, bzip2, zip) or uncompressed.
A compressed file's name must end in **.[format].[compression]**. Example: **.sql.zip**

Upload a file **Select file to import**

Browse your computer: (Max: 250MiB)

Choose File swadah_2022Y_LTS_database_install.sql.zip

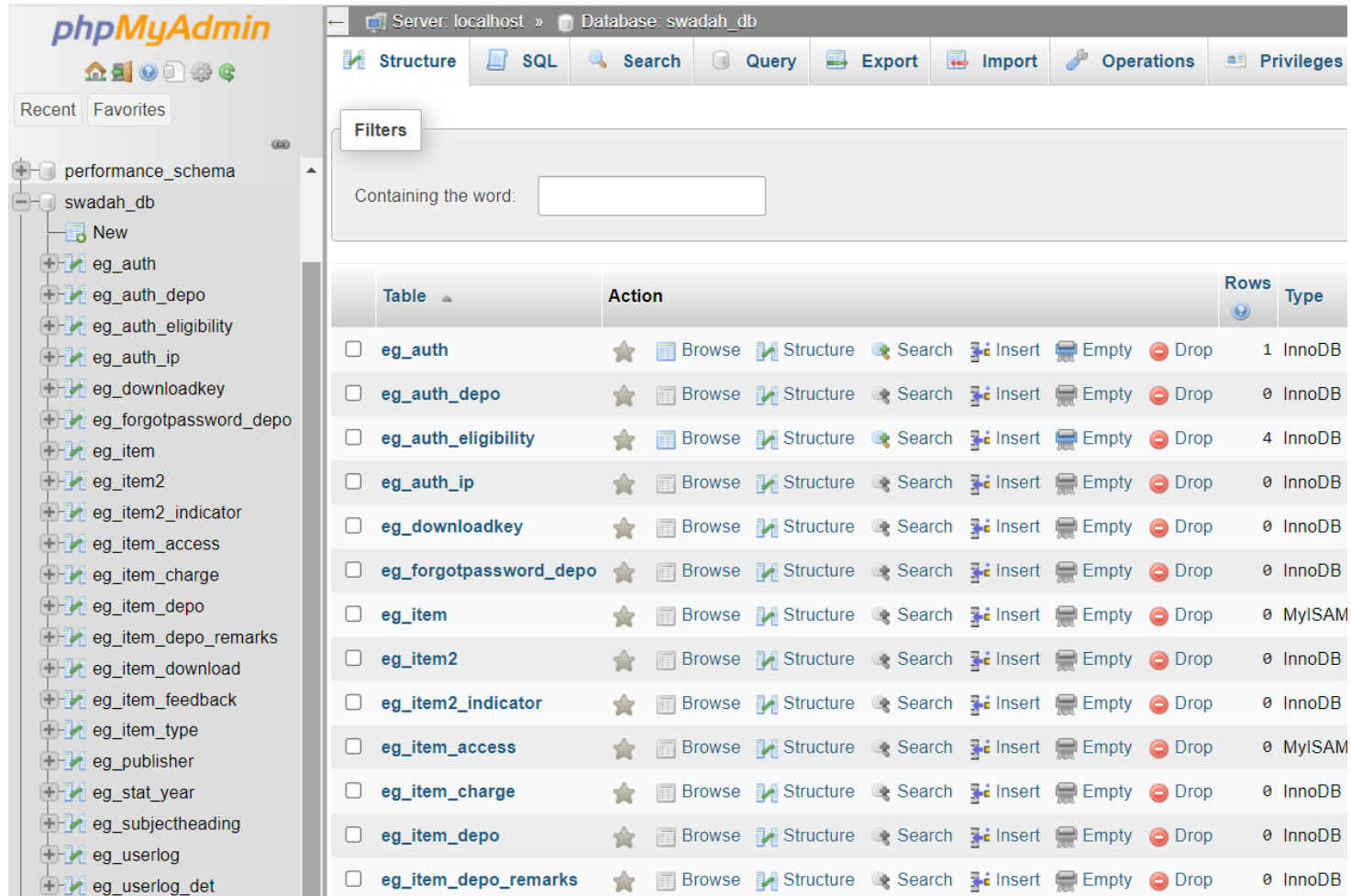
You may also drag and drop a file on any page.

Character set of the file:

utf-8

Import

Installing database sql file to the server. We will be using phpMyAdmin

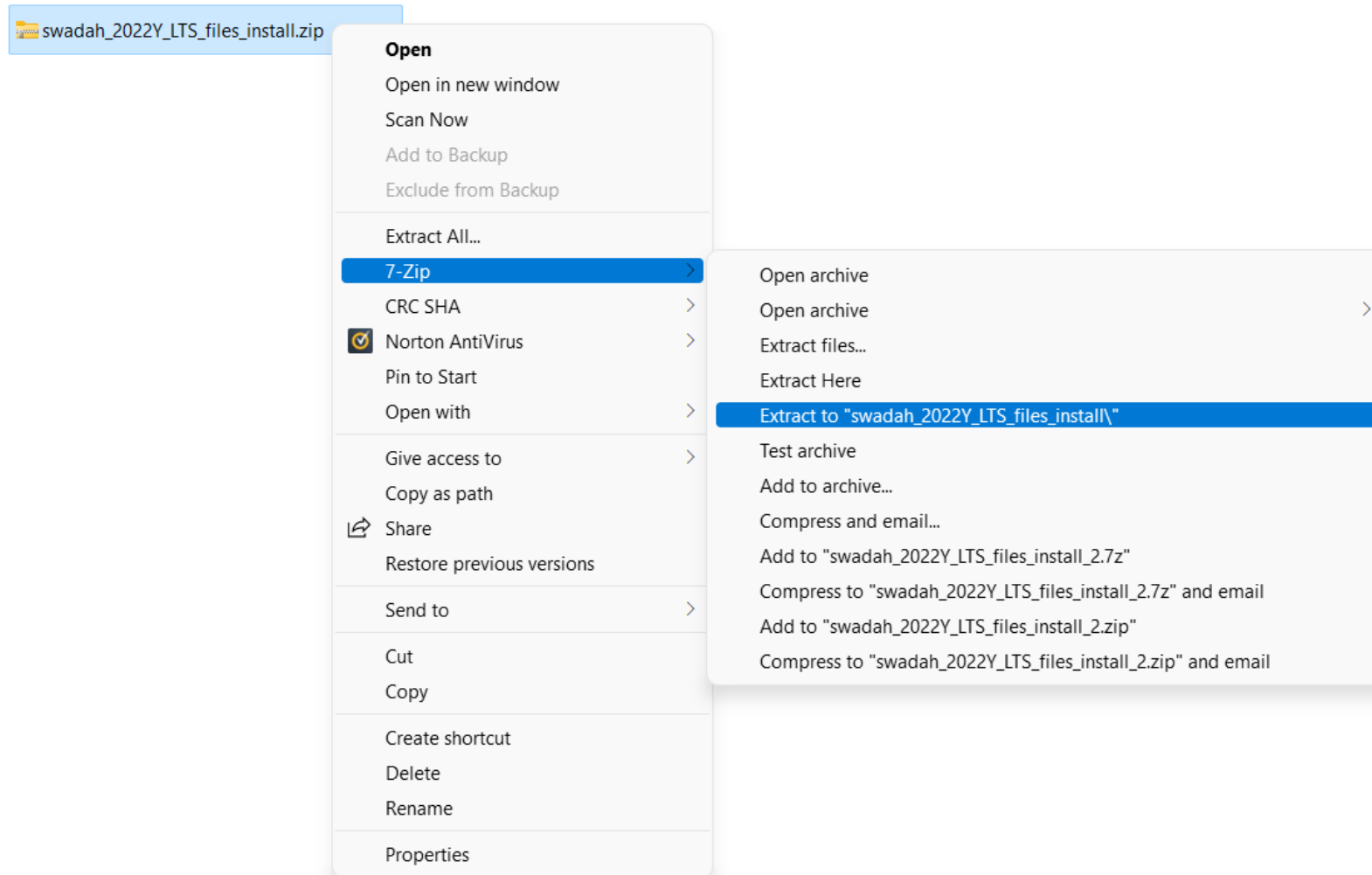


The screenshot shows the phpMyAdmin interface for a MySQL server on localhost, connected to the 'swadah_db' database. The left sidebar displays a tree view of the database structure, including a 'New' button and a list of tables. The main area shows the 'Structure' tab for the 'swadah_db' database, with a 'Filters' section and a table listing the database's tables. The table listing includes columns for 'Table', 'Action', 'Rows', and 'Type'.

Table	Action	Rows	Type
eg_auth	Browse Structure Search Insert Empty Drop	1	InnoDB
eg_auth_depo	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_auth_eligibility	Browse Structure Search Insert Empty Drop	4	InnoDB
eg_auth_ip	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_downloadkey	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_forgotpassword_depo	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_item	Browse Structure Search Insert Empty Drop	0	MyISAM
eg_item2	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_item2_indicator	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_item_access	Browse Structure Search Insert Empty Drop	0	MyISAM
eg_item_charge	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_item_depo	Browse Structure Search Insert Empty Drop	0	InnoDB
eg_item_depo_remarks	Browse Structure Search Insert Empty Drop	0	InnoDB

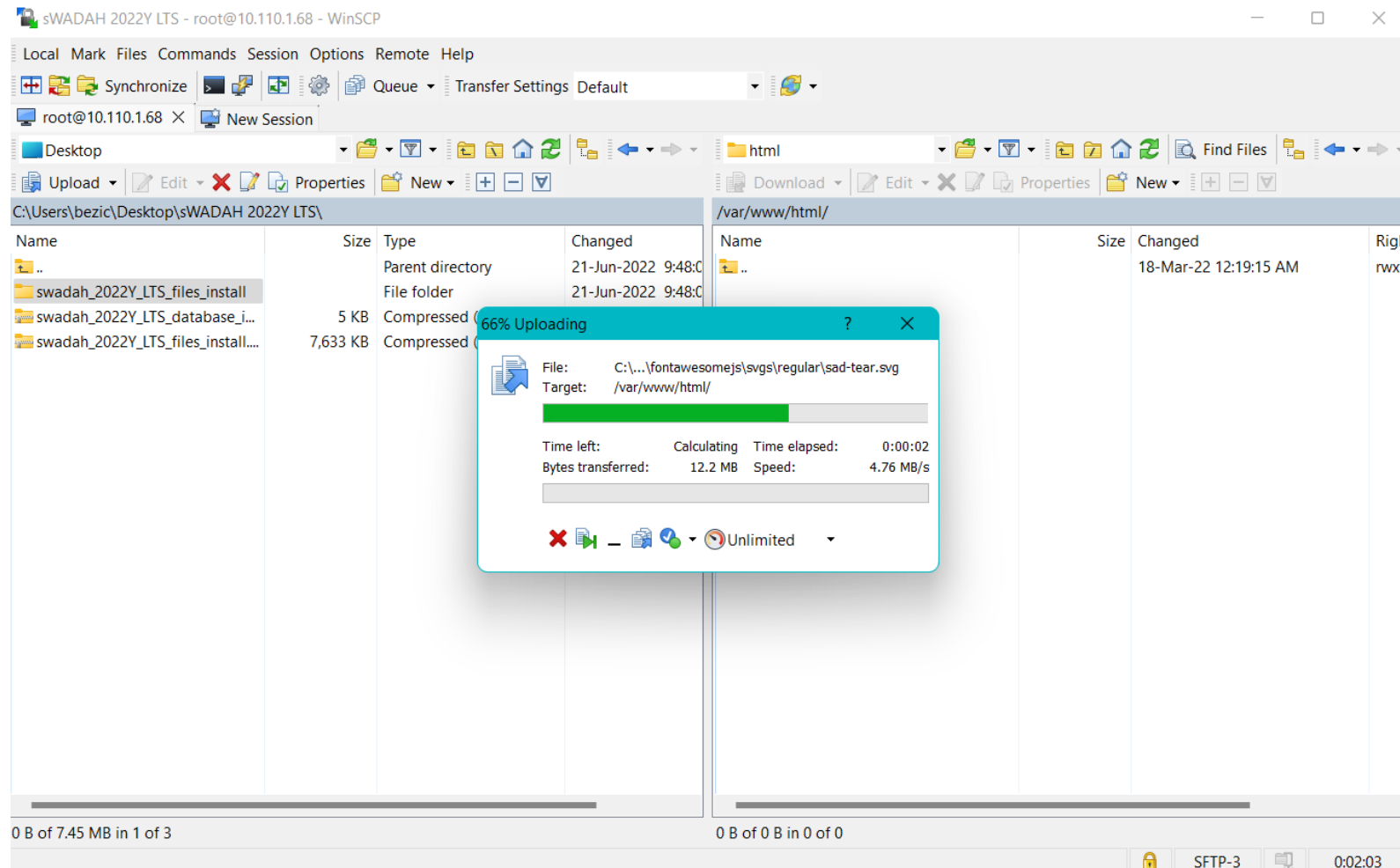
Moving sWADAH into place

STEP 1: Extract the installation file



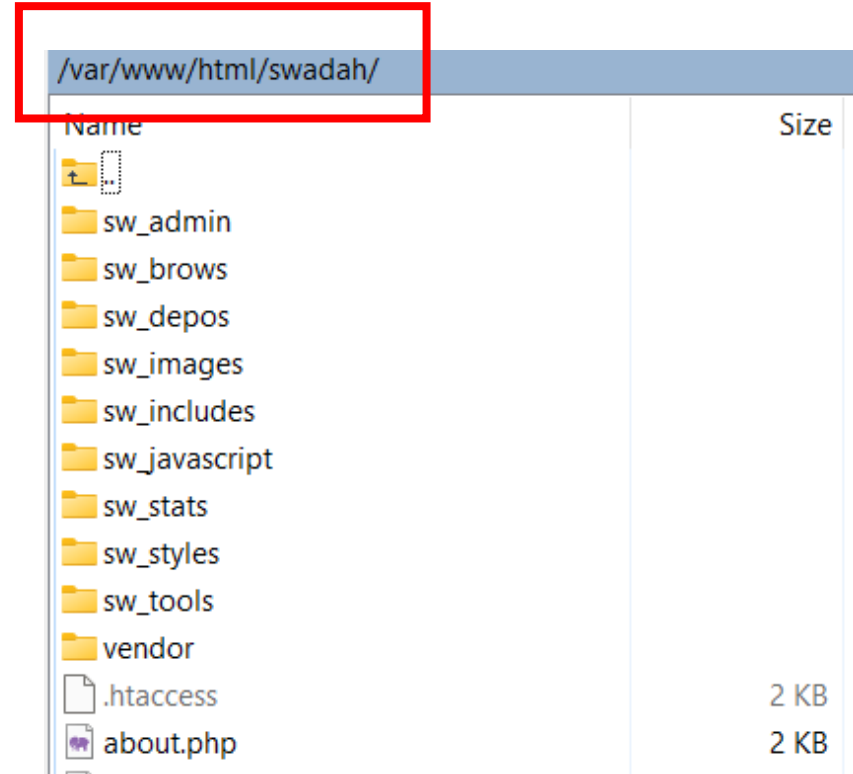
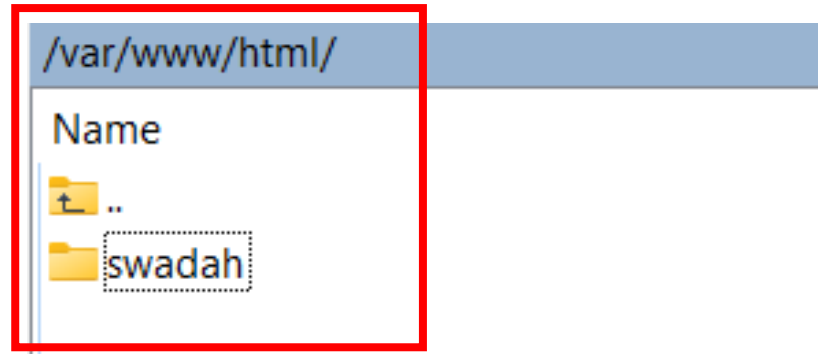
Moving sWADAH into place

STEP 2: Transfer to server in /var/www/html



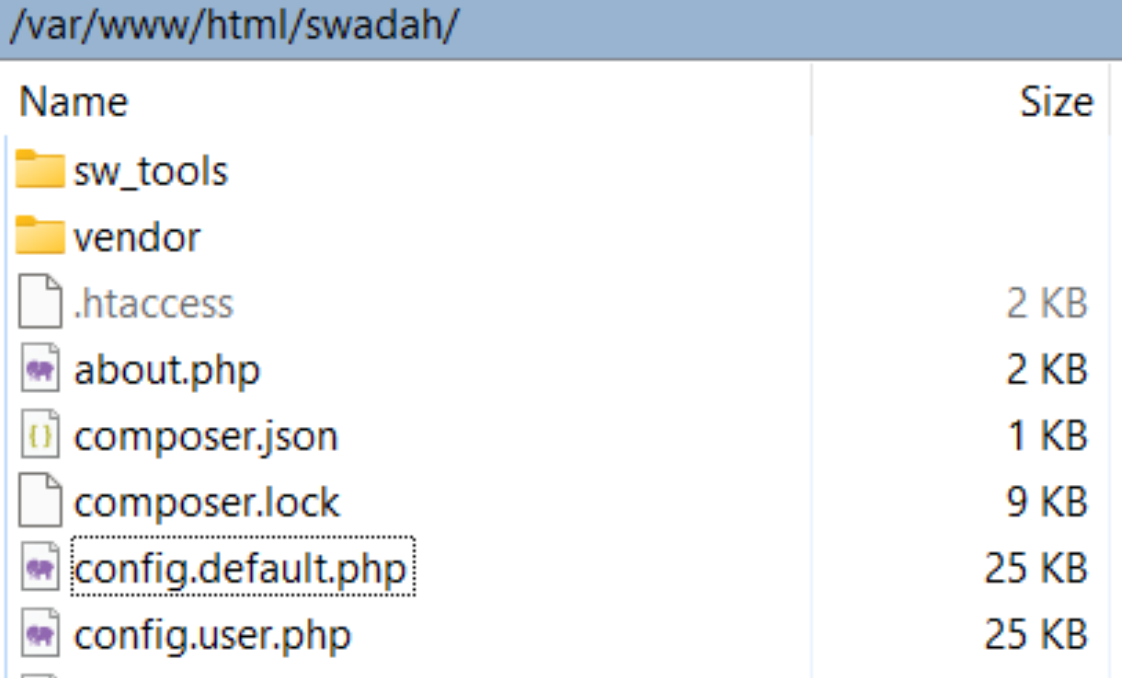
Moving sWADAH into place

STEP 3: Rename the folder in destination



Moving sWADAH into place

STEP 4: Copy config.default.php and rename it to config.user.php



Name	Size
sw_tools	
vendor	
.htaccess	2 KB
about.php	2 KB
composer.json	1 KB
composer.lock	9 KB
config.default.php	25 KB
config.user.php	25 KB

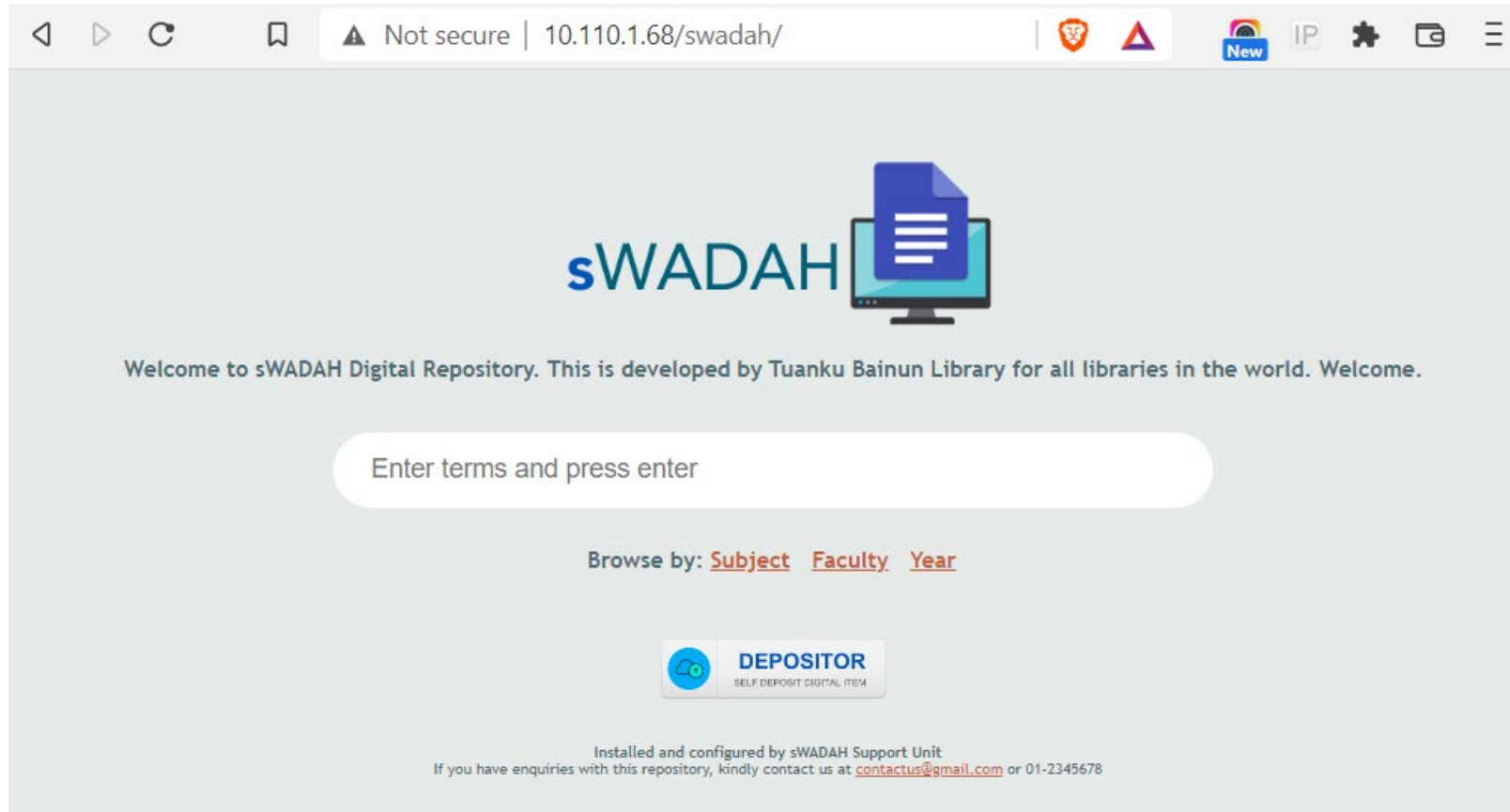
Moving sWADAH into place

STEP 5: Set database connection in config.user.php and save it.

```
1 <?php
2
3 /*
4 sWADAH config default file build 20220425
5
6 The following php extension need to be enable in php.ini:
7 bz2,curl,fileinfo,gd or gd2,gettext,intl,mbstring,exif,mysqli,openssl,pdo_mysql,pdo_s
8 After uncomment the line to enable those above, restart Apache.
9
10 Everything in this sea of codes ARE cAsE SENsitive.
11
12 Read carefully all comments before proceeding. Failure and success at your own risks.
13
14 Extra note: You might want to copy value you want to change and put it into config.us
15 so that you don't have to revalue config.php everytime there is new build of sWADAH.
16 */
17
18 //set time zone for this sWADAH installation
19 putenv("TZ=Asia/Kuala_Lumpur");//set time zone reference: https://en.wikipedia.org/wi
20 date_default_timezone_set('Asia/Kuala_Lumpur');//set php time zone reference: https://
21
22 //database connection properties
23 $dbhost = "localhost";//set the ip or host for mariadb/mysql database
24 $dbname = "swadahdb";//database name to access
25 $dbuser = "swadahuser";//username to access the database
26 $dbpass = "swadahpassword";//password the username above
```

Moving sWADAH into place

STEP 6: Navigate to `http://<server>/swadah`



If you have entered wrong input for database connection, it will prompt out error in connection.

Next: Updating components with composer

First you must change directory to the location that you have installed sWADAH files.

```
[root@fedora ~]# cd /var/www/html/swadah  
[root@fedora swadah]# composer update_
```

Output:

```
[root@fedora swadah]# composer update
Do not run Composer as root/super user! See https://getcomposer.org/root for details
Continue as root/super user [yes]?
Loading composer repositories with package information
Info from https://repo.packagist.org: #StandWithUkraine
Updating dependencies
Lock file operations: 0 installs, 2 updates, 0 removals
  - Upgrading phpmailer/phpmailer (v6.6.0 => v6.6.3)
  - Upgrading symfony/polyfill-mbstring (v1.25.0 => v1.26.0)
Writing lock file
Installing dependencies from lock file (including require-dev)
Package operations: 1 install, 2 updates, 0 removals
  - Downloading phpmailer/phpmailer (v6.6.3)
  - Downloading symfony/polyfill-mbstring (v1.26.0)
  - Downloading smalot/pdfparser (v2.2.1)
  - Upgrading phpmailer/phpmailer (v6.6.0 => v6.6.3): Extracting archive
  - Upgrading symfony/polyfill-mbstring (v1.25.0 => v1.26.0): Extracting archive
  - Installing smalot/pdfparser (v2.2.1): Extracting archive
^ISGenerating autoload files
2 packages you are using are looking for funding.
Use the `composer fund` command to find out more!
```

Change /swadah
directory/files owner in
/var/www/html/swadah
to Apache

```
[root@fedora swadah]# sudo chown apache:apache -R /var/www/html/swadah
[root@fedora swadah]# ls -l
total 292
-rw-r--r--. 1 apache apache 1113 May 18 09:08 about.php
-rw-r--r--. 1 apache apache 104 Apr 28 12:47 composer.json
-rw-r--r--. 1 apache apache 8469 Jun 21 10:02 composer.lock
-rw-r--r--. 1 apache apache 25184 Jun 15 16:08 config.default.php
-rw-r--r--. 1 apache apache 25179 Jun 21 09:56 config.user.php
-rw-r--r--. 1 apache apache 3171 May 25 15:14 core.php
-rw-r--r--. 1 apache apache 30329 Jun 20 10:19 detailsg.php
-rw-r--r--. 1 apache apache 27353 Jun 20 16:35 details.php
-rw-r--r--. 1 apache apache 4559 Apr 22 09:08 doc.php
-rw-r--r--. 1 apache apache 5833 May 18 09:08 faq.php
-rw-r--r--. 1 apache apache 13232 Jun 15 13:15 index2.php
-rw-r--r--. 1 apache apache 5379 May 24 14:12 index.php
-rw-r--r--. 1 apache apache 6089 May 25 13:53 in.php
-rw-r--r--. 1 apache apache 32173 May 18 09:11 oai2.php
-rw-r--r--. 1 apache apache 3749 May 18 09:11 passchange.php
-rw-r--r--. 1 apache apache 12997 May 18 09:08 searcherapi.php
-rw-r--r--. 1 apache apache 12028 Jun 15 13:16 searcher.php
drwxr-xr-x. 3 apache apache 4096 Jun 21 09:52 sw_admin
drwxr-xr-x. 2 apache apache 4096 Jun 21 09:52 sw_brows
drwxr-xr-x. 3 apache apache 4096 Jun 21 09:52 sw_depos
drwxr-xr-x. 2 apache apache 4096 Jun 21 09:52 sw_images
drwxr-xr-x. 3 apache apache 4096 Jun 21 09:52 sw_includes
drwxr-xr-x. 4 apache apache 4096 Jun 21 09:52 sw_javascript
drwxr-xr-x. 2 apache apache 4096 Jun 21 09:52 sw_stats
drwxr-xr-x. 2 apache apache 91 Jun 21 09:52 sw_styles
drwxr-xr-x. 2 apache apache 4096 Jun 21 09:52 sw_tools
-rw-r--r--. 1 apache apache 3905 May 25 11:12 usrlogin.php
-rw-r--r--. 1 apache apache 3758 May 25 10:53 usr.php
drwxr-xr-x. 8 apache apache 130 Jun 21 10:02 vendor
[root@fedora swadah]# _
```

Congratulation you have
installed sWADAH.

Next we will be configuring `config.user.php` for first time use.

Configuring `config.user.php` for first time use

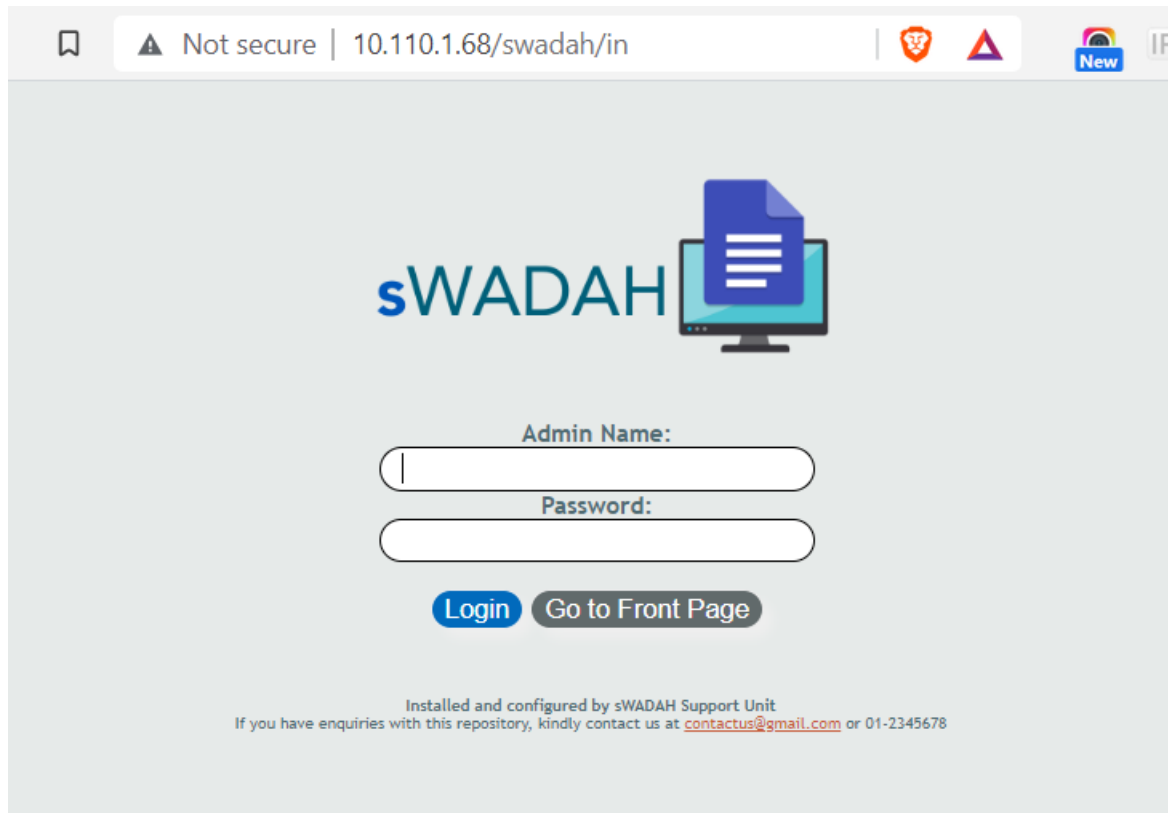
- Set `$allowed_ip` to accept for specific IP address/range. For example below we only accept all IP range that begins with `10.110.*.*`

```
//allowed IP for administration page
//only ip in this range are allowed to access administration page
//format range 10.x.x or 10.x or specific: 10.x.x.x
$restriction_for_adminPage = true; // enable allowed_ip below to enforce = true; disable = false.
$allowed_ip = array(
    '10.110'
);
```

- This is important because to go to the administration page, you'll need to be allowed first.

Logging in

- To log in, navigate to `http://<server>/swadah/in.php`



The screenshot shows a web browser window with the address bar displaying "Not secure | 10.110.1.68/swadah/in". The page content includes the sWADAH logo, a document icon on a monitor, and a login form with two input fields labeled "Admin Name:" and "Password:". Below the fields are two buttons: "Login" and "Go to Front Page". At the bottom, there is a footer with contact information: "Installed and configured by sWADAH Support Unit. If you have enquiries with this repository, kindly contact us at contactus@gmail.com or 01-2345678".

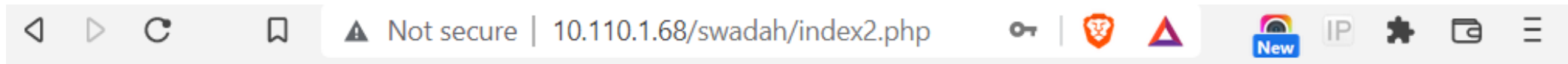
First time login credential:

Admin name: admin

Password: pustaka

Logging in

- After logging in, you'll be greet with this page:



Please change AES KEY. All functions will not be available until you change this value. Follow instruction in config.default.php.

Please keep this page running. After changing, refresh this page.

IMPORTANT: Without leaving this page, edit `$password_aes_key` in the config.user.php file to something random. This is set only once and please do not change this again in the future. Save it, and refresh the page above.

NOTES: Even though the instruction above stated changing value for config.default.php, but as we have already made a copy of it, renamed to config.user.php, we will be using that instead.

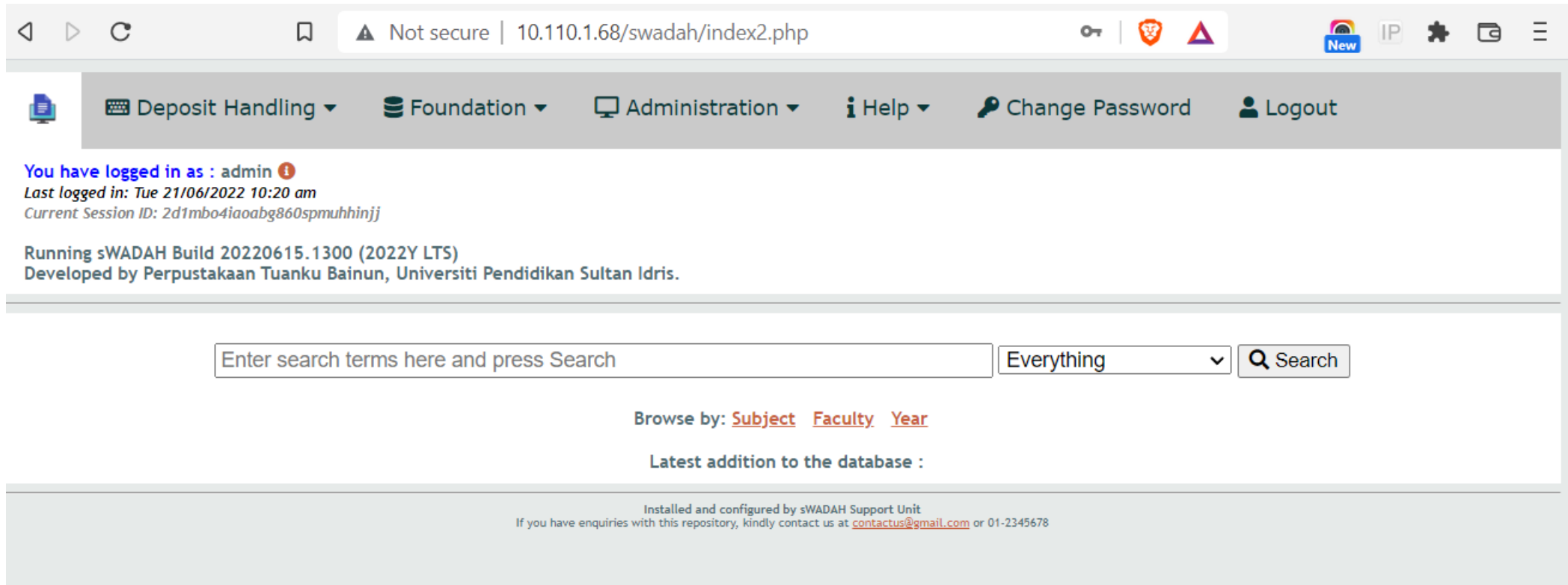
Logging in

- After refresh the page, you'll need to change the default password for admin.

The screenshot shows a web application interface for changing a password. At the top, there is a navigation bar with a document icon, a 'Change Password' link, and a 'Logout' link. Below this is a yellow banner with the text 'Please input your new password alongside with it confirmation :'. The main form area contains two input fields: 'New Password:' and 'New Password (Again):', followed by an 'Update' button. At the bottom of the page, there is a footer with the text 'Installed and configured by sWADAH Support Unit' and 'If you have enquiries with this repository, kindly contact us at contactus@gmail.com or 01-2345678'. A modal dialog box is open in the foreground with the title 'Change Password' and the message 'You will need to change your password before using this system.' with an 'OK' button.

Logging in

- After changing your password, please login again and you will be presented with this page:



The screenshot shows a web browser window with the address bar displaying "10.110.1.68/swadah/index2.php". The page features a navigation menu with items: Deposit Handling, Foundation, Administration, Help, Change Password, and Logout. Below the menu, a message states: "You have logged in as : admin" with a last login time of "Tue 21/06/2022 10:20 am" and a current session ID. The page also displays the version "Running sWADAH Build 20220615.1300 (2022Y LTS)" and the developer "Perpustakaan Tuanku Bainun, Universiti Pendidikan Sultan Idris". A search bar is present with the placeholder "Enter search terms here and press Search", a dropdown menu set to "Everything", and a "Search" button. Below the search bar, there are links to "Browse by: Subject Faculty Year" and a section for "Latest addition to the database :". The footer contains contact information for the sWADAH Support Unit.

Not secure | 10.110.1.68/swadah/index2.php

Deposit Handling ▾ Foundation ▾ Administration ▾ Help ▾ Change Password Logout

You have logged in as : admin ⓘ
Last logged in: Tue 21/06/2022 10:20 am
Current Session ID: 2d1mbo4iaoabg860spmuhhinjj

Running sWADAH Build 20220615.1300 (2022Y LTS)
Developed by Perpustakaan Tuanku Bainun, Universiti Pendidikan Sultan Idris.

Enter search terms here and press Search Everything ▾ Search

Browse by: [Subject](#) [Faculty](#) [Year](#)

Latest addition to the database :

Installed and configured by sWADAH Support Unit
If you have enquiries with this repository, kindly contact us at contactus@gmail.com or 01-2345678

Congratulation you have done it!

Finally, you may change values inside `config.user.php` and
configure sWADAH according to your own needs.