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
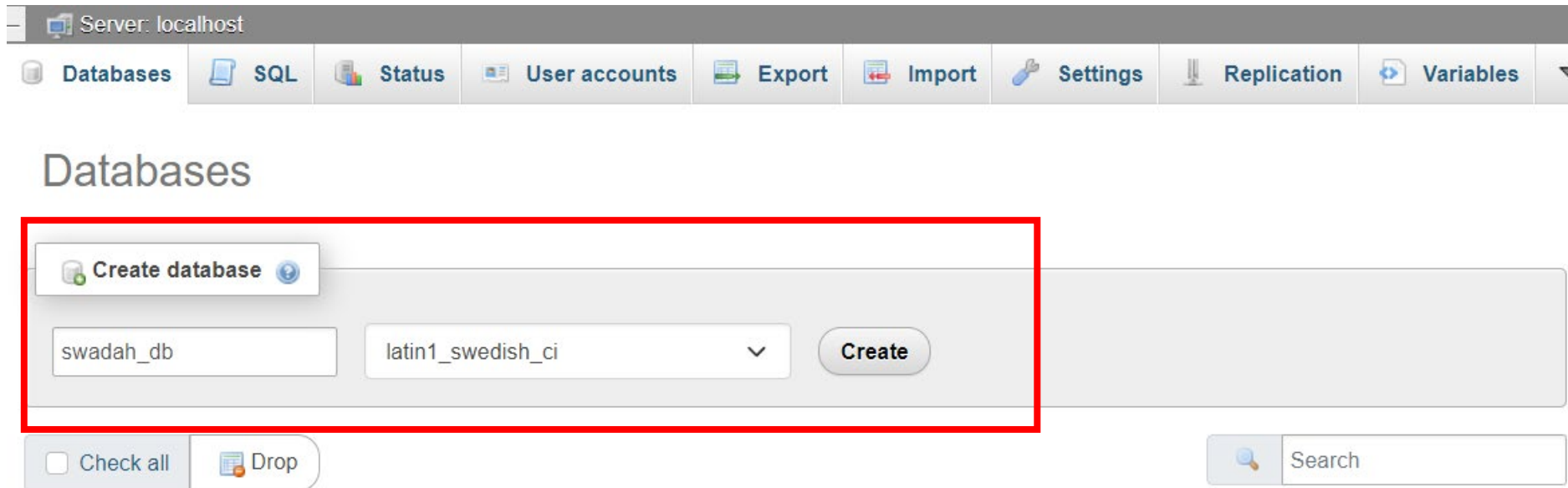
Download required files to install sWADAH

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

Installing database sql file to the server.
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| Structure | SQL | Search | Query | Export | Import | Operations | Privileges | Routines | More |

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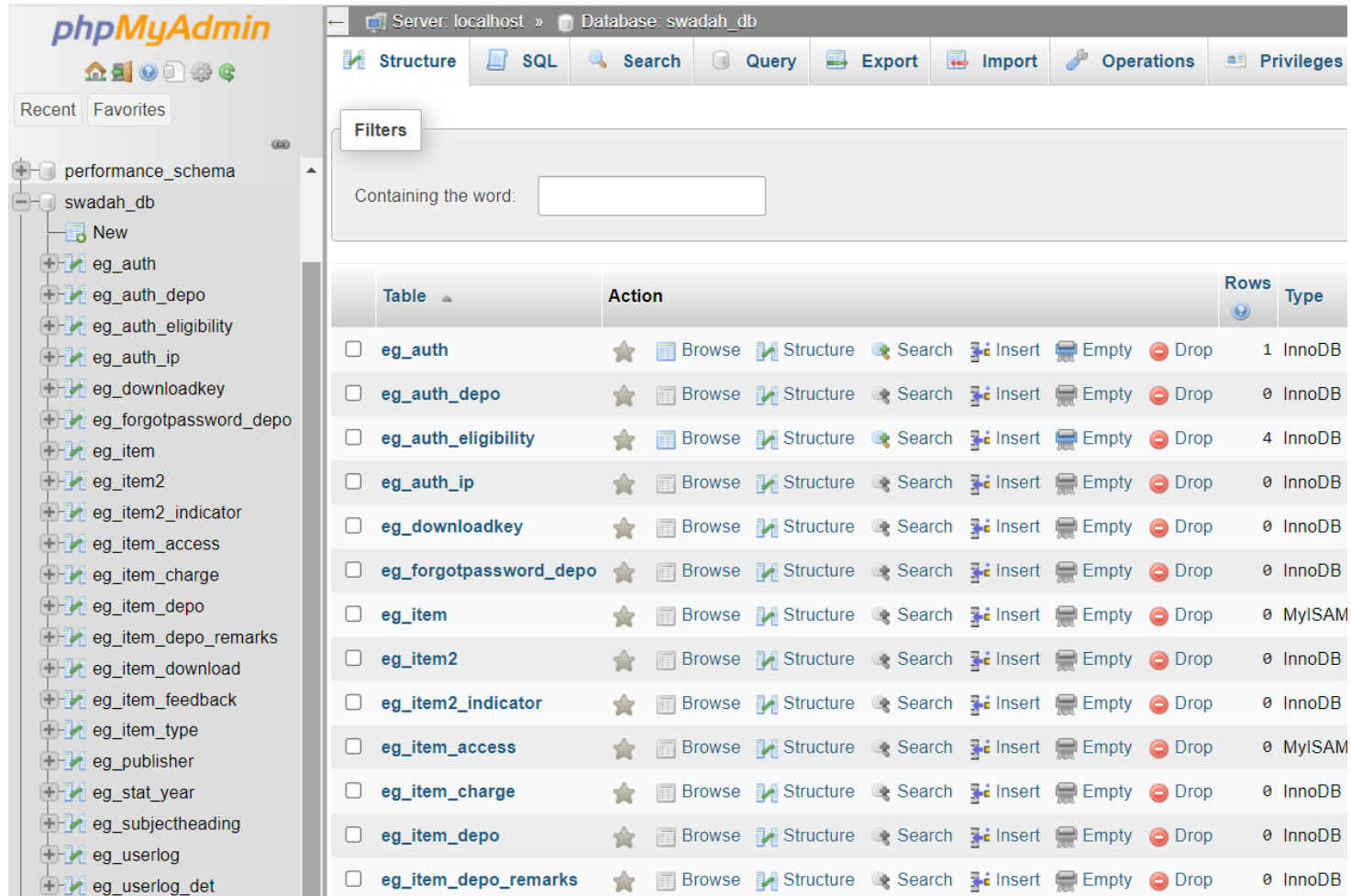
You may also drag and drop a file on any page.

Character set of the file:

utf-8

Import

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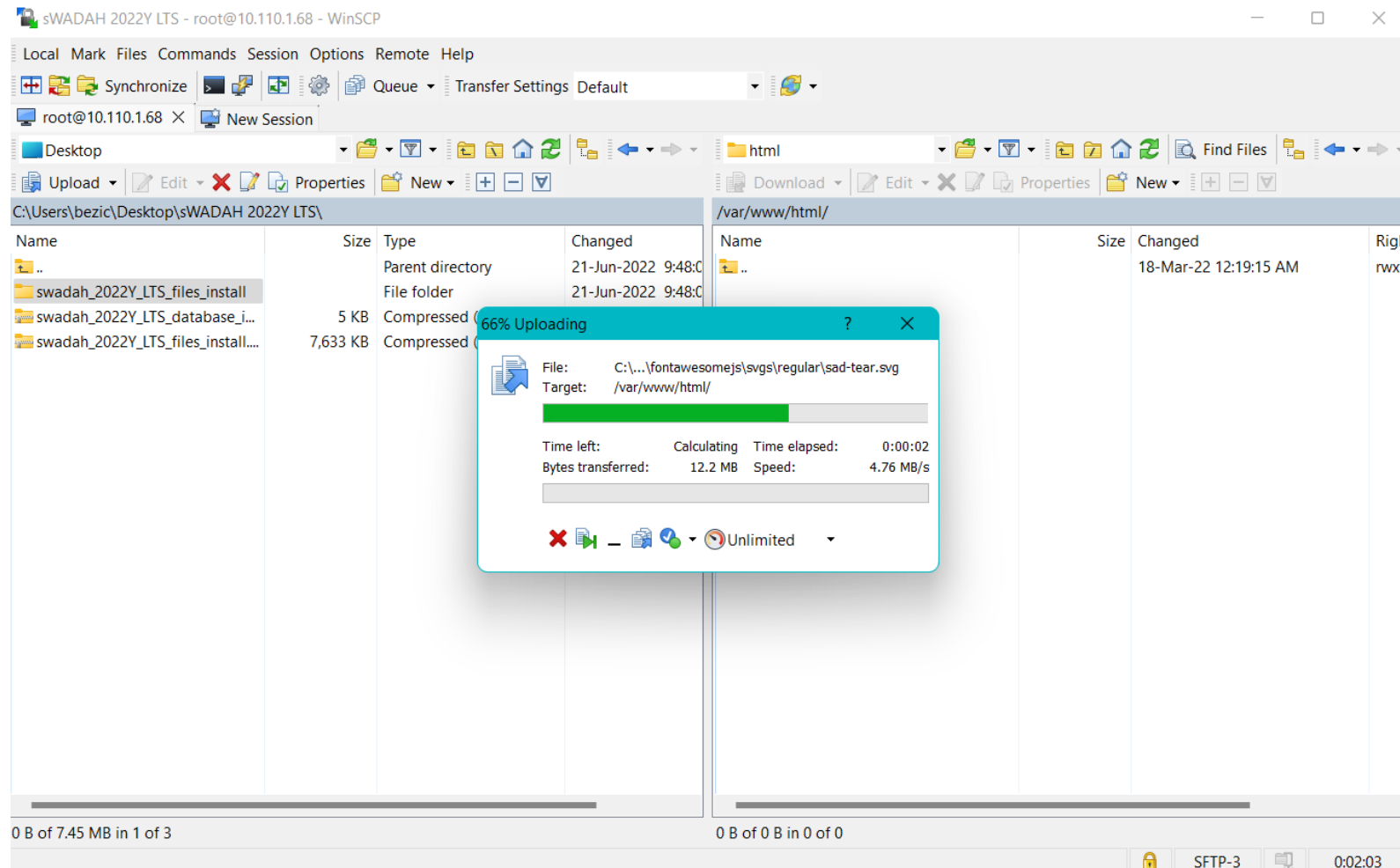## We will be using phpMyAdmin

Moving sWADAH into place
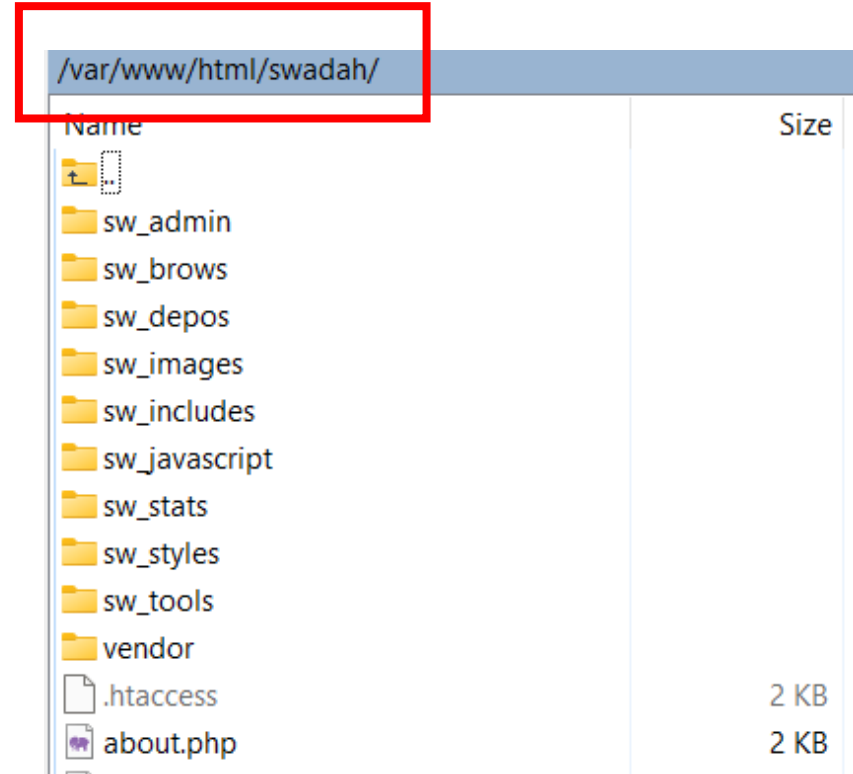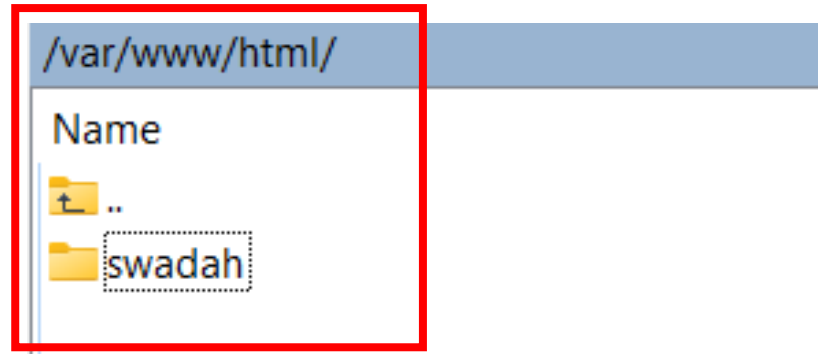## STEP 1: Extract the installation file
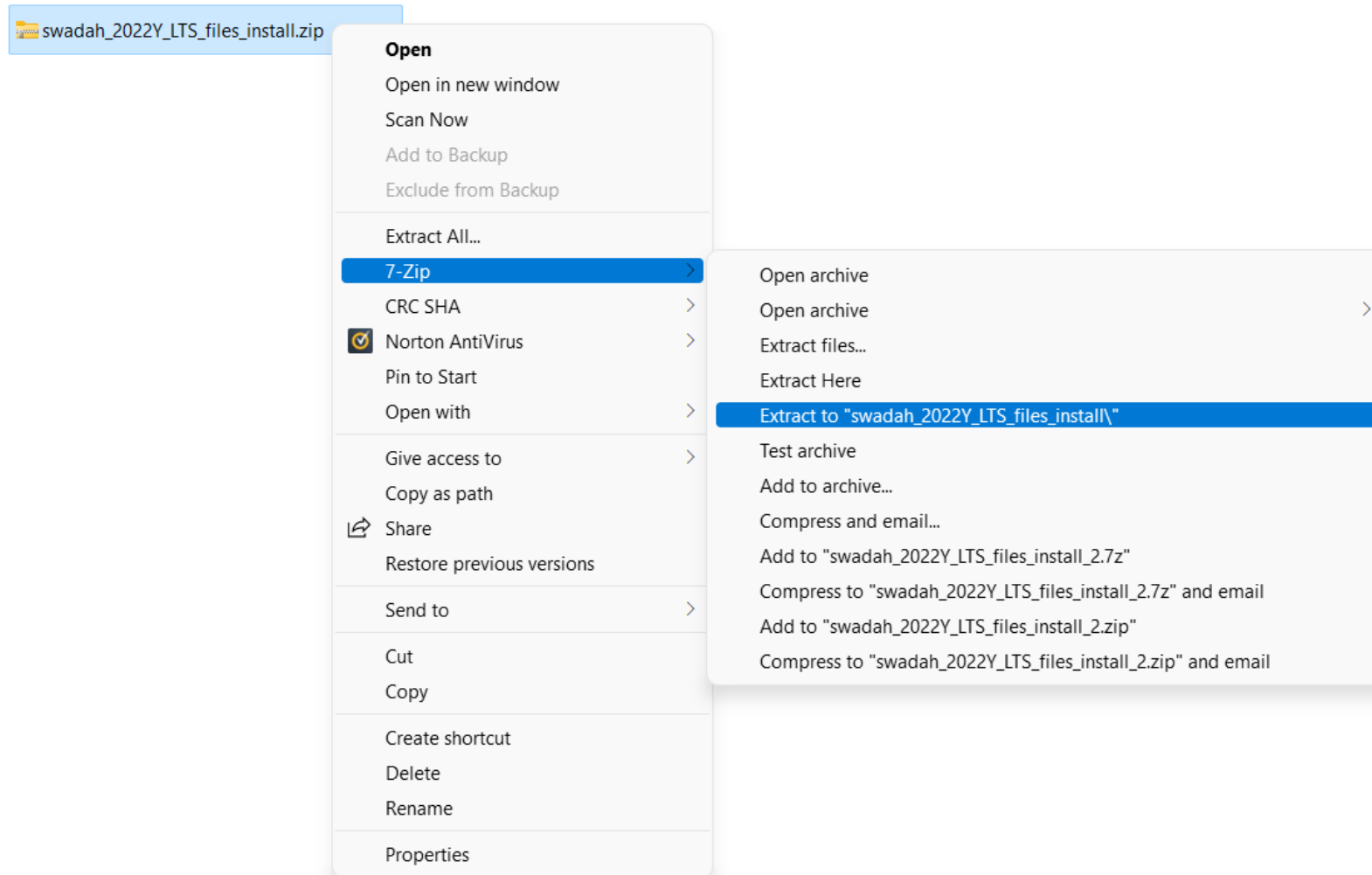
Moving sWADAH into place
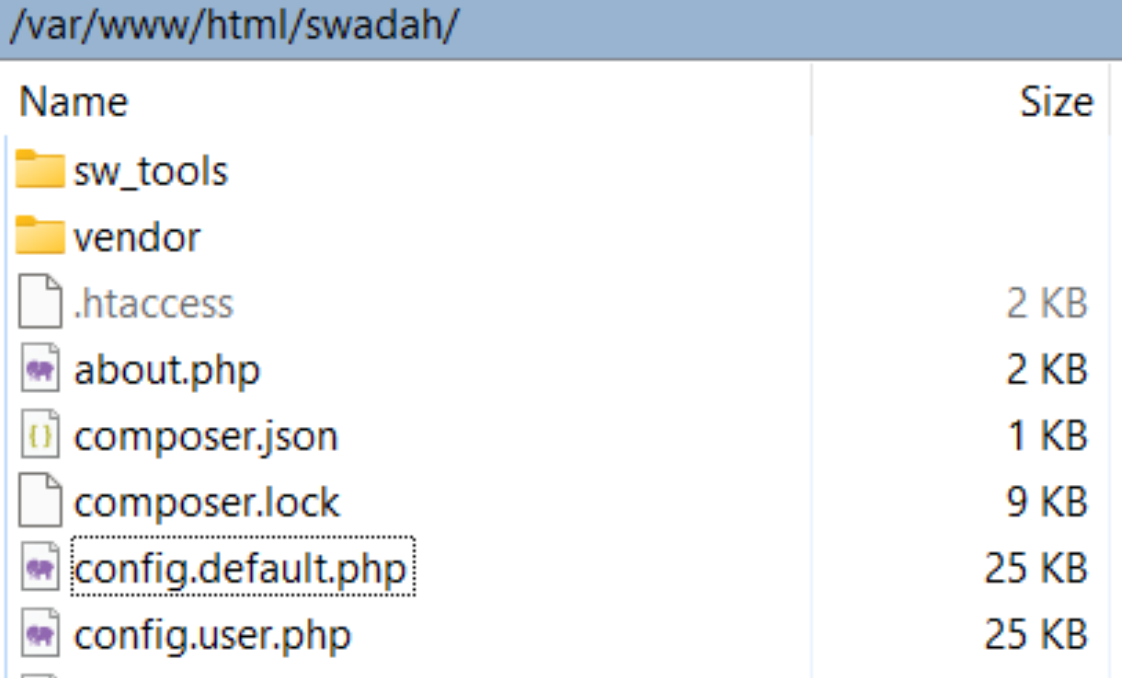## STEP 2: Transfer to server in /var/www/html

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

/var/www/html/swadah/

| 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.

```php
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:/

     //database connection properties
     $dbhost = "localhost";//set the ip or host for mariadb/mysql database
     $dbname = "swadahdb";//database name to access
     $dbuser = "swadahuser";//username to access the database
     $dbpass = "swadahpassword";//password the username above
```

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Moving sWADAH into place
STEP 6: Navigate to http://<server>/swadah
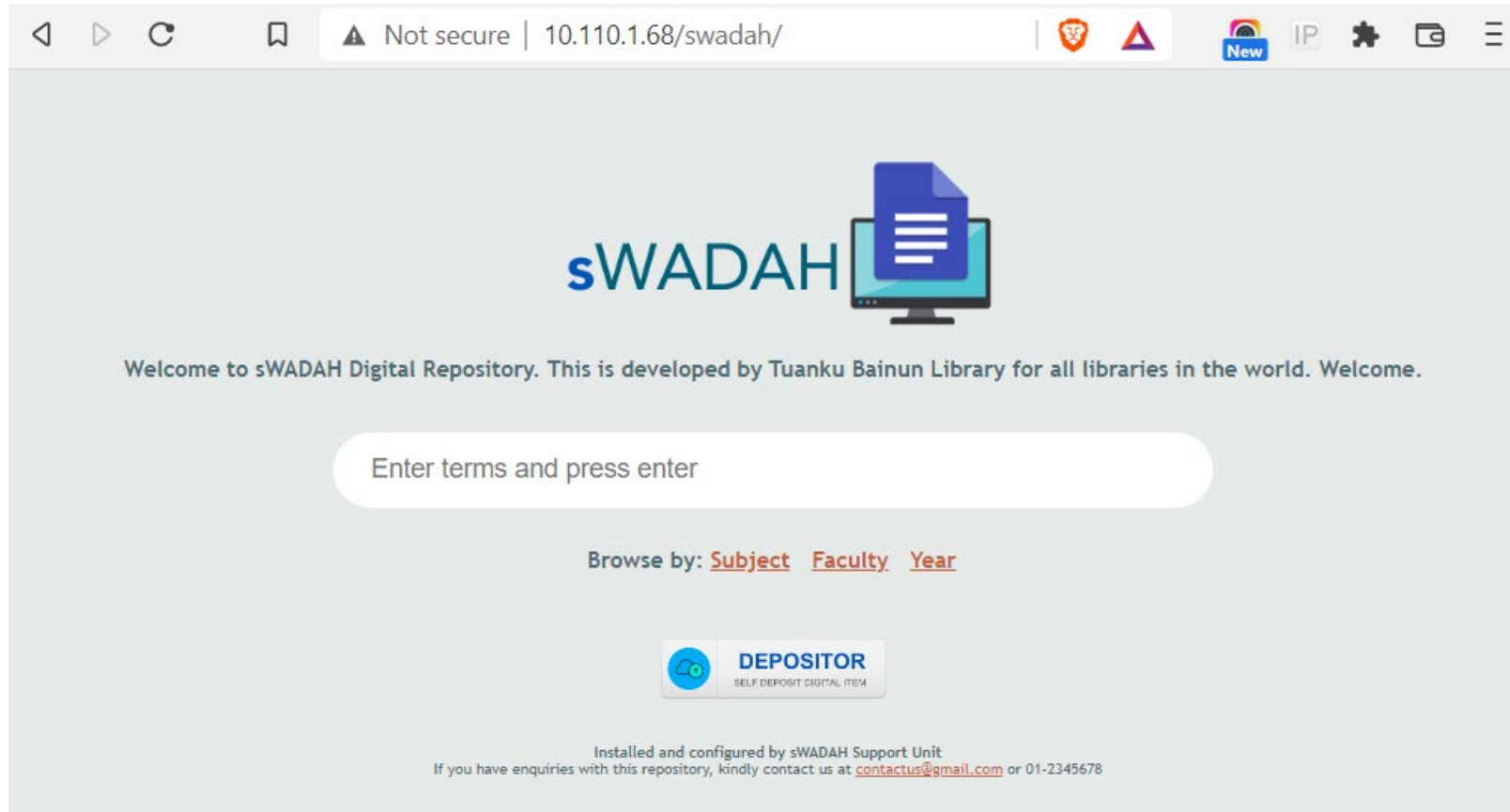
If you have entered wrong input for database connection, it will prompt out error in connection.

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
^[SGenerating 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.
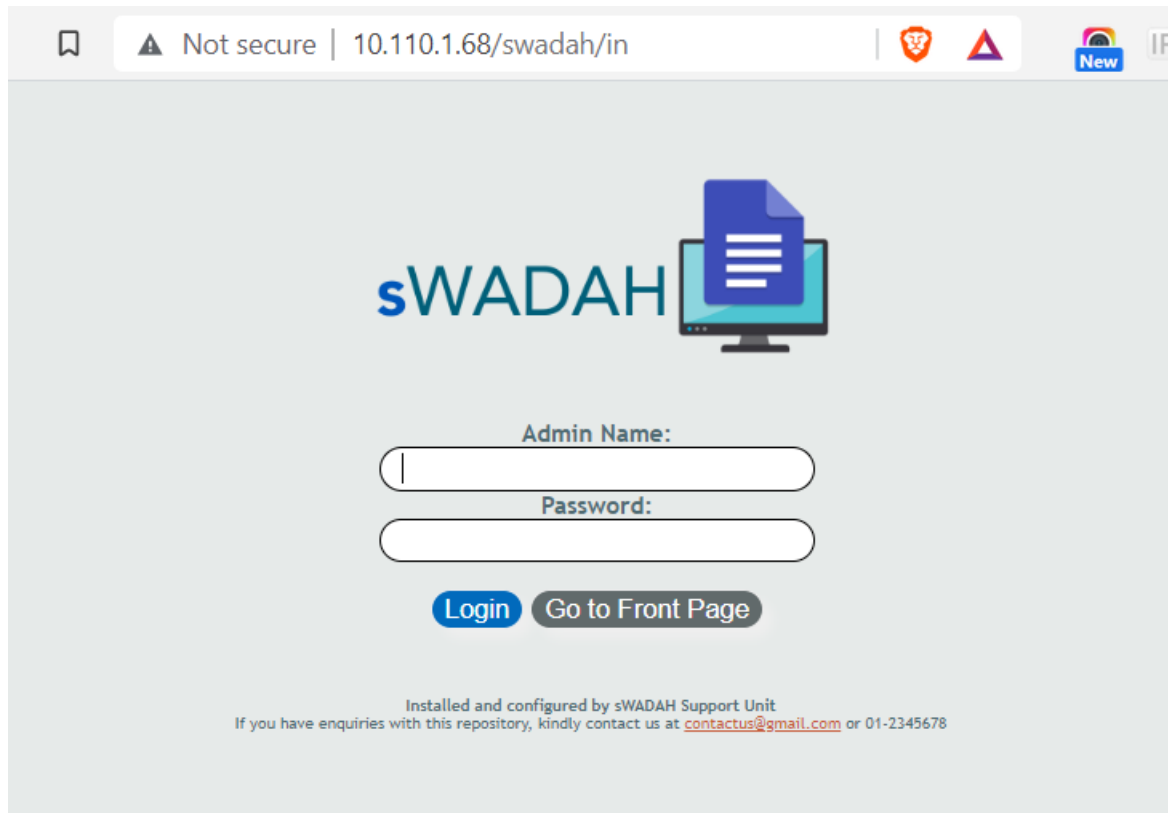
Configuring `config.user.php` for first time use

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

```php
//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

First time login credential:

Admin name: admin
Password: pustaka

Logging in

- After logging in, you'll be greet with this page:
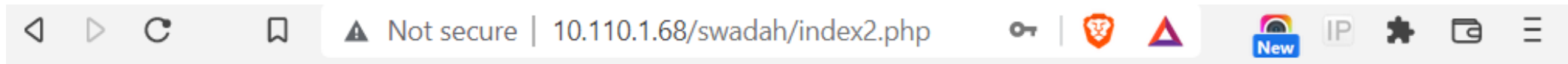
Please change AES KEY. All functions will not be available until you change this value. Follow instruction in config.default.php.
Please keep this page runnning. After changing, refresh this page.

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.
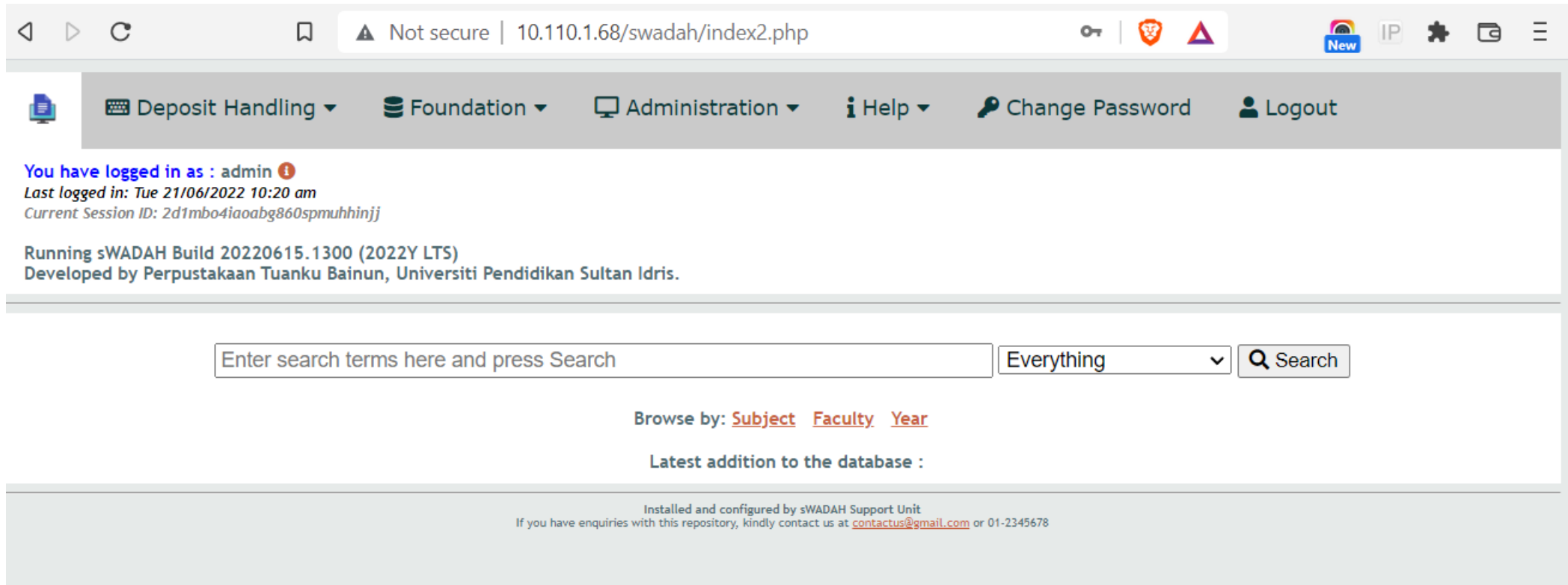
Logging in

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

Logging in

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

Congratulation you have done it!

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