

INSTALLATION DIRECTIONS

RosarioSIS Student Information System

RosarioSIS is a web based application which relies on other facilities such as a web server, PHP server-side scripting, and a PostgreSQL or MySQL/MariaDB database server.

For RosarioSIS to work you must first have your web server working, PostgreSQL (or MySQL/MariaDB) working, PHP working (including the `pgsql`, `mysqli`, `pdo`, `gettext`, `intl`, `mbstring`, `gd`, `curl`, `xml` & `zip` extensions). Setting these up varies a lot with operating system so it is well beyond the scope of this brief install document.

RosarioSIS was tested on:

- Windows 10 with Apache 2.4.58, MariaDB 10.4.32, and PHP 8.1.25
- macOS Monterey with Apache 2.4.54, Postgres 14.4, and PHP 8.0.21
- Ubuntu 22.04 with Apache 2.4.52, MariaDB 10.6.12, and PHP 5.6.40
- Ubuntu 22.04 with Apache 2.4.57, Postgres 14.9, and PHP 8.1.2
- Debian Bookworm with Apache 2.4.57, Postgres 15.5, MariaDB 10.11.4, and PHP 8.3.10
- Shared hosting with cPanel, nginx, Postgres 9.2, and PHP 7.2
- through Mozilla Firefox and Google Chrome
- through BrowserStack for cross-browser compatibility (not compatible with Internet Explorer)

Minimum requirements: **PHP 5.5.9** & **PostgreSQL 8.4** or **MySQL 5.6**/MariaDB

Installation directions for:

- [Windows](#)
- [Mac](#)
- [cPanel](#)
- [Softaculous](#)
- [Docker](#)
- **Ubuntu** (or any Debian-based Linux distribution), see below

Installing the package

Unzip RosarioSIS, or clone the repository using git to a directory that is accessible to your web browser. Edit the `config.inc.sample.php` file to set the configuration variables and rename it to `config.inc.php`.

- `$DatabaseType` Type of the database server: either `mysql` or `postgresql`.
- `$DatabaseServer` Host name or IP for the database server.
- `$DatabaseUsername` Username used for authenticating the database.
- `$DatabasePassword` Password used for authenticating the database.
- `$DatabaseName` Database name.
- `$DatabaseDumpPath` Full path to the database dump utility, `pg_dump` (PostgreSQL), `mysqldump` (MySQL) or `mariadb-dump` (MariaDB).
- `$wkhtmltopdfPath` Full path to the PDF generation utility, `wkhtmltopdf`.
- `$DefaultYear` Default school year. Only change after running the *Rollover* program.
- `$RosarioNotifyAddress` Email address to receive notifications (new administrator, new student / user, new registration).
- `$RosarioLocales` Comma separated list of locale codes. Check the `locale/` folder for available codes.

Optional variables

- `$DatabasePort` Port number to access the database server. Default is 5432 for PostgreSQL & 3306 for MySQL.
- `$RosarioPath` Full path to RosarioSIS installation.
- `$StudentPicturesPath` Path to student pictures.
- `$UserPicturesPath` Path to user pictures.
- `$FileUploadsPath` Path to file uploads.
- `$LocalePath` Path to language packs. Restart Apache after changes to this directory.
- `$PNGQuantPath` Path to [PNGQuant](#) (PNG images compression).
- `$RosarioErrorsAddress` Email address to receive errors (PHP fatal, database, hacking).

- `$Timezone` Default time zone used by date/time functions. [List of Supported Timezones](#).
- `$ETagCache` Set to `false` to deactivate the [ETag cache](#) and disable "private" session cache. See [Sessions and security](#).
- `define('ROSARIO_POST_MAX_SIZE_LIMIT', 16 * 1024 * 1024);` Limit `$_POST` array size (default is 16MB). More info [here](#).
- `define('ROSARIO_DEBUG', true);` Debug mode activated.
- `define('ROSARIO_DISABLE_ADDON_UPLOAD', true);` Disable add-ons (modules & plugins) upload.
- `define('ROSARIO_DISABLE_ADDON_DELETE', true);` Disable add-ons (modules & plugins) delete.
- `define('ROSARIO_DISABLE_USAGE_STATISTICS', true);` Disable usage statistics collection.

Create database

Now, you're ready to setup the RosarioSIS database. If you have access to the command prompt for your server, open a terminal window and follow these instructions.

The following instructions are for **PostgreSQL** (for MySQL see below):

1. Login to PostgreSQL as the postgres user:

```
server$ sudo -u postgres psql
```

2. Create the rosariosis user:

```
postgres=# CREATE USER rosariosis_user WITH PASSWORD 'rosariosis_user_password';
```

3. Create the rosariosis database:

```
postgres=# CREATE DATABASE rosariosis_db WITH ENCODING 'UTF8' OWNER rosariosis_user;
```

4. Logout of PostgreSQL:

```
postgres=# \q
```

Also, the [pg_hba.conf](#) file may have to be altered to enable password (`md5`) peer authentication:

```
# "local" is for Unix domain socket connections only
local all all md5
```

The following instructions are for **MySQL** (RosarioSIS version 10 or higher):

1. Login to MySQL as the root user:

```
server$ sudo mysql
```

or

```
server$ mysql -u root -p
```

2. Allow function creation:

```
mysql> SET GLOBAL log_bin_trust_function_creators=1;
```

3. Create the rosariosis user:

```
mysql> CREATE USER 'rosariosis_user'@'localhost' IDENTIFIED BY 'rosariosis_user_password';
```

4. Create the rosariosis database:

```
mysql> CREATE DATABASE rosariosis_db CHARACTER SET utf8mb4 COLLATE utf8mb4_unicode_520_ci;
mysql> GRANT ALL PRIVILEGES ON rosariosis_db.* TO 'rosariosis_user'@'localhost';
```

5. Logout of MySQL:

```
mysql> \q
```

Install database

To install the database, point your browser to: http://yourdomain.com/INSTALL_LOCATION/InstallDatabase.php

That's it!... now, point your browser to: http://yourdomain.com/INSTALL_LOCATION/index.php

and login as 'admin' password 'admin'. With this login, you can create new users, and change and delete the three template users.

Problems

To help you spot installation problems, point your browser to: http://yourdomain.com/INSTALL_LOCATION/diagnostic.php

PHP extensions

Install instructions for Ubuntu 22.04:

```
server$ sudo apt-get install php-pgsql php-mysql php-pdo php-intl php-mbstring php-gd php-curl php-xml php-zip
```

php.ini

Recommended PHP configuration. Edit the `php.ini` file as follows:

```
; Maximum time in seconds a PHP script is allowed to run
max_execution_time = 240
```

```
; Maximum accepted input variables ($_GET, $_POST)
; 4000 allows submitting lists of up to 1000 elements, each with multiple inputs
max_input_vars = 4000
```

```
; Maximum memory (RAM) allocated to a PHP script
memory_limit = 512M
```

```
; Session timeout: 1 hour
session.gc_maxlifetime = 3600
```

```
; Maximum allowed size for uploaded files
upload_max_filesize = 50M
```

```
; Must be greater than or equal to upload_max_filesize
post_max_size = 51M
```

Restart PHP and Apache.

Other languages

Install instructions for Ubuntu 22.04. Install the Spanish (Spain) locale:

```
server$ sudo locale-gen es_ES.UTF-8
server$ sudo update-locale
```

Then restart the server.

wkhtmltopdf

Install instructions for Ubuntu 22.04 (jammy), also works for Ubuntu 24.04 (noble):

```
server$ wget https://github.com/wkhtmltopdf/packaging/releases/download/0.12.6.1-2/wkhtmltox_0.12.6.1-2.jammy_amd64.deb
server$ sudo apt install ./wkhtmltox_0.12.6.1-2.jammy_amd64.deb
server$ wkhtmltopdf --version
server$ wkhtmltopdf 0.12.6.1 (with patched qt)
```

Set path in the `config.inc.php` file:

```
$wkhtmltopdfPath = '/usr/local/bin/wkhtmltopdf';
```

Send email

Install instructions for Ubuntu 22.04. Activate the PHP `mail()` function:

```
server$ sudo apt-get install sendmail
```

Additional configuration

[Quick Setup Guide](#)

[Secure RosarioSIS](#)