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, 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 x86 with Apache 2.4.16, Postgres 9.3.6, and PHP 7.1.18
- macOS Monterey with Apache 2.4.54, Postgres 14.4, and PHP 8.0.21
- Ubuntu 14.04 with Apache 2.4.18, Postgres 9.3.10, MySQL 5.6.33 and PHP 5.5.9
- Ubuntu 20.04 with Apache 2.4.48, Postgres 12.11, and PHP 7.4.22
- Debian Bullseye with Apache 2.4.54, Postgres 13.7, MariaDB 10.5.15 and PHP 8.1.4
- CentOS 8.2 with Apache 2.4.37, Postgres 9.6.10, and PHP 7.2.24
- Shared hosting with cPanel, nginx, Postgres 8.4, and PHP 5.6.27
- 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) or mysqldump (MySQL).
- \$wkhtmltopdfPath Full path to the PDF generation utility, wkhtmltopdf.
- \$DefaultSyear 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.
- \$PortalNotesFilesPath
 Path to portal notes attached files.
- \$AssignmentsFilesPath
 Path to student assignments files.
- \$FS_IconsPath Path to food service icons.
- \$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.

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 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 20.04:

server\$ sudo apt-get install php-pgsql php-mysql gettext php-intl php-mbstring php-gd php-curl php-xmlrpc 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 20.04. Install the Spanish language:

server\$ sudo apt-get install language-pack-es

Then restart the server.

wkhtmltopdf

Install instructions for Ubuntu 20.04 (Focal):

 $server\$\ wget\ https://github.com/wkhtmltopdf/packaging/releases/download/0.12.6-1/wkhtmltox_0.12.6-1.focal_amd64.deb$ $server\$\ udo\ apt\ install\ ./wkhtmltox_0.12.6-1.focal_amd64.deb$

Set path in the config.inc.php file:

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

Send email

Install instructions for Ubuntu 20.04. Activate the PHP mail() function:

server\$ sudo apt-get install sendmail

Additional configuration

Quick Setup Guide

Secure RosarioSIS