Online Scientific Reference System Documentation

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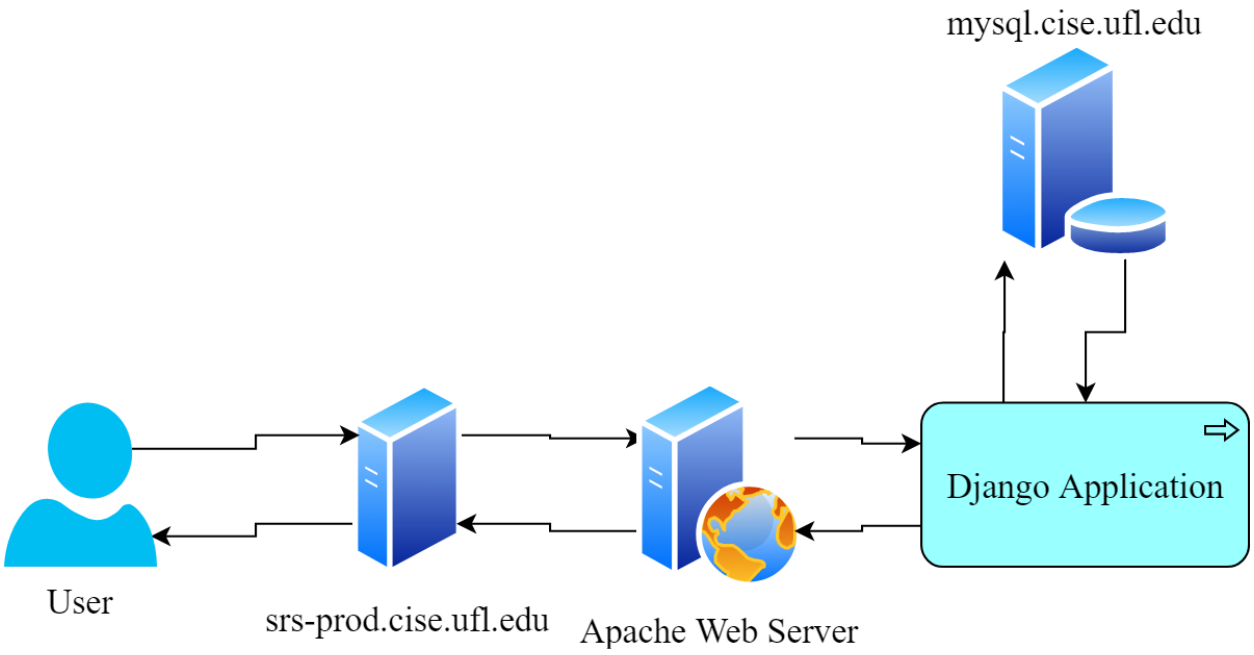
December 2019

1. Server Setup



SRS is a Django 2.2.7 application using Python 3.8.0 running on a Red Hat Enterprise Linux 7.7 Server that utilizes the CISE departments MySQL database (mysql.cise.ufl.edu). The application's static (frontend) files are served by an Apache 2.4.6 Web Server using the mod_wsgi API to direct Apache to the location of the static files.

A detailed explanation of the Apache and mod_wsgi API can be found in the Django 2.2 documentation located at https://docs.djangoproject.com/en/2.2/howto/deployment/wsgi/modwsgi/.

2. Local Installation Instructions

The GitHub repository for SRS is located at https://github.com/SMGeller/srs.

Clone the project and create your own repository for it.

Detailed installation instructions on how to setup a local development environment can be found in **Online Scientific Reference System – Spring 2018.pdf,** which is in the base directory of the repository.

(FOR WINDOWS USERS) The command to upgrade pip to the latest version is:

```
python -m install --upgrade pip
```

The MySQL client might have issues installing on Windows. The workaround for this involves downloading a wheel file (.whl) from https://www.lfd.uci.edu/~gohlke/pythonlibs/#mysqlclient and installing it manually using the following command.

```
pip install /path/to/mysqlclient.whl
```

3. Deploying Changes to Production

To deploy changes to the server you will need root access, which can be obtained by contacting the CISE department admins. Dayron Acosta initially setup the server, but any of the admins can grant root access.

The files for the SRS application can be found in the **/srv/appsroot/cise-srs/** directory.

```
cd /srv/appsroot/cise-srs/
```

In order to push changes to the server from your cloned repository, you need to change the remote GitHub repository used by the server from https://github.com/SMGeller/srs to location of your repository.

```
git remote set-url origin <YOUR REPOSITORY URL>
```

Then your changes can be pulled from your remote directory.

```
git pull
```

If you made any changes to the **models.py** file then you need to migrate those changes to the database. Do this in the virtual environment described in the **Online Scientific Reference System – Spring 2018.pdf**.

```
source myvenv/bin/activate
```

```
python manage.py migrate
```

If any changes are made to the frontend files located in **/srs/templates/**, then they need to be recollected into static files. Even if you didn't directly make changes to the frontend, I would still run this command.

```
python manage.py collectstatic
```

Then to fully apply the changes you need to restart the Apache server.

```
apachectl restart
```