**Installation and configuration of
LA EjsS Moodle plugin**

**Current Situation**

Moodle 4.0 supports new functionalities for plugins

Learning Analytics (LA) EjsS Moodle Plugin updated for Moodle 4.0

References:

* Tutorial: How to write plugins for Moodle, available at <https://docs.moodle.org/dev/Tutorial>
* LA EjsS Moodle Plugin, available at <https://gitlab.com/ejsS/addon-projects/moodle-plugin>

**Step 1. Installation in Moodle 4.0**

As an admin user, install and configure the plugin.

* Download the plugin and generate a zip file with the plugin folder (check that the zip file does not contain hidden folders such as .git or similar)
* Go to Site Administration > Plugins > Install plugins
* Drag and drop the zip file and click "Install plugin from the Zip file"



* If the validation of the plugin is successful, click "Continue"
* If the checks of the Moodle server are successful, click "Continue"
* In the window Plugins check, review the plugin information and click "Upgrade Moodle database now"



* If the installation is successful, click "Continue"



**Step 2. Configuration in Moodle 4.0**

The plugin requires the configuration of several aspects in Moodle.

* Enable web service advance feature
	+ Go to Site Administration > General > Advanced features
	+ Enable web services and click "Save changes"



* Enable REST protocol
	+ Got to Site Administration > Server > Web services > Manage protocols
	+ Enable REST protocol and click "Save changes"



* Allow users to create a web service token and use REST protocol
	+ Go to Site Administration > Users > Permissions > Define roles
	+ Click the button "Edit" for Authenticated user
	+ Filter capabilities with the text "web service"
	+ Click "Allow" for the capability "Create a web service token"



* + Filter capabilities with the text "rest:use"
	+ Click "Allow" for the capability "Use REST protocol" and click "Save changes"



**Using the LA EjsS Moodle**

**Step 1. Creating a course with EjsS simulations**

As an admin user, verify which users have the role "Course creator" in Site Administration > Users > Assign roles in System. **Note that the course creators, teachers or students cannot be an admin user as well**.

As a Course creator user, create a new course as usual.

* Go to Site Administration > Courses > Manage courses and categories
* Click the button "Create new course"
* Fill the course properties
	+ Go to Completion tracking > Enable completion tracking, and select No
* Click "Save and display"
* Enable "Edit mode"



The plugin allows to include EjsS simulations as a resource.

* Click "Add an activity or resource" and select EjsS Simulation



* Enter a name and description, and then upload the simulation zip file



* Select the zip file and click Unzip



* Select the file index.html and click Set main file
* Click the button "Save and display"

Note that you can find a repository of EjsS simulations at <https://iwant2study.org/ospsg/>

References:

* Open Source Physics @ Singapore, available at <https://iwant2study.org/ospsg/>

**Step 2. Accessing a course with EjsS simulations**

As a course creator user, enroll users as teachers or students.

* Go to the Participants page in the course and click the button "Enrol users"
* Search for the teacher and select Teacher as role to assign, and click the button "Enrol users"
* Search for the teachers and select Student as role to assign, and click the button "Enrol users"



As a student user, access the course and try the EjsS simulation.

As a teacher or course creator user, access the course and see the LA EjsS plugin reports.

* Go to the specific course and then go to More > EjsS Analytics



* Click the button "See" of the EjsS simulation that you want to see
* Click the button "Activity" of the EjsS simulation to see the activity report
* Click the button "Search" of the EjsS simulation to see an activity report for a specific action
* Click the button "Monitor" of the EjsS simulation to see a real-time activity report

As an admin user, list the courses with EjsS simulations.

* Go to Site Administration > Reports > EjsS Simulation & Stats



* Click the link of the course to see its report as a teacher user