

SLOODLE 1.2 - Tracker Documentation

Thanks for using SLOODLE 1.2!

This guide explain how to setup and use the Tracker system, which is new in SLOODLE 1.2. If you have any questions, then please post on the forums at sloodle.org.

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Introduction

SLOODLE 1.2 introduces the SLOODLE Tracker system, which was originally developed by a team from the University of Ulster. This functionality has previously been released as a 3rd party version of the SLOODLE module. For SLOODLE 1.2, we have simply transferred this functionality directly over to the core SLOODLE release.

If you would like more information about the background to the SLOODLE Tracker, then you may be interested to read an article about it published by the Ulster team:

M. J. Callaghan, K. McCusker, J. L. Losada, J. Harkin, and S. Wilson, (2009)
“**Engineering Education Island: Teaching Engineering in Virtual Worlds,**” *Italics*,
vol. 8, no. 3.

What does SLOODLE Tracker do?

The purpose of the SLOODLE Tracker is to let you integrate task-based goals into your 3d virtual educational environments, and to monitor students' progress from within Moodle. This could be as simple as requiring students to be at a specific location, or find and touch a specific button. You can also put together a series of tasks which must be completed in a set order.

If you are comfortable with content creation in Second Life (and particularly a little scripting) then you can easily create your own types of task which will integrate neatly with the SLOODLE Tracker.

Funding & related work

Making the Tracker functionality available in a main SLOODLE release was undertaken as part of a multi-institution project funded by JISC. Under the same project, work is also being done to release a version of the SLOODLE Tracker system which allows dynamic creation and deletion of OpenSim servers on a per-student basis.

Download and installation

Note: you will not be able to downgrade your site to SLOODLE 1.2 if you have been using the latest development version of SLOODLE (v2.0, or the 'trunk'). You will need to uninstall your existing SLOODLE module, and then install SLOODLE 1.2.

The download and installation process is the same as it is for standard SLOODLE releases. You will need to download and install the modules for your Moodle site, and obtain the in-world tools in Second Life.

Full links and instructions for the process can be found on the SLOODLE wiki, here:

1. Download: http://slisweb.sjsu.edu/sl/index.php/Download_Sloodle

2. Install: http://slisweb.sjsu.edu/sl/index.php/Install_Sloodle

When you get the SLOODLE tools in Second Life, you need the “**SLOODLE Set 1.2**”.

Setup the SLOODLE Tracker

A. Setup SLOODLE on your course [required]

If you were already using SLOODLE on your course, then you may not need to do this part of the setup process.

1. Visit your Moodle site and login
2. Navigate to the course where you would like to use the SLOODLE Tracker
3. Activate edit mode (if necessary)
4. Add a SLOODLE Controller to your course (if you don't already have one)
 - a. Click an "Add an activity..." menu and select "SLOODLE Controller"
 - b. Specify a name for the Controller
 - c. Save the Controller and return to the course page

B. Add a Tracker activity to your course [required]

This step adds an activity module to your Moodle course which the SLOODLE Tracker will interact with. This will typically represent a single assignment or goal, which contains one or more tasks.

1. Add a “Tracker” to your course
 - a. Click an “Add an activity...” menu
 - b. “Tracker “ will be listed under “SLOODLE modules”
2. Specify a name and (optionally) a description for your Tracker activity
3. Save the Tracker

When you click on the Tracker activity as a teacher or administrator, you will see a list of everybody who is in the course. Each person’s progress should be displayed as well. However, when a student views the page, they will only be able to see their own progress.

C. Add Tracker tools in Second Life [required]

At the moment, your Tracker will not contain any tasks. A task is automatically added to your Tracker each time you setup a Tracker tool. The default tools are a scanner and a button. A scanner task requires an avatar to be in a particular location, and a button task requires an avatar to touch an object in-world.

C1. Configure SLOODLE Set 1.2

Start by setting-up a SLOODLE Set 1.2. This is the standard procedure for SLOODLE Sets, so you may be familiar with it already. You will usually do this once for each course.

Start in Second Life:

1. Rez the SLOODLE Set 1.2 on the ground
2. Click the door to open it
3. Click the “Connect Moodle” button
4. Type the basic URL of your Moodle installation in text-chat
 - a. This should start with “http” and should *not* end with a slash or “.php”
 - b. Example: `http://www.somesite.com/moodle`
 - c. Example: `http://moodle.mycollege.edu`
5. A dialog should appear offering a URL link to your Moodle site
 - a. Click “Go to page” or “Load URL” (depends on which SL Viewer you use)
6. Your Moodle site should appear in your web-browser
 - a. Login if necessary
7. Click the SLOODLE Controller you added to your course
 - a. It should be in the “Select Controller” box under the name of your course
8. Click on “Submit”
9. Go back to Second Life
10. Click the “Connect Moodle” button again
11. A dialog should appear offering two options
 - a. Click 1 = Download configuration
12. SLOODLE Set 1.2 should report “Configuration Received”

It is recommended that you right click the SLOODLE Set 1.2 and select “Take copy”. That will store a copy of the configured Set in your inventory (in the Objects folder) so that you don’t need to repeat the configuration process if you want to use the Set on the same course at a later date.

Note: If you have not used SLOODLE on your site at all before, then you will want to setup and use a “SLOODLE RegEnrol” booth at this point so that you can register your avatar. This allows you to test the Tracker functionality using your own account.

C2. Configure a SLOODLE Tracker tool

You will need to repeat the following process for each task you want to add to your Tracker activity.

Start in Second Life with the SLOODLE Set 1.2 you configured earlier. This part of the process is the standard “web-setup” method for SLOODLE tools, so you may have done a similar process before:

1. If the SLOODLE Set 1.2 is closed, then click the door to open it
2. Click the “REZ ME” button
3. A rez menu will appear
 - a. Click “NEXT” to see the second page of items
 - b. Click “**SLOODLE 1.2 Tracker - Button**” or “**SLOODLE 1.2 Tracker - Scanner**”
 - c. Your selected SLOODLE Tracker tool should appear
4. Click on the tool that was just rezzed
5. A dialog should appear offering you a URL to your Moodle site
 - a. Click “Go to page” or “Load URL” (depends on which SL Viewer you use)
6. Your Moodle site should appear in your web-browser
 - a. Login to Moodle if necessary (although on most systems it isn’t needed)
7. The Tracker tool configuration page should appear
 - a. In the top drop-down box, select the Tracker module you added to course earlier
 - b. Click “Submit”
 - c. A page should appear telling you the settings have been stored
8. Go back to Second Life
9. Click the Tracker tool again
13. A dialog should appear offering two options
 - a. Click 1 = Download configuration

Your Tracker tool is now working. If you would like to make sure it has been setup correctly, then visit your Moodle course page, and click the Tracker activity you added earlier. You should see a list of users (and avatars, if applicable) in your course. Under each one, you should see an unnamed task -- this is the one you just added.

Note: the Scanner tool can be activated/deactivated by its owner. Touch it to toggle it on and off.

At the moment, the task will just be called “Unnamed task”. Follow part D to customise your task name and description.

D. Customise the task name and description [recommended]

You will probably want to specify a name (and optionally a description) for each task you create. This makes it easier to monitor student progress from within Moodle. This requires a small amount of script editing.

Start in Second Life:

1. Find the Tracker tool which you want to customise
2. Right-click the tool and select “Edit”
3. The Build or Create dialog should appear
 - a. Click the “Contents” tab
4. Double-click the script called “sloodle_mod_tracker-1.0”
5. Near the top will be a line saying: **NAME = “Unnamed task”**;
 - a. Replace the “Unnamed task” part with the name of your task
 - b. ...But remember to leave the “quotation marks” around it.
 - c. The semi-colon at the end is important!
6. There will also be a line saying: **DESCRIPTION = “-”**;
 - a. Replace the “-” part with a very brief description of your task
7. Click the “Save” button at the bottom of the script window
 - a. Wait a moment for the script to save...
8. Close the script window
9. Close the Build / Create dialog
10. Click your Tracker tool once to reset it

At this point, the Tracker tool should process its configuration data again, and re-connect to your Moodle site. It will update the name and description which are displayed on your Tracker activity page.

E. Customise the task order [optional]

This part of the process is entirely optional. It allows you to set a specific order in which the tasks must be completed in-world. You will need to know in advance exactly how many tasks are involved, so it is best to plan ahead, or do this at the end (after you have created all the tasks).

This involves some more script editing, and is very similar to step D.

Start in Second Life, and do this for each Tracker tool in turn:

1. Find the Tracker tool which you want to customise
2. Right-click the tool and select “Edit”
3. The Build or Create dialog should appear
 - a. Click the “Contents” tab
4. Double-click the script called “sloodle_mod_tracker-1.0”
5. Near the top will be a line like this: **PREDEFINED_ORDER = 0;**
 - a. Replace the 0 with a 1
 - b. The semi-colon at the end is important!
6. Next should be a line like this: **POSITION = 0;**
 - a. Replace the 0 with the number of the task you are editing
 - b. For example, 0 is the first task, 1 is the second, and so on
7. Next should be a line like this: **TOTAL = 0;**
 - a. Replace 0 with the total number of tasks in the sequence

It is important to make sure that you do this for every tasks if you want to use a set order.

Note: the set order only works if all the tasks are fairly close together (within 40m), as each task needs to tell the next one that it is been completed.

Using the Tracker (as a student)

How to use a Tracker activity depends on the tasks in it. The default tasks are very simple:

- **Scanner** - simply walk reasonably close the scanner for a few moments, and it should detect your presence and notify Moodle
- **Button** - click on the button, and it should notify Moodle

An activity may consist of several tasks. Remember that some tasks may have to be done in order. Be sure to find the follow the order that has been prescribed.

It is important to visit the Tracker activity in Moodle, as this will let you check that your progress has been logged.

Roll-your-own Tracker tasks

You might like to make you own Tracker tools, depending on what kind of tasks you want to use. The simplest way to start is just by customising the existing official tools. You can change colour, textures, and shape. You can also make them part of larger objects.

If you want to add functionality, e.g. to report something other than a scan or a button-press, then you will want to take a look at the “sloodle_tracker_button” script inside a button-style Tracker tool. It provides the functionality for detecting button clicks.

It is a simple script, and if you look at it then you will see it just sends a link message when an interaction occurs, and receives a link message to say the interaction has been reported. You can customise the script to make it send the link message under different conditions.

Note: all the other scripts in the Tracker tools are important SLOODLE scripts. It is recommended that you don't modify them unless you are familiar with SLOODLE scripting.

Troubleshooting

If you have a problem that isn't mentioned here then please ask us on the forums at sloodle.org.

The Tracker tool says my avatar is not registered/recognised.

You will need to register your avatar with your Moodle site. This is the important step which lets SLOODLE know which avatar corresponds to which Moodle user account. You can do this by setting-up and using a SLOODLE RegEnrol booth for your course. Your students will need to go through this process as well.

The configuration page says there are no Trackers on my course.

Did you remember to add a Tracker activity to your Moodle course? You will need to do this before you can setup a Tracker tool in-world.

If you have done that then make sure you setup the SLOODLE Set to connect to the same course which you are using your Tracker activity on. This is very important, as SLOODLE security precautions will not allow any tools to talk to multiple courses.

I get an HTTP error (e.g. 399, 404, 500 or 509) when trying to setup the SLOODLE Set.

Did you type your Moodle address correctly? These errors commonly happen when an address is typed incorrectly.

If you typed the address correctly, then are you working on your local computer? If so, then make sure your network or firewall security isn't blocking incoming connections on port 80. Also make sure you supply your IP address, and not the name "localhost" in your address. Contact us on the SLOODLE.org forums if you are having difficulty with this.