



EON REALITY

EON-XR PLATFORM

LTI Integration Guide

For EON-XR v9.0

Overview

Learning Management Systems (LMSs), or sometimes called Virtual Learning Environments (VLEs) are common in many educational institutions. The LMS allow educators to create and deliver learning content, as well as manage and monitor student performance. Some common LMSs include [Moodle](#), [Canvas](#), [Brightspace](#), [Blackboard](#), etc.

LTI integration between EON-XR and your institution's LMS can help educators make use of the EON-XR platform easily. They will not have to use EON-XR in isolation. Instead, they can design courses that blend both learning materials within the LMS with AVR lessons created in EON-XR. You may find more information about LTI [here](#).

By clicking on an LTI link within the LMS, a user (admin/teacher/student) can:

- Navigate to the EON-XR platform without logging in to EON-XR separately, or
- Navigate to specific lessons within the EON-XR platform (provided the LTI link is to the direct lesson rather than the homepage of EON-XR).

This guide is meant for both LMS/EON-XR Admins and educators to setup the LTI integration. As there are many different LMSs in the market, the process **will not** be the same for each LMS. An example for Moodle LMS is shown in this guide.

*Please note that this guide is **not** meant to be comprehensive and cannot cover all LMSs. Your version of Moodle may also be different. Use the principles covered in this guide to help you in the integration process.*

There are two parts to the LTI integration:

1. LMS Admins first add EON-XR as an External Tool within the LMS site-wide (or at the sub-account level)
2. Educators then add the EON-XR external tool as a link within their courses, whether to link to the EON-XR homepage or to specific lessons



Requirements

Admin access to EON-XR institution account

- For setting and accessing tool credentials

Admin/Faculty/Instructor (or equivalent) access to institution's Learning Management System (LMS)

- For adding external tool

Specifications

LTI

- 1.0/1.1 – stable
- 1.2 (SHA-256 encryption) - supported but unstable
- 1.3+ - not yet supported

OAuth

- 1.0 – stable
- 2.0 (two-way authentication) not yet supported

Permission

You must allow EON-XR to obtain the following user information from your LMS:

- User's Email
- User's First and Last Name
- User's Roles

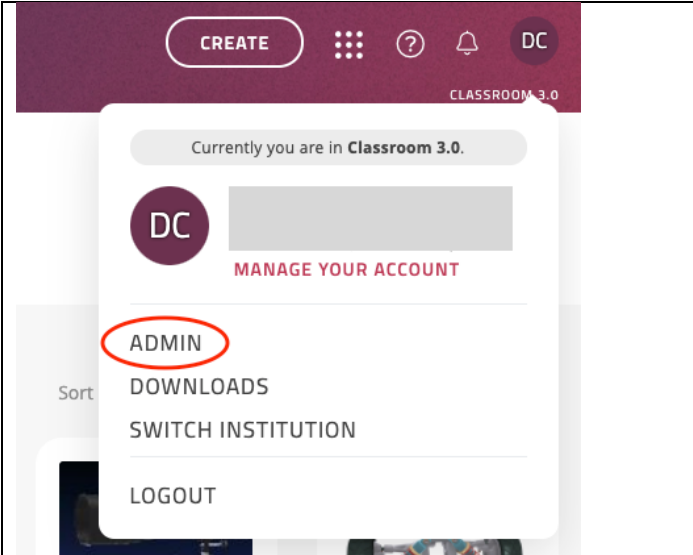
Part 1: For EON-XR and LMS Admins

Your EON-XR and LMS Admins will be the ones to (1) generate the LTI credentials, and (2) add EON-XR as an External Tool in your LMS.

Clicking on an EON-XR external tool within your LMS will allow users to:

- If their email address is already enrolled in EON-XR, they will be logged into EON-XR automatically without any change to their existing EON-XR role.
- If their email address **has not** been enrolled in EON-XR, EON-XR will create an account for the user using the email and name provided by your LMS. Their LMS role will also be used to map to an existing EON-XR role according to the Roles mapping in EON-XR (see instructions below).

Instructions to Generate LTI Credentials in EON-XR

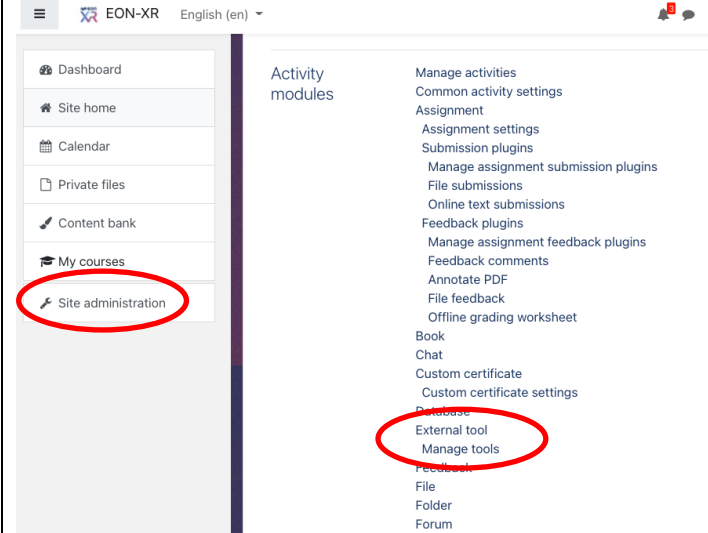
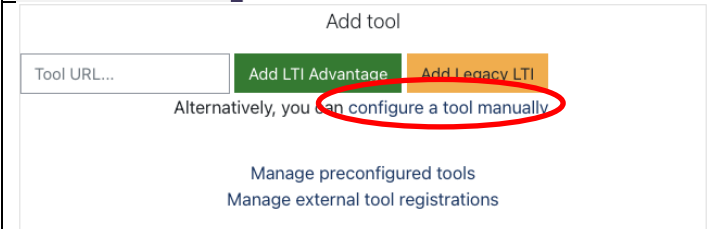
 <p>The screenshot shows the Classroom 3.0 user interface. At the top, there is a dark purple header with a 'CREATE' button, a grid icon, a question mark icon, a bell icon, and a 'DC' profile icon. Below the header, a white dropdown menu is open, displaying the user's profile with 'DC' and a greyed-out name, followed by 'MANAGE YOUR ACCOUNT'. Below that, the 'ADMIN' option is circled in red. Other options in the menu include 'DOWNLOADS', 'SWITCH INSTITUTION', and 'LOGOUT'. The background shows a blurred view of the Classroom 3.0 interface with a 'Sort' label visible.</p>	<p>Navigate to Admin</p>
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	<p>Navigate to Settings</p>												
	<p>Select LTI Settings</p>												
	<p>Select 'Generate Credentials'</p>												
<p>Input roles exactly as they appear in your learning management system (LMS) so that users will be matched to the correct roles. (Example: Instructor)</p> <p>When a LMS role is unrecognized the EON role with the lowest weight (0) will be used. When an LMS account has multiple roles, the highest weight will be used.</p> <p>After a user account is created, their Eon role can only be changed in 'Admin' settings.</p> <table border="1"> <thead> <tr> <th>WEIGHT</th> <th>EON ROLE</th> <th>LMS ROLE</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Student</td> <td>Student</td> </tr> <tr> <td>1</td> <td>Teacher</td> <td>Teacher</td> </tr> <tr> <td>N/A</td> <td>Admin</td> <td>input role here or leave blank to exclu</td> </tr> </tbody> </table>	WEIGHT	EON ROLE	LMS ROLE	0	Student	Student	1	Teacher	Teacher	N/A	Admin	input role here or leave blank to exclu	<p>Generating credentials will take you to the 'Roles' tab.</p> <p>EON Role represents the user's permission level in the EON-XR platform, this will need to be matched with the roles in the LMS platform.</p> <p><i>(Your roles might be different than the example to the left.)</i></p> <p>Enter the LMS platform's role you wish</p>
WEIGHT	EON ROLE	LMS ROLE											
0	Student	Student											
1	Teacher	Teacher											
N/A	Admin	input role here or leave blank to exclu											

	<p>to match with the EON-XR role.</p> <p>Leave entry blank if you do not wish to auto create accounts with that role.</p> <p>Capitalization does not matter; however, the role must be entered with the exact same characters as the role in the LMS.</p>								
<div style="border: 1px solid #ccc; padding: 10px;"> <div style="display: flex; justify-content: space-around; border-bottom: 1px solid #ccc; margin-bottom: 10px;"> CREDENTIALS ROLES XML </div> <p>Input roles exactly as they appear in your learn matched to the correct roles. (Example: Instruc</p> <p>When a LMS role is unrecognized the EON role</p> <p>LMS account has multiple roles, the highest we</p> <p>After a user account is created, their Eon role c</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #f2f2f2;"> <th style="padding: 5px;">WEIGHT</th> <th style="padding: 5px;">EON ROLE</th> </tr> </thead> <tbody> <tr> <td style="text-align: center; padding: 5px;">0 ▾</td> <td style="padding: 5px;">Student</td> </tr> <tr style="background-color: #f2f2f2;"> <td style="text-align: center; padding: 5px;">1 ▾</td> <td style="padding: 5px;">Teacher</td> </tr> <tr> <td style="text-align: center; padding: 5px;">N/A ▾</td> <td style="padding: 5px;">Admin</td> </tr> </tbody> </table> </div>	WEIGHT	EON ROLE	0 ▾	Student	1 ▾	Teacher	N/A ▾	Admin	<p>In some cases, the LMS will associate multiple roles with a user. For example, a user could be a Student in one course and a Teaching Assistant in another. The higher (5) weighted role will be chosen over the lower (1) weight role.</p> <p>If the LTI is unable to match the user's LMS role with an EON role, the lowest weighted EON role with an LTI role entry will be used as the default.</p> <p>When updating role weight, ensure there are no duplicate weights.</p>
WEIGHT	EON ROLE								
0 ▾	Student								
1 ▾	Teacher								
N/A ▾	Admin								
<div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <input style="width: 100%; padding: 5px;" type="text" value="input role here or leave blank to exclude"/> <div style="text-align: right; margin-top: 10px;"> UPDATE </div> </div>	<p>When completed, select Update Roles</p>								

<p>CREDENTIALS ROLES XML</p> <hr/> <p>CONSUMER KEY</p> <input type="text" value=""/> <p>SHARED SECRET</p> <input type="text" value=""/> <p>TOOL NAME</p> <input type="text" value="EON-XR"/> <p>LAUNCH URL</p> <input type="text" value="https://core.eon-xr.com/LTI/Launch"/>	<p>Next, go to the Credentials tab.</p> <p>Credentials tab will provide you with required parameters to add EON-XR as an external tool to your LMS.</p> <ul style="list-style-type: none"> • Consumer key is required to link to the LMS • Shared secret is required to establish a secure link • You may use this Tool Name or input your own Tool Name within your LMS • The Launch URL specifies where the LMS sends the launch request
<p>CREDENTIALS ROLES XML</p> <hr/> <p>With your Consumer Key and Shared Secret, use the XML below to create a new LTI App. Privacy must remain set to Public.</p>	<p>The XML tab is not required unless your LMS require you to add external tools via XML instead of the above credentials.</p>
<p>RESET CREDENTIALS</p>	<p>To reset credentials and invalidate any existing LTI links, select Reset Credentials.</p> <p><i>Note: This cannot be undone and any LTI links that have been set up will break and need to be reconfigured.</i></p>

Instructions to add External Tool in Moodle LMS

 <p>The screenshot shows the Moodle LMS site administration menu. The 'Site administration' link in the left sidebar is circled in red. In the main content area, the 'External tool' and 'Manage tools' links are also circled in red.</p>	<p>In your Moodle LMS, navigate to: Site administration > Plugins > External tool > Manage tools</p>
 <p>The screenshot shows the 'Add tool' page. The 'Add Legacy LTI' button is circled in red. Below the buttons, the text 'Alternatively, you can configure a tool manually' is also circled in red.</p>	<p>Click on "configure a tool manually"</p>

Tool settings	
Tool name	<input type="text" value="EON-XR"/>
Tool URL	<input type="text" value="https://core.eon-xr.com/LTI/Launch"/>
Tool description	<input type="text"/>
LTI version	<input type="text" value="LTI 1.0/1.1"/>
Consumer key	<input type="text"/>
Shared secret	<input type="text" value="Click to enter text"/>
Custom parameters	<input type="text"/>
Tool configuration usage	<input type="text" value="Show as preconfigured tool when adding an external tc"/>
Default launch container	<input type="text" value="New window"/>
	<input type="checkbox"/> Supports Deep Linking (Content-Item Message)
Content Selection URL	<input type="text"/>

Under Tool settings, complete the following fields:

- **Tool name** – give an appropriate name, e.g. “EON-XR”
- **Tool URL** – paste from the “Launch URL” field in the EON-XR LTI credentials
- **Tool description** – provide an appropriate description or leave empty
- **LTI version** – make sure it’s LTI 1.0/1.1
- **Consumer key** – paste from the “Consumer Key” field in the EON-XR LTI credentials
- **Shared secret** – paste from the “Shared Secret” field in the EON-XR LTI credentials
- **Tool configuration usage** – leave as the one shown
- **Custom parameters** – leave empty
- **Default launch container** – you must set to “New window”, otherwise the link to EON-XR will not work

Services

IMS LTI Assignment and Grade Services ? Do not use this service ▾

IMS LTI Names and Role Provisioning ? Use this service to retrieve members' information as per ▾

Tool Settings ? Use this service ▾

Privacy

Share launcher's name with tool ? Always ▾

Share launcher's email with tool ? Always ▾

Accept grades from the tool ? As specified in Deep Linking definition or Delegate to tool ▾

Force SSL ?

Miscellaneous

Save changes Cancel


Scroll down to the Services and Privacy section. Use the settings in the screenshot on the left:

- **IMS LTI Names and Role Provisioning** – EON-XR need to retrieve the user's Names and Role for the LTI integration to work
- **Share launcher's name with tool** – must be set to "Always"
- **Share launcher's email with tool** – must be set to "Always"

Click on "Save changes" to complete the process.

Tools

Active ⚙️ 🗑️



EON-XR v9.0

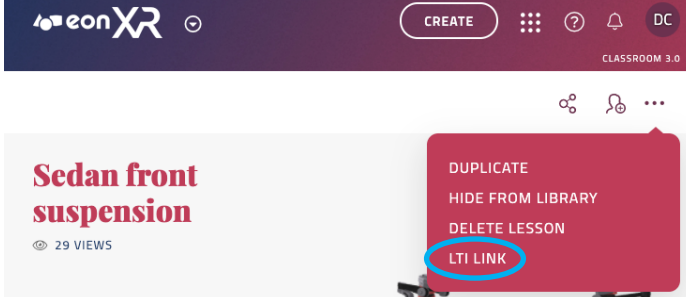
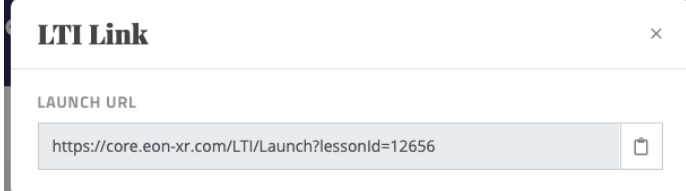
For EON-XR v9.0 XR Library

This tool is being used 31 times

EON-XR has now been added site-wide in your LMS as an external tool.

Part 2: For Faculty Members/Educators

Instructions to Obtain LTI Link for Specific EON-XR Lessons

	<p>Select LTI Link in the Lesson Page in EON-XR</p>
	<p>Use the Launch URL given, which should end with the Lesson ID</p> <p><i>For Moodle LMS, you only need the part starting with "lessonId=12656"</i></p>



























Instructions to Add LTI link to Specific EON-XR Lessons in Moodle LMS

	<p>In your course, select "Add an activity or resource"</p>
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Add an activity or resource ✕

Search

All Activities Resources

 Assignment ☆ ⓘ	 Book ☆ ⓘ	 Chat ☆ ⓘ	 Choice ☆ ⓘ	 Custom certificate ☆ ⓘ	 Database ☆ ⓘ
 External tool ☆ ⓘ	 Feedback ☆ ⓘ	 File ☆ ⓘ	 Folder ☆ ⓘ	 Forum ☆ ⓘ	 Glossary ☆ ⓘ
 H5P ☆ ⓘ	 IMS content package ☆ ⓘ	 Interactive Content ☆ ⓘ	 Jitsi ☆ ⓘ	 Label ☆ ⓘ	 Lesson ☆ ⓘ
 Page ☆ ⓘ	 Questionnaire ☆ ⓘ	 Quiz ☆ ⓘ	 SCORM package ☆ ⓘ	 Survey ☆ ⓘ	 URL ☆ ⓘ
 Wiki ☆ ⓘ	 Workshop ☆ ⓘ				

Select "External Tool"

General

Activity name ! This is an EON-XR lesson

Show less...

Activity description

↕
A
B
I
☰
☰
🔗
🔄

🖼️
📄
📷
🎥
📎
H-P

Display description on course page ?
 Display activity name when launched ?
 Display activity description when launched ?

Launch container ? Default

Custom parameters ? lessonId=12656

Preconfigured tool ? EON-XR v9.0 + ⊗ ×

Select content

Under the “General” settings, complete the following fields:

- **Activity name** – provide your name for the EON-XR lesson or activity
- **Activity description** – provide your own
- **Launch container** – leave as “Default”
- **Custom parameters** – paste the lesson ID into this field

Save the settings

🔗 This is an EON-XR lesson Edit

Mark as done

Once you’ve added the lesson successfully, clicking on the link will redirect you to the specific EON-XR Lesson Page.

+ 🔗 This is an EON-XR lesson Edit

Mark as done

Open Link in New Tab
 Open Link in New Window
 Open in InPrivate Window
 Send Link to Your Devices >
 Save Link As...
 Copy Link

ar Energy 🔗

If you want to embed the LTI link within other learning content, e.g. a Moodle page, copy-and-paste the URL from the LTI link in the previous step.
 e.g. <https://lms.eon-xr.com/mod/lti/view.php?id=4049>

Introduction to the Solar Panel

1) Open the EON-XR Lesson by clicking "View in EON-XR" on the right. Take some time to explore the lesson before attending the lecture this week.



View in EON-XR Desktop

Then, replace "view.php" with "launch.php", i.e. <https://lms.eon-xr.com/mod/lti/launch.php?id=4049>

Add this new URL to as a regular hyperlink to any content. The example on the left shows one being added to the red button. Remember to select "Open in a new window".

Note: The specific lesson must be added as an EON-XR Lesson for this to work.

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