

Integrating with Learning Management Systems: AICC



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Overview

There are two main benefits a NovoEd customer can experience by integrating with its learning management system:

- Discoverability of learning experiences they offer on NovoEd
- Tracking learner completion in the organization's system of record

Most learning management system integrations involve an **AICC package**. AICC packages contain course metadata (course title, author, description, etc.) in a .zip file and can be downloaded for a customer's NovoEd course. These packages can then be uploaded into a customer's Learning Management System.

Learner Experience

Here are the normal steps of an AICC launch and AICC completion report (keeping in mind some integrations are unique and require different steps):

1. The user discovers a NovoEd experience on LMS.
2. User clicks on launch.
3. AICC launch takes the user to a NovoEd course landing page and asks them to log in. If the customer has SSO enabled, the SSO process will simply log the user in and redirect them to NovoEd.
4. If Step 3 is successful, the user is enrolled in the learning experience, receives a welcome email from NovoEd, and can engage with learning.
5. If the course defines completion criteria and the learner completes the learning, NovoEd will send the outcome of the learning back to the LMS through the parameters sent to NovoEd during the AICC launch. NOTE: If the learning experience closes access to



learners, NovoEd will send a completion event with the right status for whether the user has completed or not to the LMS as well.

Requirements

AICC is an LMS integration standard. It is not an authentication standard. This means that customers still need to pair AICC with SSO, or users have to maintain their own username and password to enroll in NovoEd courses. **NovoEd strongly recommends that customers pair AICC with SSO at the same time.**

NovoEd is AICC 4.0 compliant. For customers that leverage an LMS with lower versions of AICC (do not support AICC 4.0), NovoEd can offer support testing these integrations. However, this option may not work out of the box. The NovoEd technical support team can enable the AICC integration. Once enabled, the Org Admin will see the option to “Download AICC package” in the Org Admin Dashboard.

Different learning management systems have various ways of accepting an AICC package. NovoEd recommends that customers consult their learning management system for this upload. It is preferred that the AICC package is launched into a full browser window and **NOT a pop-up or an IFrame**. An AICC launch from the LMS involves several redirects that might get blocked if the launch is confined in a pop-up window or an iframe.

An AICC launch from an LMS overwrites any course enrollment restrictions on NovoEd and gives the user complete provisioning controls to the LMS. For example, if a course is created with closed enrollment on NovoEd, learners will not be able to enroll unless it is through the AICC integration. When AICC integration is enabled, the NovoEd platform assumes that the user launching an AICC package from the LMS has been given access already, enrolls them, and allows them to enjoy the training.

When using an LMS and the AICC integration, the following settings should be made:

- 1. The course must be a PRODUCTION OFFERING.**
- 2. The Enrollment/Registration Type must be CLOSED ENROLLMENT on NovoEd to prevent any user from bypassing the AICC launch from the LMS.**
- 3. Defining COMPLETION CRITERIA for the course is recommended.**

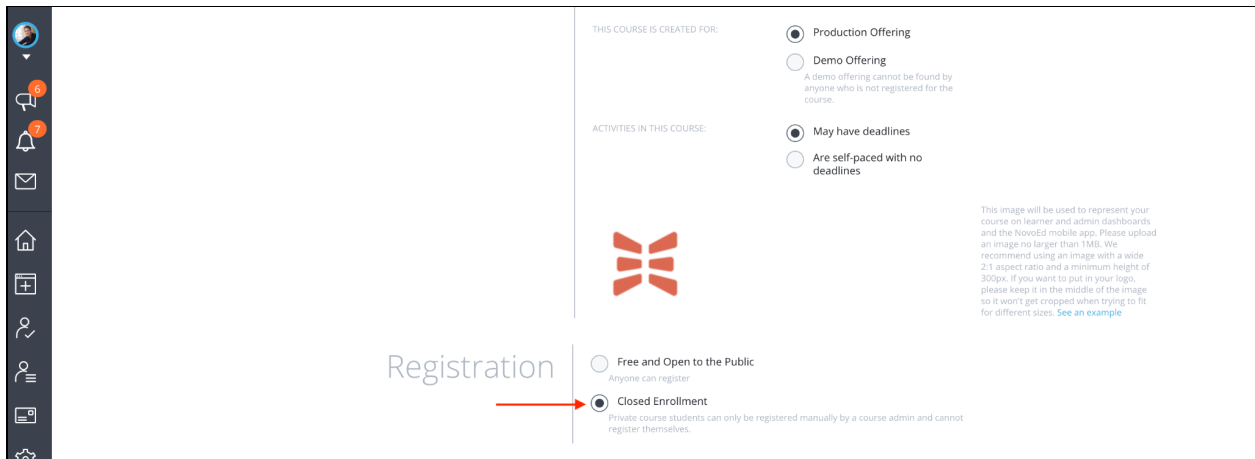
For example, if a customer has a course with the “open within organization” enrollment setting, a learner can forward the course link to another learner in your company and the new learner can enroll in the course without going through the AICC launch. As a result, the new learner’s completion data will not be recorded in the LMS. A course launch has to happen through the LMS for NovoEd to be able to send data back to the LMS after completion - this is the reason for the



requirement to provision users on the LMS to access the course launch and use closed enrollment settings on NovoEd.

NovoEd strongly discourages customers from adding users manually to courses from the user management dashboard, as that interferes with an AICC launch and the data collection process.

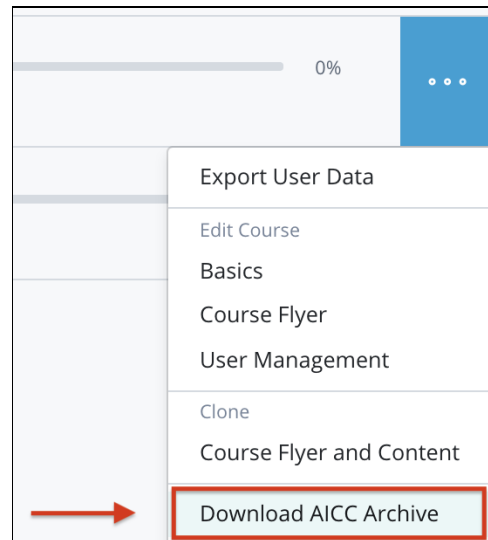
When using an LMS and the AICC integration, the course MUST be a Production Offering AND the Registration type must be CLOSED ENROLLMENT. Defining completion criteria is recommended.



How to Download AICC Packages from NovoEd

As an Org Admin:

1. Navigate to your Org Admin Dashboard where courses are listed
2. Hover over the course for which you wish to download the package
3. Click on the ellipsis blue more icon [...]
4. From the drop-down menu, choose "Download AICC Archive"
5. If you do not see this option listed, it may not be enabled. Reach out to hello@novoed.com to activate AICC for your institution.





How to Implement and Test Integration with AICC

1. Create a test course with very basic completion criteria or ask for NovoEd to transfer a test course to your institution. Our test course includes:
 - At least (1) lesson submission activity (assignment, quiz, timed exam, survey) that earns points
 - At least (1) lesson submission activity marked as to-do
 - Enabled Completion Criteria with set points and to-do
2. As an Org Admin, download the AICC file (see instructions in help article) and add it to your LMS. This may vary among Learning Management Systems, so please check with your LMS to see how to do this successfully.
3. Add test users to access this course in your LMS and in NovoEd.
4. Launch the course from the LMS. (Note: This is an important step for completion criteria to be returned to NovoEd since it will create a session ID.)
5. Complete the course's content until you're notified of completion.
6. Allow some time and then verify that completion information is being returned to LMS.
7. In the event of unsuccessful integration where the completion is not returned, we will then do some troubleshooting to determine the cause of the issue. We will need:
 - Test user email address
 - Confirmation of the course URL
 - Name of LMS

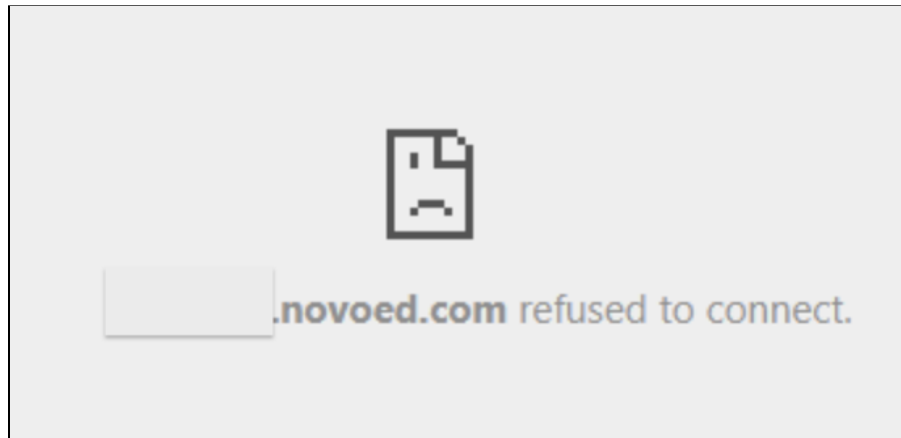
Common reasons why LMS<>NovoEd Integration is not returning completion:

- The completion criteria or catalog ID has changed; therefore a new AICC file will need to be downloaded and uploaded into the LMS
- The learner may not have launched the course from LMS.
- Customization may be needed in the AICC package or processing; in this case, we will work with our Engineering team to address



Troubleshooting LMS Integrations

ERROR: institution.novoed.com refused to connect



If you see a “refused to connect” message, it most likely means that your integration is launching NovoEd in an iFrame. Unfortunately, we cannot support this. One should configure their LMS to open the AICC package in a new tab instead.

If you do not know how to do this, please refer to your LMS Support.

For all other concerns, please reach out to hello@novoed.com and include:

- Summary of issue
- Course URL
- Email of test user
- Screenshots of what errors are in your LMS



FAQs

What changes to the course affect the AICC package?

Changes to **catalog id** or **the completion criteria / maximum attainable points** would require an update to the AICC package in the LMS.

What is reported from NovoEd to the LMS?

When the learner completes the course and/or when the course reaches its closure date, NovoEd will send the LMS learner completion data for each learner who launched the course from the LMS. The completion data reported includes **points earned / total possible points** and **completion status (incomplete/complete)**.

What happens when no completion criteria are defined?

When there are no completion criteria defined for a course, NovoEd will send the LMS a completion status of "completed" on the course's closure date. Completion status is sent for each learner who launched the course from the LMS.

How can learners, who were already enrolled before implementation, receive completion in the LMS?

When the AICC package is installed, the learner needs to launch the course **one** time through the LMS to send back completion. This can be the first time; however, they can launch anytime after the first time they enroll too and receive an AICC token to send back completion to the LMS.