



LinkedIn Learning

Edge Integration Guide



Table of contents

Overview	3
Enablement	3
Language Preferences	4
Setup instructions	5
SAML SSO configuration	5
Content catalog sync	10
xAPI Reporting setup	11
SSO validation	14
Content Catalog Sync Validation	15
xAPI (learner activity tracking)	16
xAPI SSO Unique User Identifier (UUID)	17
Workflow	18
Appendix	19
A. Security permissions	19
B. Field mapping	19
C. Subjects	20
D. Support	20
E. Frequently asked questions	21

Version history

	DATE	DESCRIPTION
1.0	07/19/2018	Original version
2.0	08/28/2018	<p>Added Prerequisite Setup section</p> <p>Added “xAPI SSO Unique User Identifier (UUID)” under Additional Information section</p> <p>Removed “Training Hours” from Appendix B: Field Mapping</p> <p>Added FAQ items #7 and #8</p>
3.0	09/07/2018	<p>Updated set-up instruction #10 - deleted the note and screenshots regarding removing line breaks from SP X.509 Certificate</p> <p>Updated Additional Information > xAPI SSO Unique User Identifier</p> <p>Added note “The following fields...” under Appendix B: Field Mapping</p> <p>Added FAQ item #9 and #10</p>
4.0	02/04/2019	<p>Updated screenshots and steps for ‘SAML SSO Configuration’ and ‘xAPI Reporting Setup’ sections based on changes in LinkedIn Learning.</p> <p>Added guidance around bypassing AuthNRequest validation.</p>
5.0	04/03/2019	Updates made to Language Preferences.
6.0	07/29/2019	<p>Version table > add version 6.0</p> <p>Page 5</p>
7.0	08/01/2019	<p>Updated list of short courses on page 15</p> <p>Correction in Step 33</p>

Overview

The Cornerstone and LinkedIn Learning integration enables organizations to manage their LinkedIn Learning content within their Cornerstone Learning module. Further, it allows course completions to be recorded in Cornerstone regardless of whether the course is launched in Cornerstone or LinkedIn. The following functionalities are included with the integration:

- Synchronization of active LinkedIn learning courses that are new and updated
- Synchronization of retired LinkedIn Learning courses
- Learners can launch and complete the course in either Cornerstone or LinkedIn portal
- Course completion records are available on the learner's Cornerstone's Transcript page regardless of whether the course is completed in Cornerstone or LinkedIn



Enablement

The integration with LinkedIn Learning is available at no charge for Cornerston Learning clients, though a LinkedIn Learning Enterprise Account is necessary. It is recommended to implement the integration in your test environment prior to production environment. Follow the steps below to configure the integration and enable it.

The following exceptions are associated with this integration:

1. Cornerstone portal does NOT have any existing LinkedIn Learning content.
 - Migration is required if your Cornerstone portal has existing LinkedIn Learning content. More information will be provided in the future.
2. The LinkedIn Learning integration is NOT the same as the Lynda.com integration. If you have a subscription with Lynda.com and would like to enable the LinkedIn Learning integration, reach out to your LinkedIn project team to learn more about migrating to LinkedIn Learning.

Language Preferences

LinkedIn Learning Integrated courses will be displayed in the clients' portals with the the language received from LinkedIn Learning. There are no necessary steps that need to be taken, as long as the language is one of the 62 languages supported by Cornerstone.

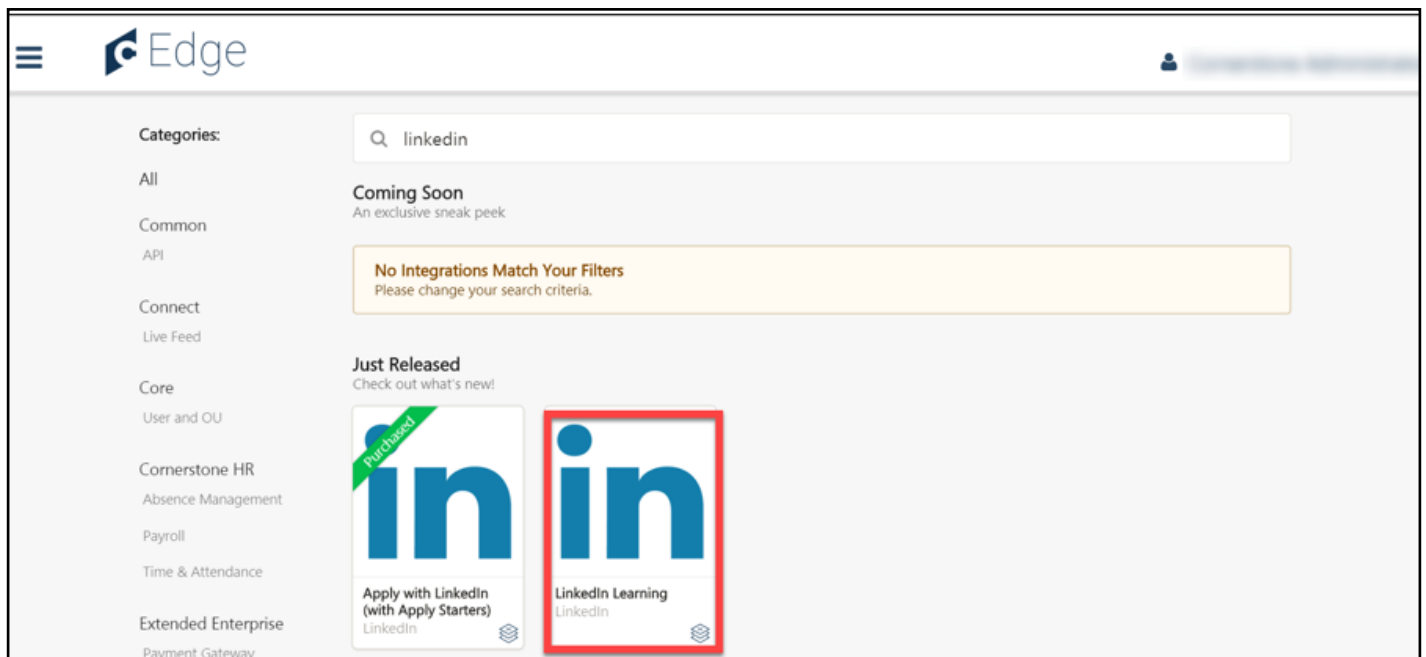
If a course from LinkedIn Learning is received in a language that is not supported by Cornerstone, the course will transform into the default language (English US).

Setup instructions

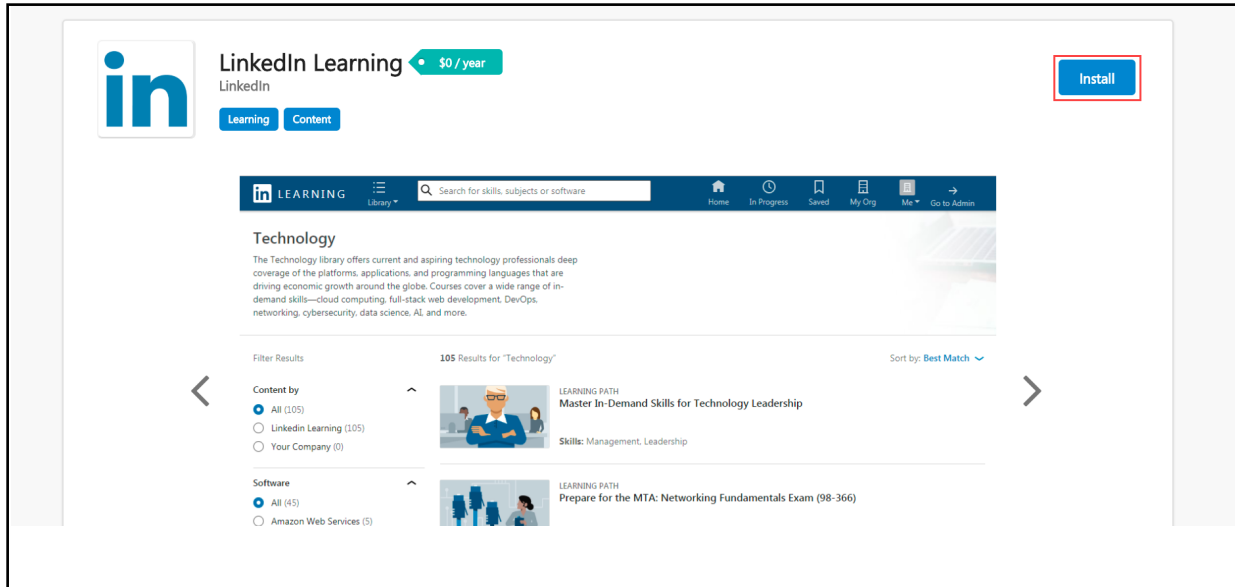
The integration can be self-installed in your CSX Stage or Pilot to support your testing exercise.

When ready to move to Production, please reach out to your Cornerstone Client Executive to have the integration installed in your CSX Production portal.

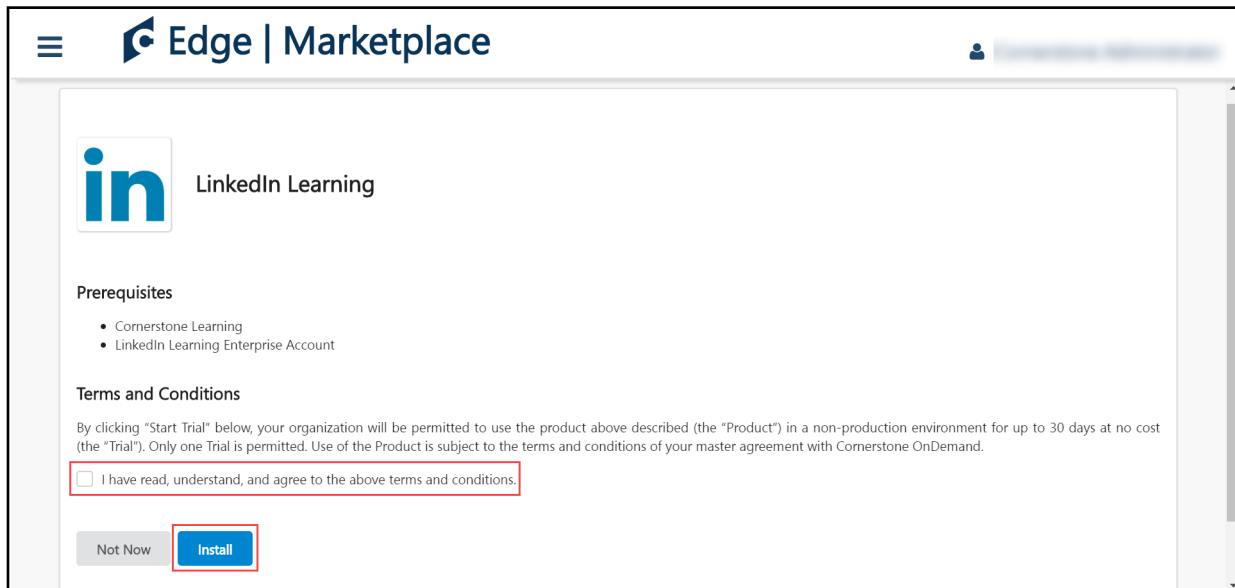
1. Log in to your Cornerstone portal.
2. Navigate to the **Edge Marketplace** (Admin > Tools > Edge > Marketplace).
3. Click on the LinkedIn Learning integration tile.



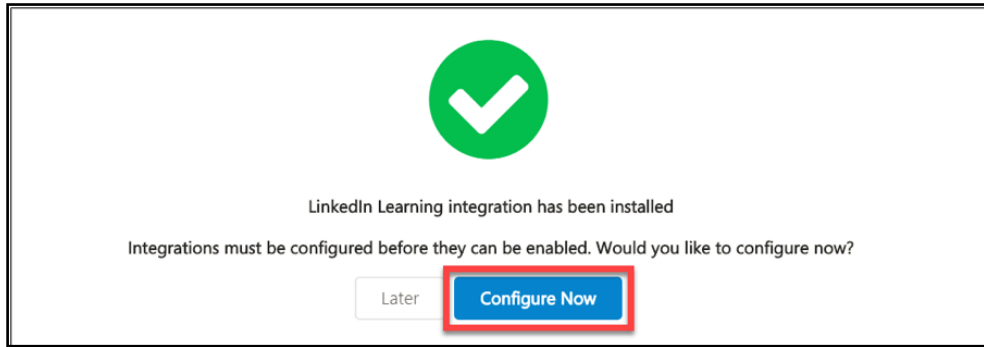
1. Log in to your Cornerstone portal.



2. Navigate to the **Edge Marketplace** (Admin > Tools > Edge > Marketplace).
3. Click on the **Install** button.
4. Review the terms and conditions then select the checkbox **I have read, understand, and agree to the above terms and conditions**. Click on **Install**.



5. Click on **Configure Now**. You will then be directed to the **Settings** page.



6. Open a new window or tab then **log in to your LinkedIn Learning admin account**.

7. Navigate to **Settings** then go to **Global Settings**.

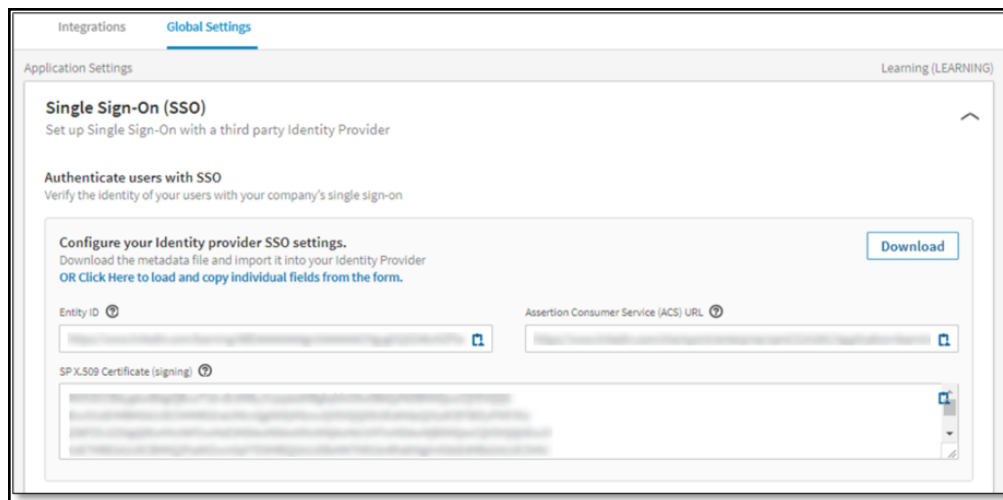
8. Expand the Single Sign-On (SSO) section and click the Add a new SSO button.

9. Under **Configure your Identity provider SSO settings** section, select **OR Click Here to load and copy individual fields from the form**.

10. Copy the values of the LinkedIn Learning fields noted in the table below. Switch back to the **Cornerstone portal window/tab**. Then, paste the LinkedIn Learning values to their corresponding Cornerstone fields under the **Service Provider** section based on the mapping below.

11. On the Cornerstone **Settings** page, copy the values of the fields under the **Identity**

LINKEDIN LEARNING (COPY)	CORNERSTONE (PASTE)
Entity ID	SP Entity ID
Assertion Consumer Service (ACS) URL	SP ACS URL
SP X.509 Certificate	SP Certificate



Provider section as noted in the table below.

12. Switch back to the **LinkedIn Learning window/tab**.

CORNERSTONE (COPY)
IdP Entity ID
IdP Redirect URL
IdP Certificate



13. On the Single Sign-On page, under the **configure the LinkedIn service provider SSO settings section**, select **Want to input the information manually? Click here**.

14. Paste the Cornerstone **Identity Provider** values (from Step 11) to their corresponding **LinkedIn Learning fields** based on the mapping below.

15. You can leave the Sign AuthnRequest option as Yes (default) in LinkedIn Learning.

CORNERSTONE (COPY)	LINKEDIN LEARNING (PASTE)
IdP Entity ID	Issuer String or Entity ID
IdP Redirect URL	IdP redirect endpoint
IdP Certificate	x.509 Public Certificate

Configure the LinkedIn service provider SSO settings.
 Now, get a metadata file from your Identity Provider and upload it here, or manually enter values

Issuer String or Entity ID [?]

Budget group [?] **Default**

IdP redirect endpoint [?]

SAML Subject Identity attribute name [?]

X.509 Public certificate [?]

[Redacted Certificate Content]

[+ Add another certificate](#)

SSO Options

Sign AuthnRequest Yes (default) No

SAML Request Binding HTTP-Redirect (default) HTTP-Post

Authentication Request Signing Algorithm SHA1 (default) SHA256

Include Assertion Consumer Service URL Yes No (default)

AuthnContextClassRef

However, note that if you set the Sign AuthnRequest to No, ensure the Bypass AuthNRequest Validation toggle is turned ON in the Cornerstone settings page.

16. On the LinkedIn Learning admin interface, select **Save** to save the SSO Configuration.
17. Under Authenticate Users with this SSO for the SSO you just setup, select Active then Activate.

Configure the LinkedIn service provider SSO settings.
 Now, get a metadata file from your Identity Provider and upload it here, or manually enter values

Issuer String or Entity ID [?]

Budget group [?] **Default**

IdP redirect endpoint [?]

SAML Subject Identity attribute name [?]

X.509 Public certificate [?]

[Redacted Certificate Content]

[+ Add another certificate](#)

SSO Options

Sign AuthnRequest Yes (default) No

SAML Request Binding HTTP-Redirect (default) HTTP-Post

Authentication Request Signing Algorithm SHA1 (default) SHA256

Include Assertion Consumer Service URL Yes No (default)

AuthnContextClassRef

Force SSO Authentication Off
 When toggled 'ON', all users **must** authenticate using the SSO configured above.
 When toggled 'OFF', admins can specify whether SSO is required on a user by user basis.

Automatically assign licenses Off
 Your team will be automatically granted licenses by clicking on activation link

[Go to SAML validator](#) [Edit SSO configuration](#)

18. Expand the Single Sign-On (SSO) section for the SSO that you just setup. Toggle Automatically assign licenses then OK. Click Save.

19. On the LinkedIn Learning admin interface, select **Integrations** then **API Application Provision**.

Content catalog sync

20. Enter **Cornerstone** in the **Application Name** field.

21. Enter **LinkedIn Learning & Cornerstone Content Sync** in the **Application Description** field.

22. Select **Generate application**.

23. Copy the values of the fields noted in the table below from LinkedIn Learning. Switch back to the **Cornerstone portal window/tab** and paste the LinkedIn Learning values to their corresponding Cornerstone fields under the **OAuth Keys** section based on the mapping below:

24. On the Cornerstone **Settings** page under the **xAPI** section, copy the values of the

LINKEDIN LEARNING (COPY)	CORNERSTONE EDGE (PASTE)
Client ID	Client ID
Client Secret	Client Secret

xAPI Reporting setup

fields noted in the table below.

25. Switch back to the **LinkedIn Learning window/tab**.

CORNERSTONE (COPY)
OAuth Server URL
Tenant Server URL
Client ID
Client Secret



The screenshot shows a form titled "xAPI" with four input fields, each with a copy icon to its right. The fields are: OAuth Server URL, Tenant Server URL, Client ID, and Client Secret. The text in the fields is blurred for security.

26. Navigate to the **Settings** then to **Integrations**.

27. Select **Reporting APIs** from the side menu.

28. Expand the the xAPI section

29. Click Add xAPI Integration

30. Add Integration Name as CSOD

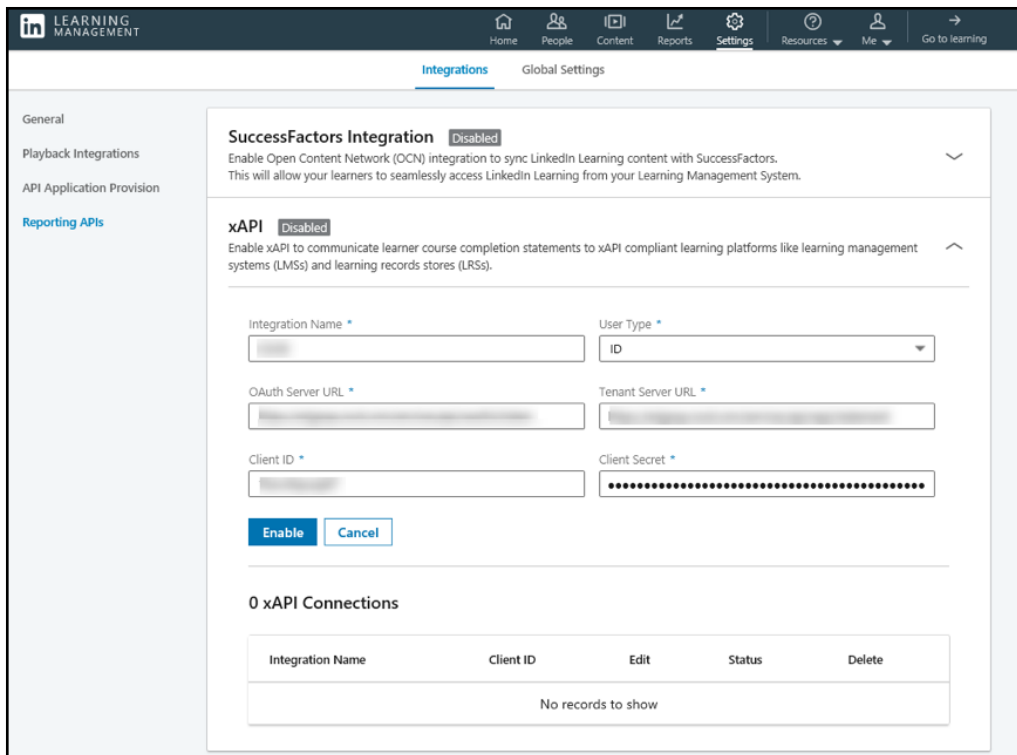
31. There are three options under the **User Type** drop down:

- a. **ID** – SAML SSO IdP configured unique user ID (UUID) value for your account. You should select this value if you are using Cornerstone as your SAML IdP. If you're using a 3rd party SSO IdP, then you should only select this option once you've confirmed your IdP is configured to send the same SSO UUID value to Cornerstone & LinkedIn Learning.
- b. **Username** – SAML SSO custom attribute used solely for communication with external systems. You should select this value if you are using a third party SAML IdP that is configured to send the Cornerstone UUID value as "username"

in the SAML SSO payload.

- c. **Email** – A user’s work email address value. You should select this value if you are using email as your UUID in both LinkedIn Learning and Cornerstone. Note

CORNERSTONE (COPY)	LINKEDIN LEARNING (PASTE)
OAuth Server URL	OAuth Server URL
Tenant Server URL	Tenant Server URL
Client ID	Client ID
Client Secret	Client Secret



that Email should be chosen as the UUID only if there are no users with identical emails in the portal (this is not enforced by CSOD), otherwise, completions coming from LinkedIn Learning might not reach the intended users in Cornerstone.

33. Paste the Cornerstone **xAPI** fields (from Step 26) to their corresponding **LinkedIn Learning** fields based on the mapping below.

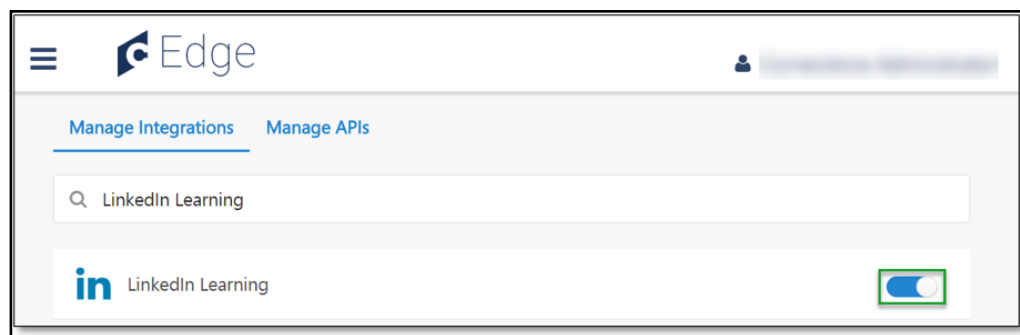
34. On the LinkedIn Learning admin interface, select **enable integration**.

35. Switch back to the **Cornerstone window/tab**.

36. Under the Preference section on the Settings page, configure the Bypass Registration. This toggle switch allows training completion records to appear on the learner's Transcript page when a training is launched and completed in LinkedIn Learning.

a. Toggle switch = enabled

- If a learner completes a course on LinkedIn Learning but the learner is not registered for the course in Cornerstone, then the course will appear in a



“Completed” status on the learner's Transcript page AND can be reported on.

b. Toggle switch = disabled

- If a learner completes a course on LinkedIn Learning but the learner is not registered for the course in Cornerstone, then the course will appear in a “Completed” status in the form of a learning record but is NOT reportable.

37. Click on **Save Settings** which will take you to the **Manage Integrations** page.

38. Search for **LinkedIn Learning** integration and enable the integration by turning on the toggle switch. Upon enablement, the content sync will run daily at 12:00am PST.

SSO validation



1. In the LinkedIn Learning navigation menu, select **Settings** then **Global Settings**.
2. In the browser address bar, copy the account ID value. In the example below the account ID is “123456”
 - <https://www.linkedin.com/enterprise/accountcenter/settings?account=123456>
3. Construct a SSO URL for testing by pasting the account ID value from the last step into the URL below.
 - SSO URL Format:
<https://www.linkedin.com/checkpoint/enterprise/login/<LinkedIn-Learning-Account-ID>?application=learning&redirect=<LinkedIn-Learning-Course-URL>>
 - SSO URL Example
<https://www.linkedin.com/checkpoint/enterprise/login/2141641?application=learning&redirect=https://www.linkedin.com/learning/onenote-2016-essential-training>
4. Copy and paste the SSO URL into an incognito or private browsing window. Provide your Cornerstone credentials when prompted.
5. If SSO authentication is working as expected, you will be redirected to LinkedIn Learning.

Note: If your LinkedIn Learning account has account binding enabled, you may be prompted to log in to LinkedIn even after successful SSO authentication. This log in is used to associate your LinkedIn Learning login with your personal LinkedIn account in order to drive custom content recommendations. If you encounter the below screen please log in with your personal LinkedIn credentials, if you do not have a LinkedIn account you have the option to create one.

Content Catalog Sync Validation

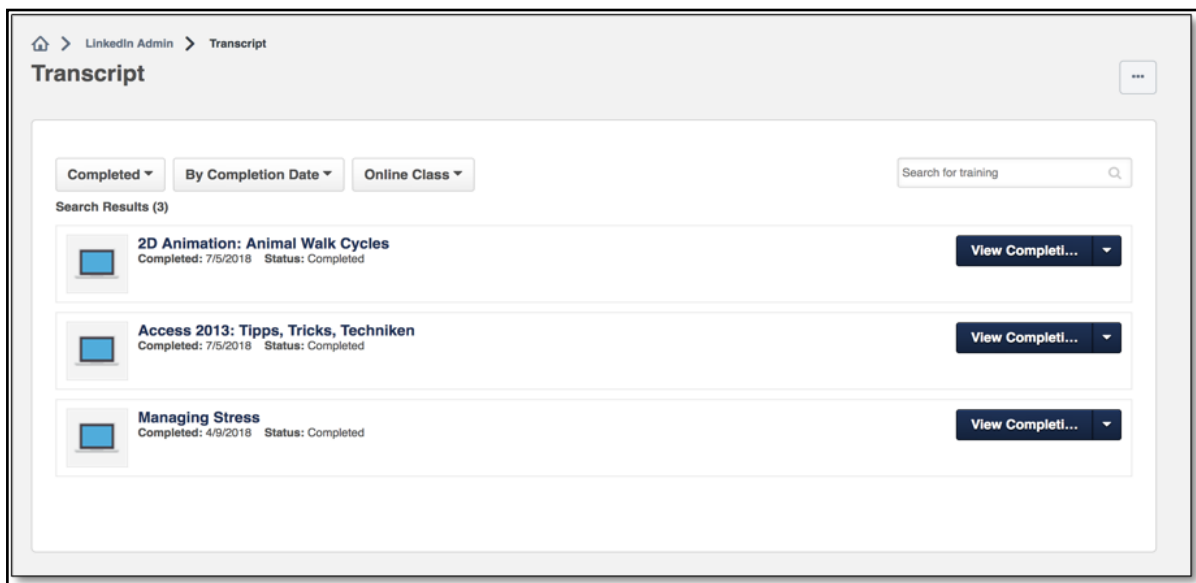
1. Navigate to the **Course Catalog** (Admin > Tools > Learning > Catalog Management > Course Catalog).
2. Select **refine search**.
3. Select the **Provider** field.
4. Select **LinkedIn Learning**.

The screenshot shows the 'Course Catalog' interface. At the top, there is a search bar with the placeholder text 'What would you like to search for?' and a dropdown menu set to 'All Training'. Below this is a 'Refine your search' section with several filters: 'Description', 'Subject', 'Provider' (set to 'LinkedIn Learning'), and 'All Languages'. There are also 'Created Date' fields for 'From' and 'To', and an 'Availability' dropdown set to 'Select Criteria'. A 'Search' button is located at the bottom right of the filter section. Below the filters, there are several filter buttons: 'Published', 'Active', 'By Title', and three checkboxes for 'Show Courses with Recurrence', 'Downloadable Courses Only', and 'Created by Me'. The main content area is a table with the following data:

<input checked="" type="checkbox"/>	Title	Provider	Version	Language	Created Date	Modified Date	Actions
<input checked="" type="checkbox"/>	 .NET 4.5: Asynchrone Programmierung	LinkedIn Learning	N/A	German (Germany)	7/24/2018		<input type="checkbox"/>
<input checked="" type="checkbox"/>	 .NET-Programmierung: Multithreading	LinkedIn Learning	N/A	German (Germany)	7/24/2018		<input type="checkbox"/>

xAPI (learner activity tracking)

1. Copy and paste the SSO URL (from the previous section) into an incognito or private browsing window. Provide your Cornerstone credentials when prompted.
2. Complete a LinkedIn Learning course in full. Below you will find a list of short courses you may want to use to test completions.
 - What is Graphic Design? (2m 49 secs)
 - In the Studio (3m 18 secs)
 - Using Data Science to Hire Employees (3m 25 secs)
 - My Photoshop Story: Chris Orwig, Photographer (3m 51 secs)
 - My Photoshop Story: Bert Monroy, Digital Painter (4m 1 secs)
3. After completing a course, visit your Transcript page in Cornerstone and ensure the completion is reflected.



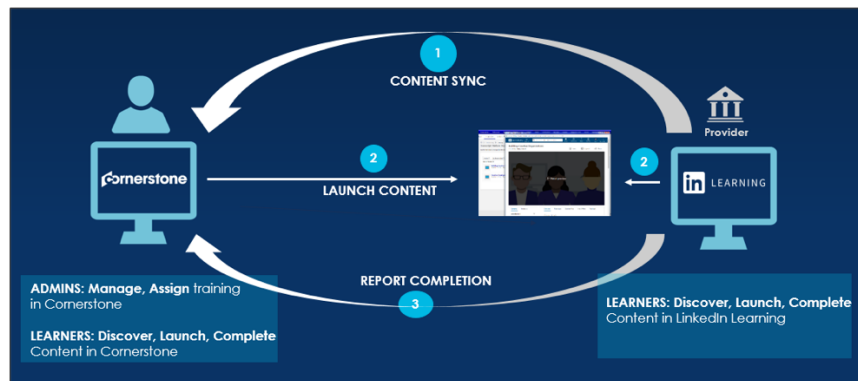
xAPI SSO Unique User Identifier (UUID)

The SSO UUID that Cornerstone sends to LinkedIn Learning during SSO depends on the user identifier used to log in to your Cornerstone portal. This is configured on the backend but the value sent over to LinkedIn Learning is displayed on the Edge Settings page.

Navigation: Admin > Tools > Edge > Integrations > Manage Integrations > select LinkedIn Learning



Workflow



Step 1: Content Sync

- Automatic nightly sync of content from LinkedIn Learning to Cornerstone Learning.
- Sync captures all entitled content that a client has purchased from LinkedIn.
- Once the content is loaded in Cornerstone, it is tagged with LinkedIn Learning as its Provider.
- Loaded LinkedIn Learning content are mobile ready.
- Loaded LinkedIn Learning content will be loaded as an Online Course learning object type.
- Admins can perform all the same actions to these LinkedIn Learning content as they would with any content (e.g. set availability, set keywords, add to a curriculum, assign training to a learner).

Step 2: Launch Content

- Learner launches the content from Cornerstone and is redirected to a LinkedIn Learning pop-up window to complete the training. No log in required.
- Learner can also browse and launch the same training from LinkedIn Learning.

Step 3: Report Completion

- Regardless of where training is launched from – Cornerstone or LinkedIn Learning – the completion record will be tracked on the learner's Transcript page in Cornerstone.
- Completion is reported in Cornerstone in near real-time

Appendix

A. Security permissions

PERMISSION NAME	PERMISSION DESCRIPTION
Edge Marketplace - Manage	Grants access to the Marketplace service for Edge Integrate where the administrator can browse and purchase third-party integrations that can be used to extend the Cornerstone system. This permission cannot be constrained. This is an administrator permission.
Edge Integrations - Manage	Grants access to the Integrations service for Edge Integrate where the administrator can configure, enable, and disable their third-party integrations that are used within the Cornerstone system. This permission cannot be constrained. This is an administrator permission.

B. Field mapping

The following fields will be loaded in Course Catalog.

ITEM #	LINKEDIN LEARNING FIELD LABEL	CORNERSTONE FIELD LABEL
1	Course Title	Title
2	Course Description	Description
3	Course Available Language	Available Languages
4	Course Published Date-time	Created Date
5	Course Modified Date-time	Last Modified date
6	Course Time to Complete	Training Hours
7	Course Subjects	Course Subjects

C. Subjects

Admins can choose to synchronize LinkedIn Learning subjects to LinkedIn Learning courses via configuration page. The subjects will be automatically defined based on the course metadata sent from LinkedIn Learning as part of the integration. Once activated, the relevant LinkedIn Learning subjects are associated with new and existing LinkedIn courses and automatically populated in Subject Management.

The subjects populated using this integration behave the same as any other subjects created manually. They will be visible in the subject filter on Learner search, Course Catalog, and the Learner Home Your Subjects widget. Subjects created using the LinkedIn Integration will be parent subjects. If an identical parent subject already exists on the portal, it will be used instead of creating a new subject.

NOTES:

- LinkedIn Learning subjects will be enabled/disabled in the portal within 24 hours of the preference update.
- If the subject synchronization is turned off, LinkedIn Learning courses will be re-synchronized without the subjects.

D. Support

- Subjects synchronization activation/deactivation will not change the course synchronization schedule and will not cause an ad-hoc synchronization to run.
- If the subjects synchronization is deactivated, new LinkedIn Learning courses will be synchronized without the subjects. There will be no effect on existing courses and no effect on any existing subject in the portal.

E. Frequently asked questions

Q: Our company already has a LinkedIn Learning SSO configured. How do I test the integration without disrupting our users' current access to LinkedIn Learning training?

A: The SSO setup between your company and LinkedIn Learning may need to be modified before the integration can be used. In order for the two systems to communicate learner activity, Cornerstone and LinkedIn Learning must reference users using the same user unique identifier (UUID). If you can update your SSO configuration to send this value Cornerstone is using directly to LinkedIn Learning, then you can continue to use your existing SSO connection. If not, you will need to migrate to Cornerstone SSO for learner activity tracking to work.

Q: Our company has a Lynda.com integration. How will the LinkedIn Learning integration impact the Lynda.com integration?

A: No change for clients using Lynda.com integration. The current version of the LinkedIn Learning integration applies exclusively to clients using LinkedIn Learning. Cornerstone and LinkedIn are working together to define a migration plan for mutual clients using Lynda.com. Please contact LinkedIn for further details on how to migrate from Lynda.com to a LinkedIn Learning account.

Q: How is the LinkedIn Learning integration different from the Lynda.com integration?

A: The current version of the LinkedIn Learning integration applies exclusively to clients using LinkedIn Learning.

Q: Will the pre-established learning paths in LinkedIn Learning come over in the feed or will we have to create those in CSOD?

A: No, this integration syncs content on the course level. Learning paths would need to be recreated in CSOD.

Q: Do we have to set up the binding/no binding through LinkedIn Learning or is that also set up in the integration?

A: This is a LinkedIn Learning account specific setting and cannot be modified through

this integration. To learn more about the configuration options contact your LinkedIn Learning Customer Success Manager (CSM).

Q: I would like to test the integration in either my Cornerstone Stage or Pilot portal before enabling this in Production. How should I do this given that LinkedIn Learning only has a Production environment?





A: You can set-up your Cornerstone Stage or Pilot environment using your LinkedIn Learning production credentials. Once testing is complete in Stage/Pilot, you need to reconfigure your LinkedIn Learning settings to use the Cornerstone production settings and values. Please work with your LinkedIn Learning CSM to complete this.

Q: Is LinkedIn Learning’s viewing preference “Focus learners on a course” supported in this integration?

A: No, Focused Learning is not supported since all completions can be communicated back to Cornerstone via xAPI.

Q: On the Course Catalog page, why is the Language set to “English (US)” for a non-English course?

A: This is because the appropriate language is not enabled in your portal. Please see [Prerequisite Setup](#) for details.

<input checked="" type="checkbox"/>	Title	Provider	Version	Language	Created Date	Modified Date	Actions
<input checked="" type="checkbox"/>	 .NET 4.5: Asynchrone Programmierung	LinkedIn Learning	N/A	English (US)	7/12/2018		<input type="button" value="v"/>
<input checked="" type="checkbox"/>	 .NET Core: Ein erster Blick	LinkedIn Learning	N/A	English (US)	7/30/2018		<input type="button" value="v"/>
<input checked="" type="checkbox"/>	 .NET-Programmierung: Multithreading	LinkedIn Learning	N/A	English (US)	7/12/2018		<input type="button" value="v"/>
<input checked="" type="checkbox"/>	 100% Male – Porträts mit Charakter	LinkedIn Learning	N/A	English (US)	7/12/2018		<input type="button" value="v"/>

Q: Can we set availability for synched LinkedIn Learning content?

A: Yes, when LinkedIn Learning content are loaded into Cornerstone, you can perform the same actions as with other learning object types (e.g. set availability, set keywords, add content to a curriculum, assign to users, etc.)

Q: What data does Cornerstone send over to LinkedIn Learning?

A: The following fields are sent over to LinkedIn Learning: user first and last name, user email address, and user’s UUID.