LIONBRIDGE

Lionbridge Connector for Adobe Experience Manager

Installation and Configuration Guide

Version 4.0.3

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1 Welcome to the Lionbridge Connector for Adobe Experience Manager

Welcome to the Lionbridge Connector for Adobe Experience Manager ("Connector"). This is the connector between Adobe Experience Manager and the Clay Tablet Platform. If the Connector's add-on for Lionbridge Freeway is installed, you can automate sending and retrieving content from Adobe Experience Manager directly to and from Freeway.

1.1 Terminology

Amazon AWS	Amazon Web Services. A suite of web application products developed and sold by Amazon.com. Clay Tablet uses various AWS offerings in order to leverage their infrastructure and build rich, dynamic solutions for its customers, specifically, the Clay Tablet Platform. For details, see http://aws.amazon.com.
Amazon S3	Amazon Simple Storage Service. For details, see: http://aws.amazon.com/s3/. The Connector and the Clay Tablet Platform use Amazon S3 to provide temporary storage services for the content sent to and from translation.
Amazon SQS	Amazon Simple Queue Service. For details, see: http://aws.amazon.com/sqs/. The Connector uses Amazon SQS to provide Message Queue Services.
Asset	Any content or document being sent for translation, including metadata. Assets are created by the Connector.
Clay Tablet (CTT)	Clay Tablet Technologies, a Lionbridge company, the corporate entity that publishes the Connector and the Clay Tablet Platform.
Clay Tablet Platform	The hosted (IaaS) connectivity platform that receives and routes content from content systems, including content management systems (CMSs), to translation providers and back during implementation. The Lionbridge Connector Team configures the Platform based on the number and nature of systems involved in your system architecture.
Freeway	The name of the Lionbridge translation portal for submitting content to and retrieving content from the Lionbridge translation provider.
FTP Server	File Transfer Protocol (FTP) is a standard network protocol used to transfer files from one host to another host over a TCP-based network, such as the Internet. Translation providers may receive and send files for translation using an FTP server.

IaaS	Infrastructure as a Service. The Clay Tablet Platform is an IaaS, because it is a hosted platform.
Keys	The Connector uses keys to establish a secure, discrete connection between the Connector instance and the Platform. **Very important:** Do not use the same account keys on multiple instances, because this is a violation of the License Agreement. Using the same account keys on multiple Adobe Experience Manager instances will cause the Connector to behave unexpectedly, which can result in lost translation content, orphaned projects, and inaccurate translation status reports. The Lionbridge Connector team will support technical issues caused by duplicating or incorrectly installing CMS address keys only on a time and materials basis.
Lionbridge	The publisher of the Freeway translation portal and a translation provider. Users connect to the Freeway translation portal to submit content to and retrieve content from the Lionbridge translation provider.
Lionbridge Connector for Adobe Experience Manager (Connector)	The connector software that Clay Tablet Technologies has developed and provides, which plugs into your Adobe Experience Manager installation to provide connectivity to our hosted Platform. In this document it is referred to as the Connector. This is the software you are installing and configuring as you work through this document.
MT	Machine translation. The translation provider can be a machine translation service, such as Bing.
Producer	CMS or another system that sends content or documents out for translation. In this case, this is your Adobe Experience Manager.
Provider	A provider of translation services. The delivery of assets to the provider may be via an FTP server or a TMS connector.
Support Asset	Supporting documents and their metadata. Support assets are not translated by the translation provider, but they provide helpful context for the translator.
TMS	Translation management system that the translation provider uses.

1.2 About the Clay Tablet Platform

The Clay Tablet translation-connectivity platform is the easiest, most flexible way to integrate content systems, including content management systems (CMSs) and other content producers, with translation

providers and translation technologies.

Clay Tablet Platform is the hosted (IaaS) connectivity platform that receives and routes content from content management systems to translation providers and back, including to Lionbridge via Freeway or onDemand. It is hosted on Amazon Web Services (AWS). During implementation, the Lionbridge Connector Team configures the Platform for your translation solution, based on the translation providers or systems you use. The Clay Tablet Platform uses the following services on AWS:

- S3 (Amazon Simple Storage Service), which provides storage services for the content sent to and from translation.

- SQS (Amazon Simple Queue Service), which provides message queue services.

1.3 How the Connector Works with Adobe Experience Manager

The Lionbridge Connector ("Connector") is an important part of the Clay Tablet translation solution.

The Connector is installed on your system as an add-on to Adobe Experience Manager. Its functionality is displayed to the users as part of Adobe Experience Manager.
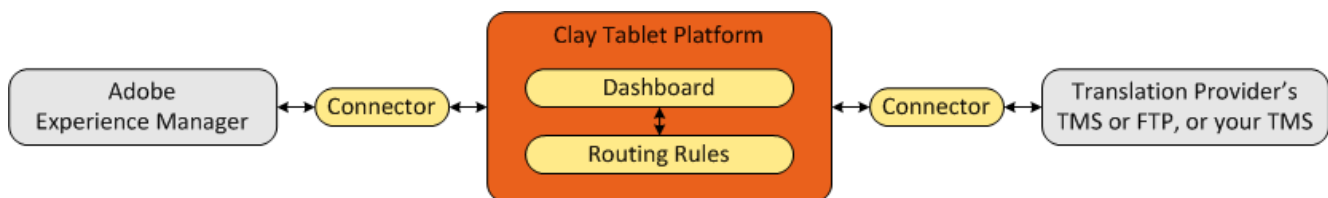
Your translation systems architecture might look like the configuration above. It may have additional CMSs or translation providers, but the core concepts remain the same. If your translation provider is Lionbridge, it is accessed via either Freeway or onDemand.

During implementation, Lionbridge Connector Support works with you and your translation providers to configure and test the other elements of your translation solution, which are the Clay Tablet Platform's connections to your translation providers' systems.

1.4 Using this Guide

Purpose of this guide

This guide describes everything you need to know to install and configure the Lionbridge Connector ("Connector") for Adobe Experience Manager. It describes the delivery package contents, system requirements, installation instructions, and configuration procedures.

Note: This guide describes using both the Adobe Experience Manager Touch-Optimized UI and the Classic UI. The terminology in this guide is for classic devices, such desktops and laptops, although it is also relevant to mobile devices, such as tablets. For detailed information about the UIs and views, as well

as differences in terminology depending on device types, refer to the Adobe Experience Manager documentation, available at http://helpx.adobe.com/marketing-cloud/experience-manager.html?t2.

Recommendation: Review the user guide to fully understand the powerful features of the Connector.

Who should use this guide

This guide is intended for Adobe Experience Manager administrators and system integrators.

What you should already know

This document assumes that your company already has an installed instance of Adobe Experience Manager. It assumes that you have a strong working knowledge of Adobe Experience Manager and its features.

If Lionbridge is your company's translation provider, it assumes that either Freeway or onDemand is already set up for your company.

How to find out more about the Lionbridge Connector for Adobe Experience Manager

For information on using the Lionbridge Connector to send and receive content for translation from Adobe Experience Manager, read the *Lionbridge Connector for Adobe Experience Manager User Guide.*

To access all Lionbridge Connector for Adobe Experience Manager documentation:

1. Log into Adobe Experience Manager.

2. Do one of the following:

   * In the Touch-Optimized UI of Adobe Experience Manager, click the Tools icon and then click **Lionbridge Connector** in the Adobe Experience Manager rail. (This opens the Connector in a new browser tab.)

   * In the Classic UI of Adobe Experience Manager, scroll down and click **Lionbridge Connector** in the right pane.

   * In your Web browser, navigate to `/content/ctctranslation/status.html` on your Adobe Experience Manager instance.

3. In the Lionbridge Connector rail, click **Admin Tools**.

   This displays the **Admin Tools** menu options.

4. Click **Help**.

A new Web page opens, displaying links to the Lionbridge Connector for Adobe Experience Manager documentation.

Documentation conventions

This guide uses the following conventions:

Convention	Description
Bold	Highlights screen elements such as buttons, menu items, and fields.
Courier	Highlights input, file names, and paths.
Italics	Highlights terms for emphasis, variables, or document titles.
>	Indicates a menu choice. For example, "Select **Admin Tools > Configuration**."

1.5 How to Contact Lionbridge Connector Support

Email @: connectors@lionbridge.com

You can submit a support ticket either:

- by email

- from the Lionbridge Connector Zendesk page, using your web browser:
  https://connectors.zendesk.com/

1.5.1 Submitting a Support Ticket

1. Do one of the following:

   ▦ Email connectors@lionbridge.com, and cc (carbon copy) anyone to include in the ticket correspondence.

   Important: Include the information and attachments in your email that are listed in the sub-sections below.

   ▦ Create a ticket in Zendesk:

   a. Open the Lionbridge Connector Zendesk page in your browser: https://connectors.zendesk.com.
   b. Sign in to Zendesk.

   Note: If you do not have sign-in credentials yet, then click either **Sign up** or **Get a password**, and follow the onscreen instructions.

   Important: Include the information and attachments that are listed in the sub-sections below.

    c.   Click **Submit a request**.

    d.   In the **CCs** field, add anyone to include in the ticket correspondence.

Zendesk automatically creates a ticket and responds to everyone included in the cc field.

2.   Everyone in the original cc receives updates unless they request to be removed from the ticket.

> **Important:** Check your email spam folder (especially first-time Zendesk users) as sometimes email notifications from Zendesk are marked as spam.

When the issue is resolved, Lionbridge closes the ticket.

1.5.2 Information to Include in a Support Ticket

- client name
- CMS or content system name and version
- Connector or App version installed
- name of job for which the issue occurs
- date of job submission
- detailed description of the issue
- any error text–copy and paste, if applicable

Files to attach to the support ticket:
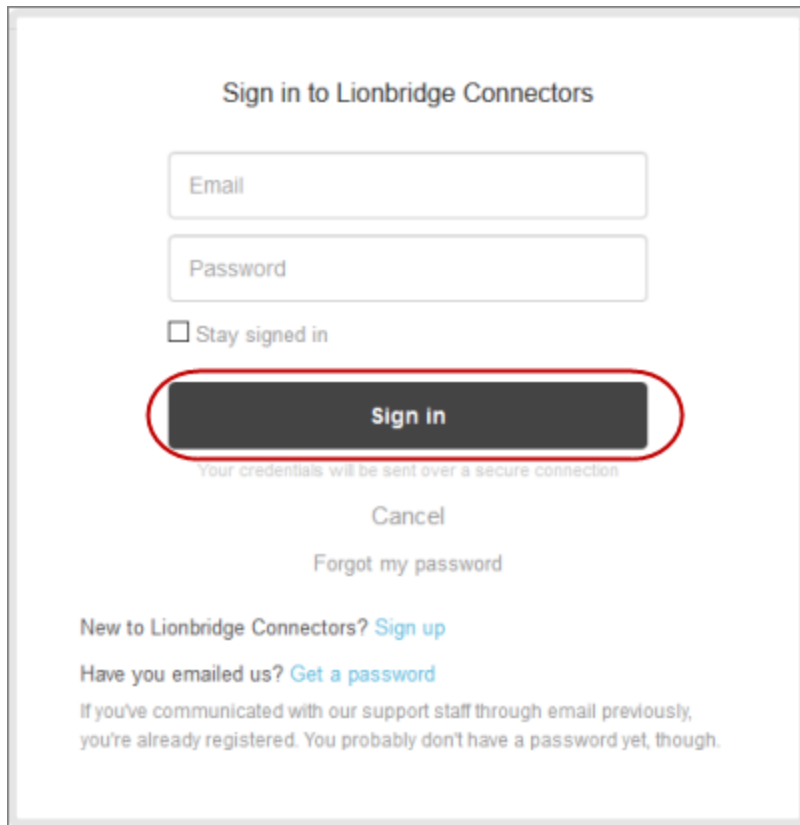
- CMS log files for the date the issue occurred
- Connector or App log files for the date the issue occurred
- screen capture of the issue

1.5.3 Viewing and Updating Your Support Ticket in Zendesk

> **Important:** You must log into Zendesk to view your support tickets there.

1.   Open the Lionbridge Connector Zendesk page in your browser: https://connectors.zendesk.com.

2. Enter your credentials, and click **Sign in**.

> **Note:** If you do not have sign-in credentials yet, then click either **Sign up** or **Get a password**, and follow the onscreen instructions.

3. After signing in, click **My activities** to view the tickets you opened or where you are cc'd.

4. To update tickets, you can reply or attach files.

For more information, refer to "Submitting and tracking support requests" in Zendesk's *Help Center guide for end-users*, at: https://support.zendesk.com/hc/en-us/articles/203664386-Help-Center-guide-for-agents-and-end-users.

> **Important:** Zendesk refers to a *support ticket* as a *support request*. These terms are interchangeable.

1.5.4 Signing Up for a Zendesk Account for Lionbridge Connectors

You can create a new Zendesk account for Lionbridge Connectors.
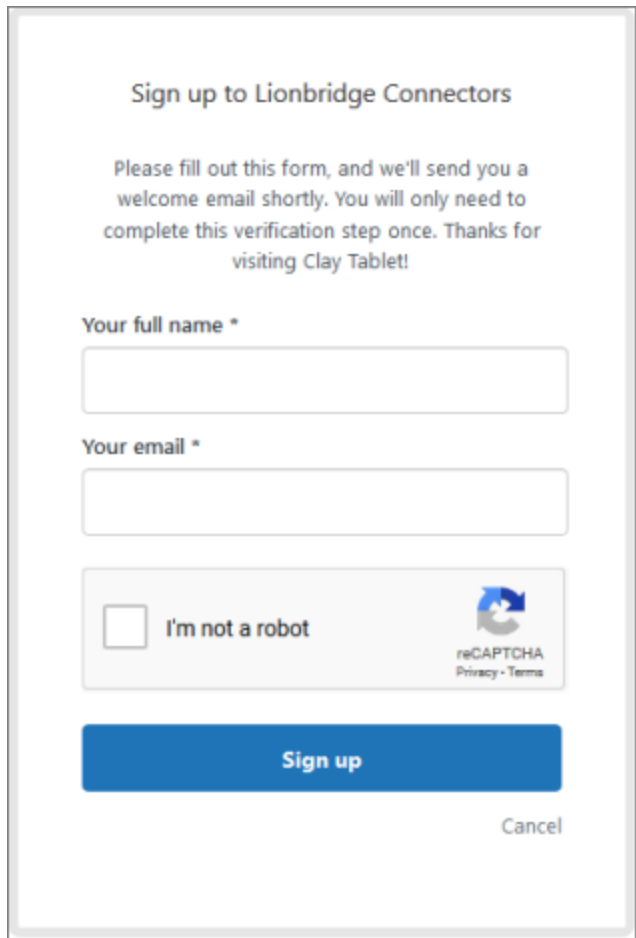
Note: If you have previously emailed Lionbridge Connectors Support at connectors@lionbridge.com to create a support ticket, you can get a password for your email account. For detailed instructions, see "How to Get a Password if You Have Previously Emailed Lionbridge Connectors."

To sign up for a Zendesk account:

1. Open the Lionbridge Connector Zendesk page in your browser: https://connectors.zendesk.com.
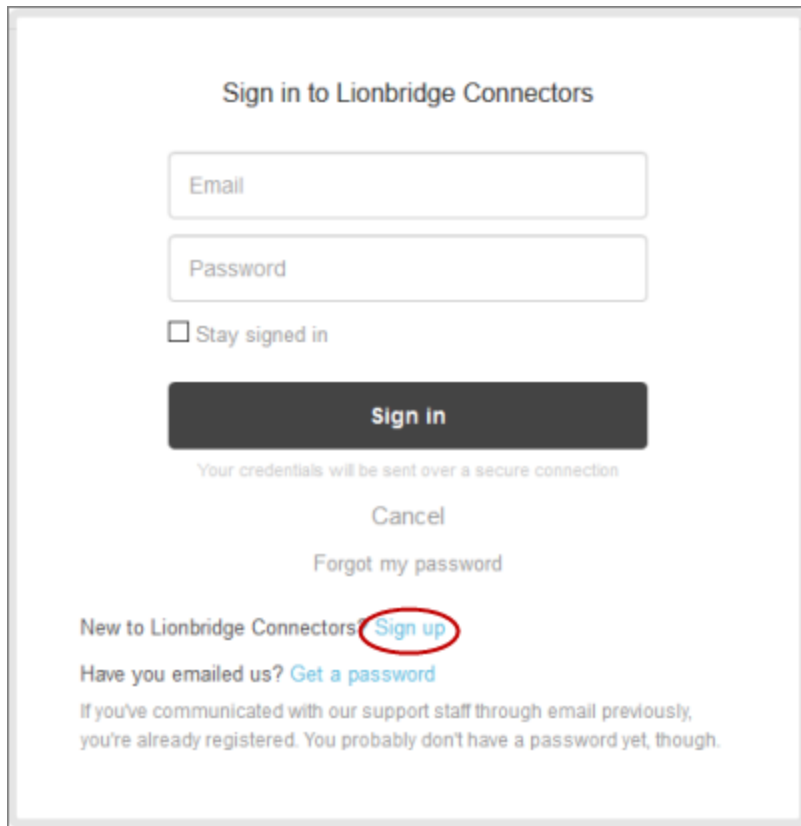
2. Click **Sign up** link.

The **Sign up** page opens.

3. Enter your name and email address, and select the **I'm not a robot** check box.

4. Click **Sign up**.

   The **Sign-up complete** page opens. You will receive a verification email shortly with a verification link that enables you to sign in. If you do not receive an email within a few minutes, please check your junk or spam folder.
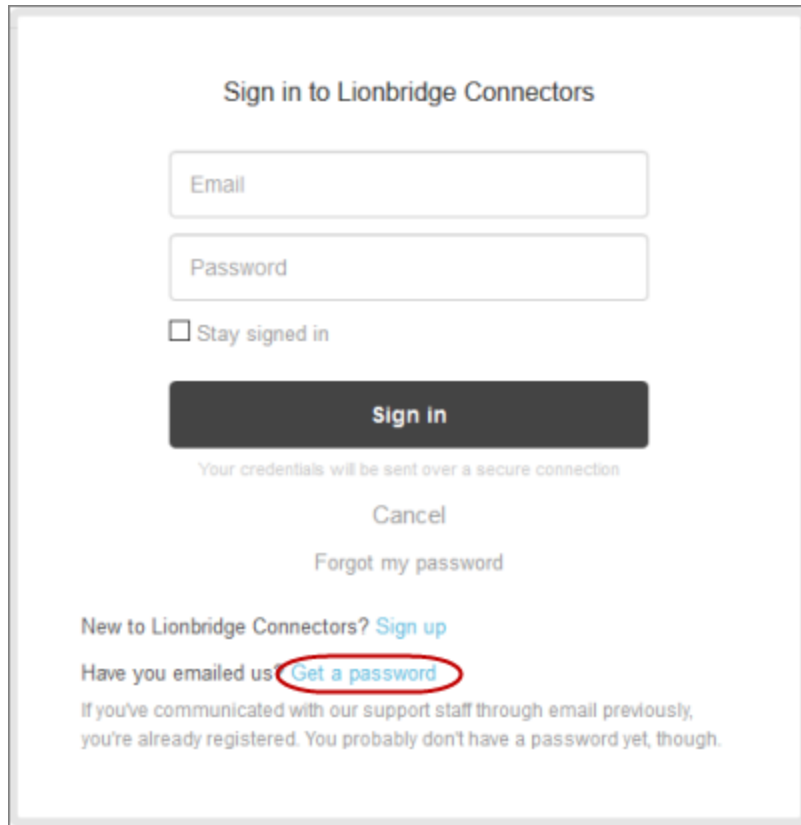
5. Click the link in the verification email to create a password and sign into Zendesk.

1.5.5 Getting a Zendesk Password if You Previously Emailed Lionbridge Connectors

If you have previously emailed Lionbridge Connectors Support at connectors@lionbridge.com to create a support ticket, you can get a password for your email account.

To get a password:

1. Open the Lionbridge Connector Zendesk page in your browser: https://connectors.zendesk.com.

2. Click the **Get a password** link.
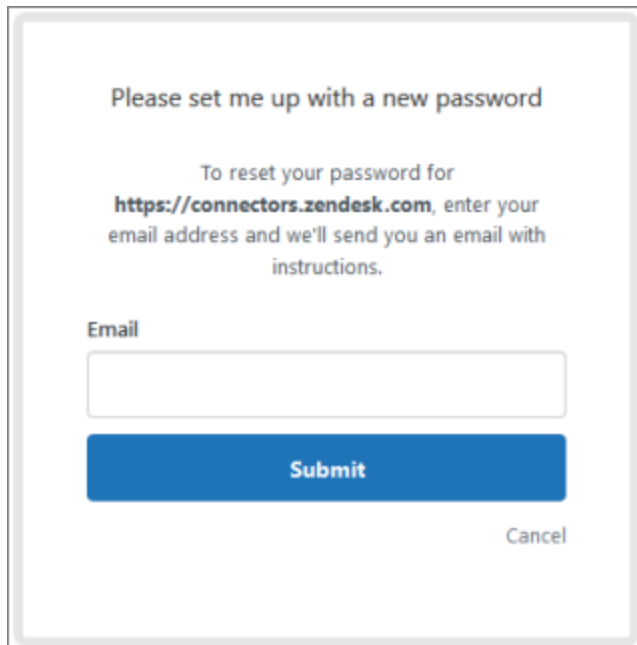
The **Please set me up with a new password** page opens.

3. Enter the email address from which you emailed Lionbridge Connectors Support
   (connectors@lionbridge.com).

4. Click **Submit**.

   Zendesk sends you an email with instructions for creating your password.

5. Follow the instructions in the email from Zendesk to create your password.

You can now sign in to Zendesk to create, view and update your support tickets.

2 Before You Install

Before you begin to install the Lionbridge Connector ("Connector") for Adobe Experience Manager, please review the system requirements, described below, and perform the following pre-installation procedures:

1. "Setting Your System Date, Time, and Time Zone Correctly" on page 18.

2. "Downloading the Delivery Package" on page 19.

3. "Creating or Updating a Connector Database on your Database Server Instance" on page 20.

4. Optional. "Creating the Connector Folders" on page 20. These are the folders where the Connector stores data for manual translation updates and shared configuration files. It may also store log files.

> **Very important:** Do not use the same account keys on multiple instances, because this is a violation of the License Agreement. Using the same account keys on multiple Adobe Experience Manager instances will cause the Connector to behave unexpectedly, which can result in lost translation content, orphaned projects, and inaccurate translation status reports. The Lionbridge Connector team will support technical issues caused by duplicating or incorrectly installing CMS address keys only on a time and materials basis.

> **Note:** If you are installing the Connector in a clustered environment, see "Installing the Connector in a Clustered Environment" on page 206.

2.1 System Requirements

The Lionbridge Connector for Adobe Experience Manager must be installed on the Adobe Experience Manager Author server. The Lionbridge Connector for Adobe Experience Manager supports Adobe Experience Manager versions 6.2 and higher.

The Lionbridge Connector for Adobe Experience Manager has no additional hardware or software requirements beyond those of Adobe Experience Manager. For detailed requirements, refer to the appropriate version of the *Adobe Experience Manager Technical Requirements*.

2.2 Setting Your System Date, Time, and Time Zone Correctly

The Connector sends content to and receives content from the Clay Tablet Platform, which is hosted in the Amazon Web Services (AWS) environment. AWS requires any machines that connect to its applications to have the correct system time and date settings.

> **Important:** Before proceeding, ensure that the system date, time, and time zone are set correctly on any systems that will run the Connector. If these settings are incorrect, the following error message is displayed: `Error. The difference between the request time and the current time is too large.`

2.3 Downloading the Delivery Package

1. Download the Lionbridge Connector ("Connector") delivery package from the link that Lionbridge Connector Support sends you. This is a `.zip` file, and it contains the following folders:

Folder Name	Description
Lionbridge connector for Adobe Experience Manager a.v-x.y.z-<datetimestamp>	The installation package that you will install into your Adobe Experience Manager system using the Package Manager tool. This has the following format: `Lionbridge connector for Adobe Experience Manager a.v-x.y.z-yyyy-MMddkkmm.zip`, where *a.v* is the supported Adobe Experience Manager version number, and *x.y.z* is the Connector version number, for example, `Lionbridge connector for Adobe Experience Manager 6.3-4.0.0-2019-03141609.zip`. **Note about upgrading from a previous version of the Connector:** There is a single package for both new installations and upgrades from previous installations. This redesigned package prevents overwriting your configuration settings while upgrading.
Freeway support package	`Lionbridge connector addon - Freeway Support.zip`, which is the Freeway-support add-on installation package that you will install into your Adobe Experience Manager system using the Package Manager tool. This package supports all versions of Adobe Experience Manager and all versions of the Connector. **Note:** This is required only if you are using the Connector's add-on for Lionbridge Freeway.
CTC Data	The Connector Data folder zip archive, `CTCData.zip`. **Note:** This folder is optional.
Documents	■ *Lionbridge Connector for Adobe Experience Manager Installation and Configuration Guide* (this document) ■ *Lionbridge Connector for Adobe Experience Manager User Guide*
License ID for CTCConfig UI	This is the file containing the license for the configuration UI if the Clay Tablet Platform is hosted on AWS. The file name is `License_ID.txt`.

2. Unzip the delivery package file you downloaded, and save its contents to a convenient location.

2.4 Creating or Updating a Connector Database on your Database Server Instance

The Connector requires one of the following databases for its database engine:

- MySQL version 5.0 or higher

- Microsoft SQL Server version 2012 or higher

- Oracle 11g and 12c

- PostgreSQL

For new Connector installations, create a database container, such as CTCTRANSLATION. The Connector will automatically create all tables and columns.

When upgrading from a previous version, the Connector automatically updates all tables and columns.

Note: If the automatic upgrade of the database fails while upgrading your version of the Connector, for example, because of insufficient permissions, the **Errors** and **SQL Scripts** buttons are displayed in the **JDBC SQL Connection** section of the **Configuration** page. Click **Errors** to view the related error messages. Click **SQL Scripts** to download the generated SQL scripts. A DBA can then run the scripts. Refer to the ct_db_update.Sql file in the Adobe Experience Manager quickstart folder for the list of SQL commands required to manually update the database.

Note about MySQL: You may need to edit the mysql.ini file to add the following lines:
```
[mysql]
default-character-set=utf8
[mysqld]
character-set-server=utf8
```

Translation Database Size Requirements

Minimum size	1 GB
Recommended size	10 GB

Recommendation: Increase the database size relative to the site content.

2.5 Creating the Connector Folders

This section describes how to create a data folder that Connector uses to store licensing information and translation data. This step is optional. The Connector uses the sub-folders to store data for translation updates and shared configuration files. It may also store log files.

1. On your Adobe Experience Manager server, navigate to the file system and create a folder called `CTCdata.`

2. Unzip the `CTCData.zip` archive folder from the delivery package you downloaded and unzipped, as described in "Downloading the Delivery Package" on page 19, and extract all the included folders into the target `CTCdata` folder. This creates the following two subfolders in the `CTCdata` folder:

Sub-Folder	Folder Access Permissions	Description
update	Full	This folder will contain manually updated translated files. **Note:** Use this feature only if translation providers have edited XML files that were already returned into Adobe Experience Manager, or if a file was not successfully inserted back into Adobe Experience Manager.
logs	Full	This folder may be used by the Connector to store Connector log files, if you select the Logs check box in the **Folder and Permissions** section of the **Configuration** page. For details, see "Folder and Permissions" on page 47.

3. Set the access permission for each folder according to the above table.

3 Installing the Lionbridge Connector

This section describes how to install the Connector installation package you downloaded earlier into your Adobe Experience Manager system, as described in .

Before you install the Connector, verify that you have reviewed the system requirements and followed all the pre-installation procedures described in .

Note: If you are installing the Connector in a clustered environment, see .

To install the Connector into Adobe Experience Manager:

1. Do one of the following:

   ⠿ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail, and then click **Deployment**. Then, in the **Navigation** page, click **Packages**.

   ⠿ In the Classic UI of Adobe Experience Manager, scroll down and click **Packages** in the right pane.

   ⠿ In your Web browser, navigate to `/crx/packmgr/index.jsp` on your Adobe Experience Manager instance.

   The **CRX Package Manager** opens.

2. Click **Upload Package** to upload the Lionbridge Connector package to the Adobe Experience Manager server.

3. Click the name of the package you uploaded earlier, and follow the on-screen instructions.

4. Optional. If you are using Connector's add-on for Lionbridge Freeway, repeat steps 2 and 3 to upload and install the Connector Freeway Support solution package (`Lionbridge connector addon - Freeway Support.zip`) using the Package Manager. This package supports all versions of Adobe Experience Manager and the Connector.

Note: If you are integrating the Connector with Adobe Experience Manager's Translation Integration Framework, return to page 178, and follow the instructions.

Tip: To prevent the installed Lionbridge Connector bundle from starting automatically, you can add the adding any file called `ct_bundle_stop_starting.config` to the Adobe Experience Manager `quickstart` folder. The file can be blank or have any content. The process that activates the Lionbridge Connector bundle then throws a exception to stop activating.

3.1 Installing the Add-On for SDL TMS

Note: This feature is available only when using the Clay Tablet Translation Connector for SDL TMS.

You can specify the SDL TMS configuration for submitting your content for translation. This feature requires installing the Add-On for SDL TMS, as described below:

To install the add-on into Adobe Experience Manager:

1. Do one of the following:

   ⁞ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail, and then click **Deployment**. Then, in the **Navigation** page, click **Packages**.

   ⁞ In the Classic UI of Adobe Experience Manager, scroll down and click **Packages** in the right pane.

   ⁞ In your Web browser, navigate to `/crx/packmgr/index.jsp` on your Adobe Experience Manager instance.

   The **CRX Package Manager** opens.
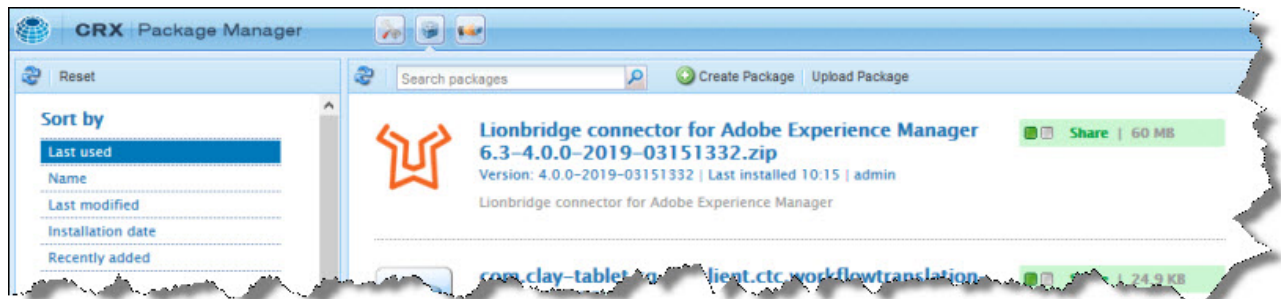
2. Click **Upload Package** to upload the `Lionbridge connector addon - SDL TMS Support.zip` package to the Adobe Experience Manager server. . This package supports all versions of Adobe Experience Manager and the Connector.

3. Click `Lionbridge connector addon - SDL TMS Support.zip`, and follow the on-screen installation instructions.

4. In your Web browser, navigate to `/content/ctctranslation/status.html#` on your

Adobe Experience Manager instance to display the Lionbridge Connector rail.

5. In the Lionbridge Connector rail, click **Admin Tools > TMS GUID Config**.

The **TMS GUID Config** page opens.
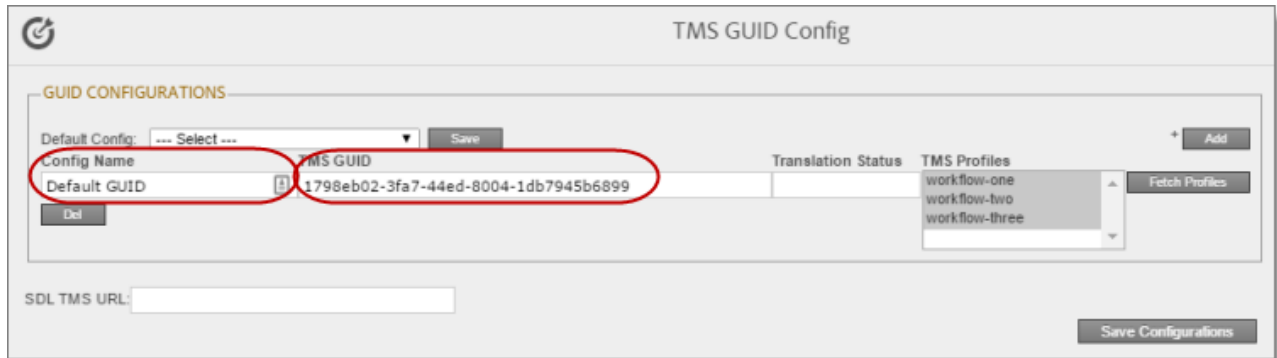
Note: A *GUID* is a Globally Unique Identifier, which is a unique reference number used as an identifier in software.

6. Click **Add** in the top-right corner of the page and enter the following information about your configuration:

Column	Description
Config Name	Your meaningful name for the TMS configuration, for example, `Default GUID`.
TMS GUID	Each translation provider can have multiple configurations, so that it can manage multiple sets of translation requirements, Each configuration in the provider's system has its own GUID.

Note: You can enter multiple GUIDs for each TMS configuration. Repeat this step for each TMS GUID configuration.

7. In the **Default Config** dropdown list at the top of the page, select the SDL configuration you created, and click **Save**. For example, select `Default GUID` from the list.

8. Optional. In the **Translation Status** field, enter a custom translation-status value that will be displayed in the page list of the Globalization Tool for all pages translated with this TMS configuration. This value is one of the following:

    ▦ A single value, such as `MT` (for machine translation) or `HT` (for human translation).

    ▦ A paired value, which is a value-title pair, with the `-|-` separator, for example `1-|-HT`, where `1` is the value stored in a custom page property, while `HT` is the value displayed in the Globalization Tool.

    This value will be stored in a custom page property that you create. For instructions, see "Creating a Page Property to Store Custom Translation-Status Values" on page 155.

9. Optional. If you want to retrieve the workflow list from the SDL TMS server, then at the bottom of the page, enter the URL for your SDL TMS instance in the **SDL TMS URL** field.

10. At the bottom of the page, click **Save Configuration**.

11. In the Lionbridge Connector rail, click **Admin Tools > LSP and Keys**.

    The **LSP and Keys** page opens. For more information about this page, see "Editing a License Key" on page 104.

12. In the **LSP and License Keys** section of page, click **Edit** beside the SDL TMS configuration.

13. In the **LSP Type** dropdown list, select `SDL TMS`.

14. At the bottom of the page, click **Update** to save this change.

    For more information about the **LSP & Keys** page, see "Editing a License Key" on page 104.

15. Test this configuration by sending encrypted content for translation. For detailed instructions, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

Important: When you send a job for translation, in the **Choose LSP** list, verify that all the configurations you added on the **TMS GUID Config** page are displayed.

4 Post-Installation Tasks

After installing the Connector, you complete the tasks below to verify that your installation was successful.

Important: The Adobe Experience Manager `admin` user must perform the post-installation and configuration tasks for the first time after installation.

1. "Configuring the Data Folder and Database Connection" on page 27.

2. "Verifying that the Bundle and All Connector Components Are Active" on page 28.

3. "Verifying that the Connector Nodes are Installed" on page 30.

4. "Configuring Network Settings for a Firewall" on page 32. (Optional)

4.1 Configuring the Data Folder and Database Connection

After installing the Connector, you configure the database connection and the data folder, and then you restart the Connector bundle, so that you can verify that all Connector nodes are active.

1. Recommended for MySQL and Microsoft SQL Server databases. Set your default database collation as follows:

   - MySQL: `utf8_general_ci`

     Note: This is highly recommended to ensure that content includes local characters.

     Note about support for hexadecimal emoji characters: To support hexadecimal emoji characters, set your default database collation to: `utf8mb4_unicode_ci`. For a list of supported hexadecimal emoji characters, see http://www.unicode.org/emoji/charts/full-emoji-list.html. For complete instructions, contact Lionbridge Connector Support. For details, see page 11.

   - Microsoft SQL Server: `SQL_Latin1_General_CP1_CI_AS`

     Note: The Connector versions 4.0.3 and higher supports Microsoft SQL Server 2012 and higher versions, and do not support Microsoft SQL Server 2008 and 2008 R2 versions.

2. Click **Admin Tools > Configuration** in the Lionbridge Connector rail to open the **Configuration** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

3. In the **JDBC SQL Connection** section, configure the Connector's database connection. For detailed instructions, see "JDBC SQL Connection" on page 42.

4. In the **Folder and Permissions** section, configure the Connector's data folder. For detailed instructions, see "Folder and Permissions" on page 47.

4.2 Verifying that the Bundle and All Connector Components Are Active

You must access the Apache Felix Web Console to verify that the bundle and all 24 Connector components are installed and active.

Verifying the bundle

1. In your browser, navigate to: `/system/console/bundles` on your Adobe Experience Manager instance.

   The **Adobe Experience Manager Web Console Bundles** page opens.

2. In the Search box in the top-left corner of the page, type `clay`, and click **Apply Filter**.

The Connector bundle is displayed.

3. Verify that the Connector bundle has active status.

Verifying the Connector components

1. In your browser, navigate to: `/system/console/components` on your Adobe Experience Manager instance.

   The **Adobe Experience Manager Web Console Components** page opens. This page displays all components alphabetically, by name.

2. Scroll down to locate the Connector components, whose names all start with `com.claytablet.`

3. Verify that all the following Connector components are installed and active:

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCAlarmFieldsServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCAuthServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCacheMonitoringServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCCacheServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCConfigServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCDataServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCDownloadServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCEventServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCInitServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCJDBCPoolServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCLocalTMServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCLogServiceImpl

   ⁞ com.claytablet.cq5.ctctranslation.impl.CTCPageServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCPipeProcessServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCPrepareServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCQueueScheduleServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCRolloutCheckServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCStatusServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCTaskServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCUpdateTMServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCUploadServiceImpl

- com.claytablet.cq5.ctctranslation.impl.CTCWordsCountServiceImpl

- com.claytablet.cq5.ctctranslation.service.configMonitor.CTConfigMonitor

- com.claytablet.cq5.ctctranslation.service.PublishEventHandle.PublishEventCTHandler

- com.claytablet.cq5.ctctranslation.service.RolloutEventHandle.RolloutEventCTHandler

- com.claytablet.cq5.ctctranslation.service.UserPermissionChangeEventHandle.UserResourceChangeListener

- com.claytablet.cq5.ctctranslation.workflow.RestoreCTCUnlockedProcess

- com.claytablet.cq5.ctctranslation.workflow.RolloutCTCQueueProcess

- com.claytablet.cq5.ctctranslation.workflow.RolloutCTCTranslationProcess

- com.claytablet.cq5.ctctranslation.translationapi.impl.config.DummyTranslationAdapterFactory

- com.claytablet.cq5.ctctranslation.translationapi.impl.CTCTranslationJobManagerImpl

- com.claytablet.cq5.ctctranslation.translationapi.impl.CTCTranslationServiceFactoryImpl

4.3 Verifying that the Connector Nodes are Installed

After installing the Connector, you must access the CRXDE Lite interface to ensure that all 12 Connector nodes are installed.

1. Do one of the following:

   - In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   - In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   - In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

CRXDE Lite opens.

2. In the navigation pane on the left, navigate to `/etc/ctctranslation`.

3. Verify that the following 16 nodes are present:
   - ctcconfig_InitFields
   - ctcstatus
   - fields4trans
   - ctcconfig_ContentTypes
   - TransOptions
   - UI_ShowOptions
   - sidekickUI
   - ctaddlanguages
   - PageOptions
   - profiles
   - ctcconfig
   - debug
   - teamprofiles
   - lspkeys
   - crypt
   - license keys

Note: The `logback.xml` file is also displayed. This is log configuration file that is injected into the Adobe Experience Manager log service.
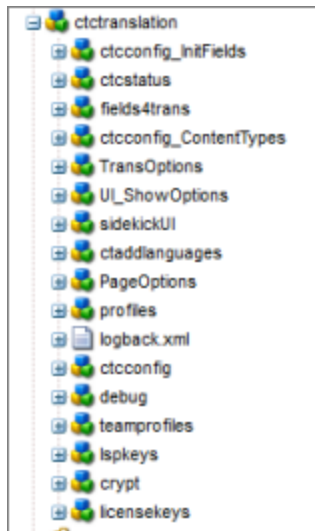
4.4 Configuring Network Settings for a Firewall

Optional step. If you have a firewall, you must configure your ports so that the Connector can communicate with the Clay Tablet Platform. The Connector must be able to communicate with the Clay Tablet Platform by initiating the following outbound network connections:

Protocol	Port Number	Description	Location to Configure
HTTPS	Port 443	For secure access to the Clay Tablet License Server	https://api.clay-tablet.net/license/v1
HTTPS	Port 443	For secure access to Amazon's AWS S3 service	*.s3.amazonaws.com/*
HTTPS	Port 443	For secure access to Amazon's AWS SQS service	https://queue.amazonaws.com/*
HTTPS	Port 443	For secure access to Amazon's AWS SQS service	https://sqs.us-east-1.amazonaws.com/*

Note: Any URLs you configure here will be displayed in the **AWS URLs** section of the **LSP & Keys** page, which is described in "Editing a License Key" on page 104.

If the Lionbridge Freeway add-on is installed, also configure:

Protocol	Port Number	Description	Location to Configure
HTTPS	Port 443	For secure access to Lionbridge Freeway	https://fwapi.lionbridge.com/obvibundles/freewayauth.asmx
HTTPS	Port 443	For secure access to Lionbridge Freeway	https://fwapi.lionbridge.com/obvibundles/service.asmx

5 Configuring the Connector

You configure the Connector for Adobe Experience Manager mostly via the Lionbridge Connector rail, as described below.

1. Log in to Adobe Experience Manager with the `admin` account to start configuring the Connector.

2. Do one of the following:

    ▦ In the Touch-Optimized UI of Adobe Experience Manager, click the Tools icon and then click **Lionbridge Connector** in the Adobe Experience Manager rail. (This opens the Connector in a new browser tab.)

    ▦ In the Classic UI of Adobe Experience Manager, scroll down and click **Lionbridge Connector** in the right pane.

    ▦ In your Web browser, navigate to `/content/ctctranslation/status.html` on your Adobe Experience Manager instance.

The **Translation Status** page opens.

3.   In the Lionbridge Connector rail, click **Admin Tools**.

This displays the **Admin Tools** menu options. You can perform most Connector configuration changes using these tools.

Note: After the Connector is installed, you must start configuring the Connector by selecting **Admin Tools > Configuration**. If you do not begin with this, subsequent configuration options will not be available. For details, see "Configuring Connector Global Settings" on page 38.

The following menu options are available:

Menu Option	Purpose	For Details, See…
Configuration	Configure Connector global settings, including translation options.	"Configuring Connector Global Settings" on page 38
Language Mapping	Configure the language branches in the Web site structure where the Connector returns translated content, and configure the language lists displayed in Sidekick and the Bulk Translation wizard.	"Configuring Connector Languages" on page 83
Component Mapping	Configure the types of components and fields that the Connector can send out for translation when you send out content for translation.	"Configuring which Components and Properties to Send Out for Translation" on page 89
LSP and Keys	Configure the translation provider and the license keys. Migrate license keys to the new license server.	"Configuring Translation Providers and License Keys" on page 97
Advanced Settings	Configure: ■ a page property for storing custom translation-status values for translated pages ■ which metadata is available for copying and translation (from the Globalization Tool) ■ which DAM (digital-asset) metadata is available for updating (from the Globalization Tool) ■ SEO flags to include in the XML translation files ■ which fields are available to generate the Field Report (from the Globalization Tool) ■ which workflows are available to run on multiple pages (from the Globalization Tool) ■ which user group has permission to perform specific actions in the Globalization Tool	"Configuring Advanced Settings in the User Interface" on page 151
Team Profiles	Define sets of Connector users who are allowed to send content out for translation from the specified source languages, to the specified source languages, using the specified translation providers.	"Configuring Team Profiles" on page 110

Menu Option	Purpose	For Details, See…
Search Agents	Configure search agents to collect pages for translation in the Bulk Translation wizard.	"Configuring Connector Search Agents" on page 114
Queue Schedulers	Schedule translation jobs that send out content for translation from the Translation Queue.	"Scheduling Translation Jobs to Send Out Content from the Translation Queue" on page 115
TMS GUID Config	Configure the TMS GUID (global unique identifier), which is required for the following features when using the SDL TMS Add-On for the Connector: ■ supporting multiple configurations for SDL TMS ■ viewing custom translation-status values for SDL TMS when viewing job status in the **Translation Status** page	"Installing the Add-On for SDL TMS" on page 23
Help	Open the home page of the Connector documentation (http://connectors.lionbridge.com/docs/Online_Help_Only/Product_Pages/AEM.htm) in a new Web browser tab.	N/A

4. The following additional configuration steps are optional:

Configuration	For Details, See…
Subscribe to receive email notifications when new components are added to your site or when previously deleted components are added back. This is useful if you are planning to add new components in the future.	"Subscribing to Email Notifications about New Fields and Components" on page 94
When using the Connector's add-ons for Lionbridge Freeway or SDL TMS, you can configure content encryption and decryption.	"Configuring Content Encryption and Decryption (Lionbridge Freeway and SDL TMS only)" on page 108
Configure Adobe Experience Manager user permissions for translation users.	"Configuring Adobe Experience Manager User Permissions for Translation Users" on page 113

Configuration	For Details, See…
Configure the frequency that the Connector checks for processing, sending, and receiving translations.	"Configuring the Service Components" on page 126
Configure custom content types, using CRXDE Lite.	"Configuring Custom Content Types" on page 134
Configure the rollout feature.	"Configuring the Rollout Feature" on page 135
Configure content collection from Blueprint pages.	"Enabling Content Collection from Blueprint Pages" on page 142
Configure which content the Connector includes in TM (translation memory) updates.	"Configuring the TMX to Include the Original Translation" on page 144
Configure which properties to exclude from translation.	"Excluding Properties from Translation" on page 145
Configure all jobs to pause before the Connector sends them out for translation.	"Configuring All Jobs to Pause" on page 147
Configure the Connector to automatically listen to publish events and add published pages to the Translation Queue.	"Configuring Catching Pages from Publish Events to the Translation Queue" on page 148
Configure which properties of i18n dDictionary items and tags to collect for translation when using the Bulk Translation wizard.	"Configuring which Properties of i18n Dictionary Items and Tags to Collect for Translation" on page 149
Configure the translation settings for digital assets.	"Configuring Translation Settings for Digital Assets" on page 127
Create a custom asset handler that modifies the translation settings of specific asset types.	"Creating a Custom Asset Handler" on page 128

5.1 Configuring Connector Global Settings

▶ To configure Connector global settings, click **Admin Tools > Configuration** in the Lionbridge Connector rail to open the **Configuration** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The configuration options are organized into the following sections:

Configuration Section	Purpose
"Server URL" on page 40	Specify the base URL that is used to generate a full page review URL.
"Network Configuration" on page 41	Specify the network configuration details for proxy server implementations.
"Translation Platform" on page 42	Enter the license for the Clay Tablet Platform, which receives and routes content between the Connector and translation providers **Note:** In general, you configure the license immediately after installation.
"JDBC SQL Connection" on page 42	Configure the JDBC SQL connection to the Connector database. **Note:** In general, you configure the database connection immediately after installation.
"Freeway Config" on page 44	If Lionbridge Freeway is your translation provider, configure its credentials and Freeway-specific settings.
"Folder and Permissions" on page 47	Configure the Connector data folder and its permissions. **Note:** In general, you configure the Connector data folder immediately after installation.
"Translation Settings" on page 49	Configure translation-specific options.

Configuration Section	Purpose
"In-Context Preview" on page 54	Configure the settings for the In-Context Preview feature. This feature enables those without Adobe Experience Manager access (such as translators) to preview items in the XML files for translation as Adobe Experience Manager would render them. **Warning:** This feature is currently in alpha testing. It is not currently generally available for production usage. Do not configure this feature unless you have contacted the Lionbridge Connector Team and arranged to be an alpha tester of this feature. If you are not an alpha tester of this feature, do not configure this feature.
"Mail Server Settings" on page 55	Specify the email settings for notification emails that the Connector can send.
"Log Service" on page 57	Specify the Connector log settings.
"Agent Services" on page 57	Configure the settings for the `ctcPrepareService` and `ctcUploadService` services.
"Encryption Keystore (Lionbridge Freeway and SDL TMS only)" on page 58	Specify the keystore location and password for content encryption and decryption.
"UI and Default Settings" on page 59	Specify the default user interface settings that are displayed to users, and configure the Connector to support editing multiple versions of a source page concurrently.

When you are done, you can perform the actions described below. The corresponding buttons are displayed at the bottom of the Configuration page:

▶ To export all your configuration settings, from all configuration pages, click **Export All Configurations**. The Connector downloads the XML files as a single ZIP file. By default, these files are downloaded to the following location: AEM_QuickStart_Folder\CTC_Configs\Export. For a detailed description of the exported files and how to reimport them, see "Automatically Updating Your Connector Configuration" on page 207,

▶ To export your configuration settings (excluding the translation options) as an XML file, click **Export Configuration**. The Connector downloads the file.

▶ To export your translation options as an XML file, click **Export Translation Options**. The Connector downloads the file.

▶ To update the Connector with changes to Adobe Experience Manager users or groups, click **Reload Cache**. This facilitates Connector access for newly added or modified users or groups.

▶ To save your changes to the Configuration page, click **Save Configuration**.

5.1.1 Server URL

The **Server URL** section of the **Configuration** page specifies the base URL that is used to generate a full page review URL.

Configuration Option	Description
Server Base URL	This is the base URL that is used to generate a full page review URL. For example, if the URL of the Adobe Experience Manager server is `http://www.xxx.com:4502`, then the full URL of page `/content/www/product` is `http://www.xxx.com:4502/content/www/product.html` in the file for translation.

5.1.2 Network Configuration

The **Network Configuration** section of the **Configuration** page specifies the network configuration details for proxy server implementations.

Configuration Option	Description
Use Proxy Server	Indicates whether the Connector uses a proxy server. If this is `No`, the other settings in this section are not required.
Proxy Host	The IP address or domain name for the proxy server.
Proxy Port	The port number for the proxy server.
Need Authentication	Indicates whether authentication is required to access the proxy server. If this is `No`, the remaining settings in this section are not required.
[Proxy Auth] User	The user name for authentication to the proxy server.
[Proxy Auth] Password	The password for authentication to the proxy server.
[Proxy Auth] Domain	The domain for authentication to the proxy server.

▸ To verify the network configuration and credentials for a proxy server, click the **Test** button. After testing, a message box indicates whether your configuration passed the test.

5.1.3 Translation Platform

The **Translation Platform** section of the **Configuration** page contains the license for the Clay Tablet Platform, which receives and routes content between the Connector and translation providers.
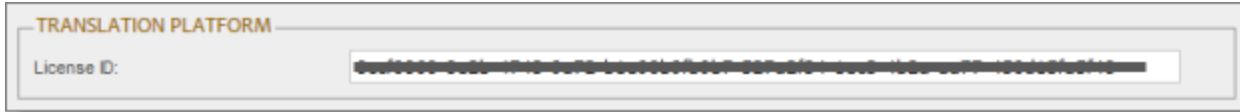
Configuration Option	Description
License ID	Enter the license ID from the `License_ID.txt` file in the package you downloaded. For details, see "Downloading the Delivery Package" on page 19.

5.1.4 JDBC SQL Connection

The **JDBC SQL Connection** section of the **Configuration** page configures the JDBC SQL connection to the Connector database.
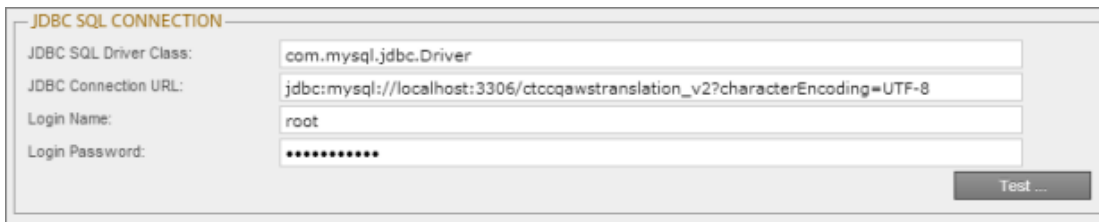
The options in this section configure the JDBC SQL connection to the Connector database. The Connector supports the MySQL, Microsoft SQL Server, Oracle, and PostgreSQL databases.

Important: Every Adobe Experience Manager server with the Connector installed needs its own Connector database. Mirrored or load-balanced servers can point to the same Connector database.

Configuration Option	Description
JDBC SQL Driver class	Enter the appropriate configuration parameter for your database implementation: ■ For Microsoft SQL Server, enter: `com.microsoft.sqlserver.jdbc.SQLServerDriver`. ■ For MySql, enter: `com.mysql.jdbc.Driver`. ■ For Oracle, enter: `oracle.jdbc.driver.OracleDriver`. ■ For PostgreSQL, enter: `org.postgresql.Driver`.

Configuration Option	Description

JDBC Connection URL	Enter the appropriate configuration parameter for your database implementation:
	▪ For Microsoft SQL Server, the URL should look like:
	`jdbc:sqlserver://192.168.1.66:1433;databaseName=ctctranslation;.`
	▪ For MySQL Server, the URL should look like:
	`jdbc:mysql://192.168.1.90:3306/ctctranslation?characterEncoding=UTF-8.`
	▪ For Oracle, the URL should look like:
	`jdbc:oracle:thin:@//192.168.1.66:1521/CTCTRANSLATION.`
	▪ For PostgreSQL, the URL should look like:
	▦ `jdbc:postgresql://localhost:5432/ctctranslation?charSet=utf-8` if SSL is not required
	▦ `jdbc:postgresql://localhost:5432/ctctranslation?charSet=utf-8&ssl=true` if SSL is required
	Note: You can use the DNS name or IP address of the server where the PostgreSQL database resides.

Login name	The name for logging in to the SQL database.
Login password	The password for logging in to the SQL database.

General notes: In the examples above, `192.168.1.66` is the IP address of the database server. Alternatively, you can enter the domain name of the database server.

Notes for MySQL users: Ensure that `characterEncoding=UTF-8` is configured for MySQL. `3306` is the default port of MySQL Server. If your database server uses a different port, change the port number in the example to match your port number.

Note for Microsoft SQL Server users:

▪ `1433` is the default port of the Microsoft SQL Server. If your database server uses a different port, change the port number in the example to match your port number.

▪ The Connector versions 4.0.3 and higher do not support Microsoft SQLServer 2008 and 2008 R2 versions.

Note for Oracle users: `1521` is the default port of the Oracle DB Server. If your database server uses a different port, change the port number in the example to match your port number.

▶ To verify the JDBC connection and credentials, click the **Test** button. After testing, a message box indicates whether your configuration passed the test. This message box also displays a list of all Adobe Experience Manager instances that access this Connector database, and when the database was last accessed, which facilitate troubleshooting.

Upgrading the database while upgrading your version of the Connector

If upgrading the database fails while upgrading your version of the Connector, the **Errors** and **SQL Scripts** buttons are displayed:

- Click **Errors** to view the related error messages.
- Click **SQL Scripts** to download the generated SQL scripts. A DBA can then run the scripts.

5.1.5 Freeway Config

If Lionbridge Freeway is your translation provider, the **Freeway Config** section of the **Configuration** page configures its credentials and Freeway-specific settings.

```
┌─ FREEWAY CONFIG ────────────────────────────────────────────────────────────┐
│                                                                              │
│  Freeway Auth URL:        https://fwapi.demo.lionbridge.com/obvibundles/freewayauth.asmx  │
│                                                                              │
│  Freeway Service URL:     https://fwapi.demo.lionbridge.com/obvibundles/service.asmx       │
│                                                                              │
│  Login Name:              [                                            ]     │
│                                                                              │
│  Login Password:          [                                            ]     │
│                                                                              │
│  If your LSP or one of your LSP(s) is lionbridge, then you need to config how to connect to lionbridge Freeway TMS.  │
│                                                                       [ Test ... ]  │
│                                                                              │
│  Freeway Analysis Codes:     ✔ Require Value 1    ☐ Require Value 2    ☐ Require Value 3  │
│  Use Analysis Code as Queue metadata   ☐                                    │
│  Include instructions in content       ☐                                    │
│  Include instructions in metadata      ✔                                    │
│  Summarize notes in instructions       ☐                                    │
│                                                                              │
└──────────────────────────────────────────────────────────────────────────────┘
```

Note: This section is displayed and relevant only if you are using the Connector's add-on for Lionbridge Freeway.

Configuration Option	Description
Freeway Auth URL	The URL where Lionbridge Freeway provides the authentication service. This is `https://fwapi.lionbridge.com/obvibundles/freewayauth.asmx`.
Freeway Service URL	The URL where Lionbridge Freeway provides the analysis code service. This is `https://fwapi.lionbridge.com/obvibundles/service.asmx`.

Configuration Option	Description
Login Name	The login name for the Freeway server.
Login Password	The login password for the Freeway server.
Test	Click this to test the Freeway login credentials, above. After testing, a message box indicates whether the credentials passed the test.
Freeway Analysis Codes	Each check box indicates whether to display the corresponding analysis-code field to users when they send out content for translation to Lionbridge Freeway. ■ **Require Value 1:** If this check box is selected, the first analysis code configured for your company (for example, region) must be displayed to users when sending content to Freeway. ■ **Require Value 2:** If this check box is selected, the second analysis code configured for your company (for example, department) must be displayed to users when sending content to Freeway. ■ **Require Value 3:** If this check box is selected, the third analysis code configured for your company (for example, priority) must be displayed to users when sending content to Freeway. **Warning:** This configuration is required for full integration between the Connector and Freeway. Otherwise, the Connector cannot retrieve and display analysis code options, and the user cannot specify analysis codes for projects submitted to Freeway. However, even without this configuration, the Connector can still send submitted content to Freeway.

Configuration Option	Description
Use Analysis Codes as Queue Metadata	Indicates whether to use only Level-2 queue metadata as analysis codes. Select this check box to display the following user interfaces: ■ The **Options** page of the **Bulk Translation** wizard includes the **Queue Metadata** dropdown list, where users can select the Queue Metadata analysis code for content items. ■ The **Translation Queue** includes the **Metadata** dropdown list, for filtering content items by the Level-2 queue metadata analysis code. and the **Metadata** column heading, for indicating the analysis code for an item displayed in the Queue. ■ The **Re-send translation job** dialog box includes the **Queue Metadata** dropdown list, where users can select the Queue Metadata analysis code for content items. ■ The **Sidekick** wizard includes the **Queue Metadata** dropdown list, where users can select the Queue Metadata analysis code for content items.
Include instructions in content	Indicates whether the Connector sends the content of the **Special Instruction** field to Freeway as content in the XML translation files.
Include instructions in metadata	Indicates whether the Connector sends the content of the **Special Instruction** field to Freeway as metadata.
Summarize notes in instructions	Indicates whether the Connector merges any notes about individual content files into the instructions it sends to Freeway. **Note:** If you select this check box, you must select either or both of the **Include instructions in content** and **Include instructions in metadata** check boxes. Otherwise, the content will not be delivered to Freeway.

5.1.6 Folder and Permissions

The **Folder and Permissions** section of the **Configuration** page configures the Connector data folder and its permissions.

Configuration Option	Description
[Translation User] Server Group ID	Select the ID of the Adobe server group whose members can submit content from the Bulk Translation wizard only to the Translation Queue. The members cannot send out content directly for translation or submit content from Sidekick.
[Translation Submit] Server Group ID	Select the ID of the Adobe server group whose members can submit translation jobs from the Bulk Translation wizard or Sidekick to the Translation Queue and send out content directly for translation.
[Translation Admin] Server Group ID	Select the ID of the Adobe server group whose members can send out jobs for translation, configure the Connector, and remove completed translation jobs and statuses.
Display all jobs and Delete button for non-admin users	To display the Delete button and all jobs in the **Status** tab of the **Translation Status** page to users who are not members of the `Translation Admin` group, select this check box. **Note:** If you do not select this check box, then only users who are members of the `Translation Admin` group can access the Delete button and view all jobs.
[Job Quote] Can be approved/rejected by	Select the user group whose members can approve or reject translation job quotes.

Configuration Option	Description
Data Folder (Optional)	Optional. This is the path to the folder you created, where Connector will store translation data. For details, see "Creating the Connector Folders" on page 20. ■ For Microsoft Windows, the path must end with \, for example, `c:\ctcdata\`. ■ For UNIX, including Linux, or Mac, the path must end with /, for example, `/usr/share/ctcdata/`. **Note:** The `files/update` subfolder should have full access permissions for Java processes. ▸ To verify that this path is correct, click the **Test** button. After testing, a message box indicates whether your configuration passed the test.
Logs	To save the log files in the `logs` sub-folder of the folder specified in the **Data Folder (Optional)** field, select this check box. **Note:** If you do not select this check box, the log files are saved in `crx-quickstart/logs`.

5.1.7 Translation Settings

The **Translation Settings** section of the **Configuration** page configures translation-specific options.

Configuration Option	Description
Project Identifier	The project name, as it will be displayed in the Translation Status page. If you leave this field blank, the project name is concatenated with the username and the date and time stamps in translation projects your company submits for translation. **Recommendation:** Enter your company name as the project identifier.
MAX # pages per File	This setting determines the maximum number of Adobe Experience Manager pages that the Connector packs into a single XML file for translation. You can adjust the number to better suit your translation requirements. **Note:** Translation providers translate an entire XML file before returning it. Therefore, it takes more time to translate an XML file with more pages packed into it than an XML file with fewer pages packed into it. Specifying a lower maximum number of pages per file generally results in a faster turnaround time. The default value is 100, which means the Connector will package content from 100 Adobe Experience Manager pages into a single XML file. **Recommendation:** Discuss this with your translation provider.

Configuration Option	Description
Submit user name and email as job metadata	This setting determines whether the Connector includes or excludes a submitter's username and email address when submitting a job for translation. By default, this check box is not selected, which means the Connector excludes a submitter's username and email address when submitting a job for translation. This feature supports the EU's General Data Protection Regulation.
Catch Rollout Pages to [Rollout] Queue	Select this check box to enable users to send content to the Translation Queue when using Adobe Experience Manager's MSM Rollout functionality. If this check box is selected, when users roll out pages, the Connector automatically sends content to the Translation Queue. **Note:** Alternatively, you can use the `CTCRolloutTranslation` workflow to enable this functionality. For details, see "Viewing the Rollout Workflow" on page 192. For information about when to use which configuration method, see "Configuring the Rollout Feature" on page 135.
Catch Published Workflow Pages to Queue	Select this check box to automatically catch pages published by a workflow and send them to the Translation Queue. **Note:** This requires adding the `Add Published Page to Translation Queue` step to your workflow. To do this, you add the `Type: Process step, Process: com.claytablet.cq5.ctctranslation. workflow.PublishCTCQueueProcess` workflow step to your workflow, and then you use this workflow to publish, instead of using Adobe Experience Manager's built-in publish feature. For detailed instructions, refer to the Adobe Experience Manager documentation, at https://docs.adobe.com/docs/en/aem/6-2/develop/extending/workflows/step-ref.html. **Note about settings for this feature:** You configure the source and target languages and the translation settings for this feature in the **Configuration for Catching Published Pages to Queue** section of the **Advanced Settings** page. For detailed instructions, see "Configuring Translation Settings for Catching Pages to the Translation Queue" on page 171.

Configuration Option	Description
Catch Pages from Publish Event to Queue	Select this check box to automatically listen to publish events and add published pages to the Translation Queue. **Note:** To display this option, you must create the `ShowCatchPublishEventPageToQueueInCTConfig` property in `/etc/ctctranslation/ctcconfig`. For detailed instructions, see "Configuring Catching Pages from Publish Events to the Translation Queue" on page 148. **Note about settings for this feature:** You configure the source and target languages and the translation settings for this feature in the **Configuration for Catching Published Pages to Queue** section of the **Advanced Settings** page. For detailed instructions, see "Configuring Translation Settings for Catching Pages to the Translation Queue" on page 171.
Remove Control Characters	Some control characters, such as `0X10` and `0X13`, will cause an XML file to be invalid. However, some translation providers and translation management systems may not be able to handle control characters. This option instructs the Connector to automatically remove all control (non-printing) characters (`0x00-0x1F`) from an XML file before sending it out for translation.
Translate Page Annotations	This setting determines whether the Connector sends out page annotations for translation. ■ If this check box is selected, the Connector sends out page annotations for translation. ■ If this check box is not selected, the Connector does not send out page annotations for translation. For information about annotations, refer to the Adobe Experience Manager documentation, at: https://helpx.adobe.com/experience-manager/6-3/sites/authoring/using/annotations.html.

Configuration Option	Description
Translate Dependent CF	This setting determines whether the Connector sends out for translation Content Fragments that are referenced in pages, Experience Fragments, and adaptive forms. ■ If this check box is selected, the Connector sends out for translation Content Fragments that are referenced in pages, Experience Fragments, and adaptive forms. ■ If this check box is not selected, the Connector does not send out for translation Content Fragments that are referenced in pages, Experience Fragments, and adaptive forms.
Save Translation to Local TM	This setting determines whether the translated content is stored at a property level in the local TM (translation memory). You can view these properties in CRXDE Lite. ■ If this check box is selected, the translated content is stored at a property level in the local TM. ■ If this check box is not selected, the translated content is not stored at a property level in the local TM.
Language Conversion (URL Reference)	For fields in Adobe Experience Manager pages that contain only internal URLs to sites hosted on the same Adobe Experience Manager instance, the Connector can automatically find the referring target URL and exclude this field from the page translation process. ■ Select this check box if the entire field is a URL reference, for example, `/content/www/en/us/products`, in a field of a page that will be translated to French, and there is no `<a>` link tag. In this scenario, the Connector treats this field as a URL reference field, and it does not send out this field for translation. It automatically converts the URL to `/content/www/fr/fr/products` for the French version of the content. ■ Clear this check box if you want the Connector to send out this field for translation. **Note:** If the sites use different language structures, for example, one site uses `en` and the other uses `en-US`, you must configure the languages using the **Group**, **Base CRX Path**, and **Reference CRX Path** columns in the **Language Mapping** page. For details, see "Configuring Connector Languages" on page 83.

Configuration Option	Description
Language Conversion (Content Link)	For fields in Adobe Experience Manager pages that contain internal links to sites hosted on the same Adobe Experience Manager instance, the Connector can automatically convert these internal links to point to the corresponding pages in the target language. ■ Select this check box to convert the link to the corresponding target page. For example, if you are translating English to French, a link that was previously to another English page will now point at the corresponding French page. ■ Clear this check box to maintain the link to the page in the source language. For example, if you are translating English to French, a link that was previously to another English page will still point at the original English page. **Note:** If the sites use different language structures, for example, one site uses `en` and the other uses `en-US,` you must configure the languages using the **Group**, **Base CRX Path**, and **Reference CRX Path** columns in the **Language Mapping** page. For details, see "Configuring Connector Languages" on page 83.
Language Conversion option	■ Select this check box to convert the URL references and the content links in a page to the corresponding target language even if the target folder does not exist. In this case, the URL references and the content links point to the Target language after a successful translation in the corresponding target page. ■ Clear this check box if you do not want the language conversion for the URL references and content links in a page to target language. In this case, even after the successful translation in the corresponding target page, the URL references and content links point to source language.
Send translation events	Select this check box to prevent or enable writing Connector translation events to OSGi events. These events occur when a page translation status changes. By default, this check box is cleared, so that these events are not written to OSGi events.
"Send-Out" Notification	Select this check box if you want the Connector to send an email notification when it sends out a page for translation.
Email addresses for receiving "Send-Out" Notification	Comma-separated email addresses that will receive notification emails when the Connector sends out a page for translation.

Configuration Option	Description
"Completed" Notification	Select this check box if you want the Connector to send an email notification when a page translation has been completed.
Email addresses for receiving "Completed" Notification	Comma -separated email addresses that will receive notification emails when a page translation has been completed.

Note about email notifications: The above settings are global, so the Connector will send email notifications to these addresses for all translation projects. In the Connector, users can also add email notifications on a project basis. For details, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

5.1.8 In-Context Preview

The **In-Context Preview (ICP)** section of the **Configuration** page specifies the settings for the In-Context Preview feature. This feature enables those without Adobe Experience Manager access (such as translators) to preview items as Adobe Experience Manager would render them.

Warning: This feature is currently in alpha testing. It is not currently generally available for production usage. Do not configure this feature unless you have contacted Lionbridge Connector Support and arranged to be an alpha tester of this feature. If you are not an alpha tester of this feature, leave all these settings blank.

Configuration Option	Description	Sample Value
External Preview URL (for source)	The URL that enables translators or external reviewers to preview the source item on the Connector Preview server. For instructions on configuring this setting, contact Lionbridge Connector Support, as described in "How to Contact Lionbridge Connector Support" on page 11.	https://ct-preview-server-url?chunk={chunkid}&lang={lang}

Configuration Option	Description	Sample Value
External Preview URL (for target)	The URL that enables translators or external reviewers to preview the target item the Connector Preview server. For instructions on configuring this setting, contact Lionbridge Connector Support, as described in "How to Contact Lionbridge Connector Support" on page 11.	https://ct-preview-server-url?chunk={chunkid}&lang={targetlang}

You can use the following parameters listed in the table below to configure the URLs described above:

Parameter	Description
{lang}	The source language of the Adobe Experience Manager item sent for translation.
{targetlang}	The target language of the translated Adobe Experience Manager item.
{chunkid}	The globally unique ID generated by the Connector, which identifies each translatable field (chunk) in the XML file generated by the Connector.

5.1.9 Mail Server Settings

The **Mail Server Settings** section of the **Configuration** page specifies the mail-server settings for notification emails that the Connector can send.

This section is required if you configured the Connector to send notification emails. For details, see "Translation Settings" on page 49.

Configuration Option	Description
Use Experience Manager Mail Service	You can use either Day CQ Mail Service's email notification settings or the Connector's own settings to send email notifications from the Connector. ■ To configure the Connector to use Day CQ Mail Service's email notification settings, select this check box, and leave the remaining settings in this section blank. For instructions on configuring Day CQ Mail Service's email notification, refer to https://docs.adobe.com/docs/en/aem/6-1/administer/operations/notification.html#Configuring. **Note:** The Connector uses only the Day CQ Mail Service. The other settings described on the Adobe Experience Manager page are not relevant. ■ To configure the Connector to use its own email notification settings, clear this check box, and populate the rest of the settings in this section, as described below.
Note: The following settings are relevant only if the **Use Experience Manager Mail Service** check box, described above, is cleared.	
SMTP Host	The IP address or domain name of your SMTP server.
SMTP Port	The port used by your SMTP service.
Need Authentication	Indicates whether the SMTP server needs authentication. If necessary, contact your network administrator for this information.
[SMTP Auth] User	The login name or account if your SMTP server needs authentication.
[SMTP Auth] Password	The password to log in to your SMTP server if it needs authentication.
SMTP STARTTLS	Indicates whether your SMTP server supports the StartTLS protocol. If necessary, contact your network administrator for this information.
Notification email from	The email address from which Connector notification emails will be sent. If this is not specified, the default email address is ctcnotification@clay-tablet.com.

▸ To verify the email settings, click the **Test** button. After testing, a message box indicates whether your configuration passed the test.

5.1.10 Log Service

The **Log Service** section of the **Configuration** page specifies Connector log settings.

Configuration Option	Description
Log Level	There are three levels of logging: `Info`, `Debug`, and `Trace`. **Recommendation:** Initially set the log level to `Debug`, since this level of logging has all the details of the Connector translation process. This level of detail is required for Lionbridge Connector Support to assist you with any implementation issues. After the end-to-end translation process is running smoothly, you can change this to `Info`, so that only warnings and errors are logged.
Log Archive (Days)	By default, the Connector maintains 15 days of logs.

5.1.11 Agent Services

The **Agent Services** section of the **Configuration** page configures the settings for the `ctcPrepareService` and `ctcUploadService` services.

Configuration Option	Description
Speed	You can choose a level from 1 to 20 to adjust the load of the `ctcPrepareService` and `ctcUploadService` agent services present to your servers. Setting 1 is very fast and therefore more resource intensive. The default value is 1 (fastest). Based on Connector testing, this setting will push CPU usage to 60% on average. You can monitor your server performance, and if the Connector uses too many server resources, you may need to adjust the speed level. **Note:** This speed setting affects all Connector agent services.
Multiple Threads	This is the maximum number of threads that the Connector can use for the Clay Tablet JDBC pool, and to concurrently prepare, send, download, and return translations to Adobe Experience Manager. It is between 1 and 20.

5.1.12 Encryption Keystore (Lionbridge Freeway and SDL TMS only)

The **Encryption Keystore** section of the **Configuration** page configures the settings for the keystore that is used to encrypt and decrypt content for translation and translated content.

Note about the encryption framework: This is Java Cryptography Extension (JCE). This is an officially released Standard Extension to the Java Platform, which is described here: https://docs.oracle.com/javase/7/docs/technotes/guides/security/SunProviders.html#SunJCEProvider. For more information, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

Note about the keytool utility: This is Java's keytool – Key and Certificate Management Tool, which is described here: https://docs.oracle.com/javase/6/docs/technotes/tools/solaris/keytool.html. For more information, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

Configuration Option	Description
Path	The file path of the encryption keystore.
Password	The keystore password.

▶ To verify the keystore password, click the **Test** button. After testing, a message box indicates whether the password passed the test.

5.1.13 UI and Default Settings

The **UI and Default Settings** section of the **Configuration** page specifies the default user interface settings that are displayed to users.

Configuration Option	Description
Translation on Sidekick	This setting determines the user interface displayed when clicking **Translate Content** on the **Page** tab of the Sidekick. Some companies prefer a simplified process where users cannot choose advanced translation options, while others prefer to empower their content editors to set various parameters each time they send out content. For instance contributors can choose to ensure source content is not overwritten during the translation process, as it pertains to MSM rollout processes. The following options are available: ■ `Simple UI`: Users can submit content to the Translation Queue. All options are displayed in a single dialog box. Advanced translation options *are not* displayed. ■ `Simple UI with all options`: Users can submit content to the Translation Queue. All options are displayed in a single dialog box. Advanced translation options *are* displayed. ■ `Wizard`: Users can either submit content to the Translation Queue or send content out for translation. Options are displayed in a two-page wizard. Advanced translation options *are not* displayed. This is the default setting. ■ `Wizard with all options`: Users can either submit content to the Translation Queue or send content out for translation. Options are displayed in a two-page wizard. Advanced translation options *are* displayed. This is the default setting. For more information about these options, including screen captures of the user interfaces displayed in Sidekick, see "Sidekick Options" on page 74.
Show options on Bulk UI	This setting determines whether to display the **Options** page in the Bulk Translation wizard. The **Options** page enables users to change the following options: ■ Use Local TM ■ Select if using Blueprint/Live-copy ■ Only translate content from locked components ■ Unlock the component after translated content come back ■ Allow translate content from Not-Sync components ■ Translate Page Content ■ Translate Metadata These options are individually configurable, and they are described in the **Translation Default Settings** section, below.

Configuration Option	Description
Show options on Touch UI	This setting determines whether to display the **Options** tab in the **Translate Content** page, which opens from Adobe Experience Manager's Touch-Optimized UI. The **Options** tab enables users to change the following options: ■ Use Local TM ■ Select if using Blueprint/Live-copy ■ Only translate content from locked components ■ Unlock the component after translated content come back ■ Allow translate content from Not-Sync components ■ Translate Page Content ■ Translate Metadata These options are individually configurable, and they are described in the **Translation Default Settings** section, below. **Note:** This is displayed only in Adobe Experience Manager versions 6.3 and higher, and it is relevant only for those versions.

Configuration Option	Description

Indicate SEO field in translation file	You can include SEO flags in XML translation files to indicate page field and property translations that must be Search Engine Optimized (SEO). Select the method for including this information in the file:
	
	■ `Yes, use attribute`: The Connector adds the `SEO_Flag` attribute to `PropertyContent` in the XML file. For example:
	
	`<PropertyContent IsMultipleValue="No"`
	`NodePath="jcr:content"`
	`PropertyName="jcr:title"`
	`SEO_Flag="This is a SEO field" <=== this text "This is a SEO field" is configured in Metadata config`
	`>`
	`Products`
	`</PropertyContent>`
	
	■ `Yes, add extra line`: The Connector adds a extra `PropertyContent` to the XML file to indicate that the next field is an SEO field:
	
	`<PropertyContent IsMultipleValue="No"`
	`NeedTranslation="false"`
	`SEO_Flag="true">`
	`The next field is a SEO field <=== this text "The next field is a SEO field" is configured in Metadata config`
	`</PropertyContent>`
	`<PropertyContent IsMultipleValue="No"`
	`NodePath="jcr:content"`
	`PropertyName="jcr:title">`
	`Products`
	`</PropertyContent>`
	
	If you select `No` (the default value), then the Connector does not include SEO flags in the XML translation files.

Configuration Option	Description
	Important: If you specify this setting, you must specify which SEO flags to include in the **Page Metadata Configuration** section of the **Advanced Settings** page. For details, see "Configuring which Page Metadata is Available for Copying and Translation" on page 168.
Allow Reference Files for Translation Job	Select this check box to enable users to attach *references files* (support assets) when sending out a translation job. This determines whether the **Reference Files** feature is available in the Translation Queue, Bulk Translation Wizard, Globalization Tool, and the Sidekick wizard.
Translate Asset Metadata	Select this check box to enable users to send out properties of digital-asset metadata properties for translation. For more information about this feature, see "Configuring Translation Settings for Digital Assets" on page 127. **Important:** You must configure the asset properties to send for translation in the **Component Mapping** page, in the same way that you configure other component. After you click **Collect** for an asset to add it to the component list, you must click **Set for all components** to send all components with a specific property for translation. For detailed instructions, see "Configuring which Components and Properties to Send Out for Translation" on page 89
Translate Asset Binary	Select this check box to enable users to send out digital assets for translation, for example, actual JPG or PDF files. For more information about this feature, see "Configuring Translation Settings for Digital Assets" on page 127. **Tip:** In the **Exceptions** text field, you can prevent assets with specific file-type extensions or asset paths from being sent out for translation. Separate each file type or path with a comma (,), for example: `gif,jpg,png,perform.ppt,/products/docs/guide.pdf` You can use the exclamation mark (!) wild-card character as a prefix for file names to exclude, for example: `!NeedTrans.pdf`. **Note:** When the Connector sends the actual asset for translation, it sends the *original rendition*. There may be multiple renditions of an asset, for example, there may be multiple versions of an image with different resolutions, such as for Web and print. For more information, refer to "Managing Renditions" in the Adobe Experience Manager documentation, at: https://docs.adobe.com/docs/en/aem/6-3/author/assets/managing-assets-touch-ui.html#Managing%20Renditions.

Configuration Option	Description
Show Globalization Tool	Select this check box to display the **Globalization Tool** menu item in the Lionbridge Connector rail and the corresponding Globalization Tool. You can use the Globalization Tool to perform actions on multiple pages simultaneously. For a detailed description of this feature, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.
Use user session in page search	This setting determines whether the Connector uses Adobe Experience Manager's built-in permission settings so that a user can access only part of the content repository. ■ To use Adobe Experience Manager's built-in permission settings, select this check box. ■ To ignore Adobe Experience Manager's built-in permission settings, clear this check box (default value). By default, a user can access all content. **Tip:** You can also limit a user's access by using team profiles. For details, see "Configuring Team Profiles" on page 110.
Pause job before sending	This setting determines whether the Connector automatically pauses a job before sending it out for translation, after `Preparing` status (`0%`) but before `Sending` status (`1%`). This is useful if you want to review or export reports of content items, or download the XML files before sending them out for translation. You can resume a paused job in the **Translation Status** page. ■ To configure the Connector to automatically pause jobs before sending them out, select this check box. ■ To prevent the Connector from automatically pausing jobs before sending them out, clear this check box (default value). **Note:** You can also configure this setting using the `PauseBeforeSend` property in CRXDE Lite. For details, see "Configuring All Jobs to Pause" on page 147.

Configuration Option	Description
Only Translation Admin can pause jobs	This setting determines who can use the pause button in the **Translation Status** page. You can pause a job before sending it out for translation, after `Preparing` status (`0%`) but before `Sending` status (`1%`). This is useful if you want to review or export reports about XML files with content items, or download the XML files before sending them out for translation. ■ To display the pause button only for users assigned to the `Translation Admin` group, select this check box. ■ To display the pause button for all users, select this check box (default value).
Disable default language mapping	This setting disable Adobe Experience Manager's default language mapping feature. ■ To disable Adobe Experience Manager's default language mapping, select this check box. ■ To enable Adobe Experience Manager's default language mapping, select this check box (default value). **Note about adaptive forms:** If you are sending out adaptive forms for translation, clear this check box to enable Adobe Experience Manager's default language mapping. If you are using custom languages, then in the **Language Mapping** page, use the **Identity** column to link your custom languages to the corresponding default Adobe languages. For detailed instructions, see "Configuring Connector Languages" on page 83. This step is required because adaptive forms support only the locales defined in Adobe languages.
Open linked pages in	This setting configures whether the Connector opens page-path links in either Adobe Experience Manager's Touch UI or its Classic UI. These page-path links are displayed in the following Connector interfaces: ■ Bulk Translation wizard ■ Translation Queue ■ Globalization Tool ■ Translation Status page, Job Details tab
Status UI Default Settings	This sub-section determines the default values for UI elements in the **Translation Status** page.

Configuration Option	Description
Show jobs from past	This setting determines the default date range for displaying translation jobs in the **Translation Status** page. A job's *date* is its submission date. The supported values are: ■ `1 week` ■ `2 weeks` (default value) ■ `3 weeks` ■ `1 month` ■ `3 months` ■ `1/2 year` ■ `1 year` **Note:** In the **Translation Status** page, the user can use the **Period** fields and date choosers to change the date range for displayed translation jobs.
Show jobs submitted by	This setting determine the default value of the **Submitted By** dropdown list in the **Translation Status** page. The supported values are: ■ `Me`: The page displays only the jobs submitted by the current user. ■ `My team(s)`: The page displays the jobs submitted by all members of the current user's team. **Note:** The user can change this selection in the **Translation Status** page.

Configuration Option	Description
Translation Default Settings	This sub-section determines the default settings of these options when they are displayed in the Bulk Translation wizard, the Translation Queue, the Translate Content page in the Touch-Optimized UI, and in the Sidekick. The Connector also uses these default translation options for catching rollout pages to the Translation Queue, if the **Catch rollout pages to [Rollout] Queue** check box is selected in the **Translation Settings** section of the **Configuration** page. For all these options: ■ If a check box is selected, then the default value of this option is selected. ■ If a check box is cleared, then the default value of this option is cleared. **Note about the Catch rollout pages to [Rollout] Queue feature:** If a check box is enabled, then the option is selected. This feature has no user interface for changing the value. Many of the options in this section are related to Adobe Experience Manager's MSM (Multi Site Manager) and Rollout features. For a description of these features and related concepts, as well as integration with the Connector, see "MSM and Rollout Settings" on page 81. **Note:** Depending on your company's configuration, users may not be able to change these values. For example, if the **Show options on Bulk UI** check box, described above, is not selected, then users cannot change these settings in the Bulk Translation wizard. In that case, this section determines the default value of these settings.
Use Local TM	This feature determines whether to check each component in the source version of the item for any content changes, and send only changed components out for translation. If a component was previously translated and it has not changed, then the Connector does not send it for translation again: Instead, it uses the stored translation. This feature reduces the quantity of content that the Connector sends to translation providers, which reduces your cost. However, it needs the Connector translation backup data, and it increases the Connector processing time before sending out the items for translation. ■ If this check box is selected, the Connector checks whether content was already translated before sending it out for translation. ■ If this check box is cleared, the Connector sends out content for translation without checking whether it has already been translated.

Configuration Option	Description
Select if using Blueprint/ Live-copy	This option is relevant when the target pages are MSM (Multi Site Manager) live copy pages, which means that Adobe Experience Manager automatically updates a target page when the corresponding source page changes. It prevents the Connector from overwriting unique source content that already exists in the target pages.
	This is useful when you are sending a page for translation that has been used in the past to push content to other pages, and includes target page content which has been changed, for example, regionalized. In this scenario you do not want to overwrite the regionalized content as the translation process occurs. Select this option when you *do not* want the Connector to overwrite components in the target pages that include regionalized content with the newly translated content.
	■ If this check box is selected, the Connector *does not* overwrite unique source content that already exists in the target pages.
	■ If this check box is cleared, the Connector *does* overwrite unique source content that already exists in the target pages.
	Recommendation: Select this check box if you are using the live-copy feature.

Configuration Option	Description
Only translate content from locked components	This option enables users to send out only content from locked components for translation. ■ If this check box is selected, users can send out content for translation only if it is from a locked component. ■ If this check box is cleared, users can send out content for translation whether or not it is from a locked component. **Note:** Locked components have an inheritance relationship between a source Blueprint page and the connected live copy page. When sending content for translation using Sidekick, users can choose whether to send for translation the content from locked components, which is inherited from a Blueprint component. This is useful if, for example, the page has both global and regional information and you only want to translate (replace) the global content that is created via a Blueprint page. In this scenario, suppose that the regional content on the page is manually translated in house, and that it has not changed. You would not want to tamper with it. However, using the same scenario, the global content from head office *has* changed and needs translation. You would select this check box to separate the content and localize only the new, inherited content. **Note about Blueprint pages:** If the **Pickup Content From Blueprint Pages** setting is specified, then the Connector always acts as though this option is selected, even if it is not selected. This occurs because only content from locked components are rolled out from Blueprint pages to Livecopy pages. For more information, see "UI and Default Settings" on page 59.

Configuration Option	Description
Unlock the component after translated content come back	This option automatically unlocks a component after translated content returns. This option is relevant only when the **Select if using Blueprint/Live-copy** is been selected. After translated content returns, it automatically unlocks a component, which breaks the MSM inheritance. **Warning:** This breaks the inheritance between the component and its Blueprint page, so that it no longer inherits new content. However, you can use the `CTCRestoreOriginalSync` workflow to relock the component and recreate the inheritance. For details, see "Viewing the Restore Original Sync Workflow" on page 193. ■ If this check box is selected, the Connector automatically unlocks a component after translated content returns. ■ If this check box is cleared, the Connector does not automatically unlock a component after translated content returns.
Allow translated content from Not-Sync components	This option enables users to send content for translation even if it is not synchronized. This means it *does not* have a relationship to a Blueprint page, so it cannot be synchronized with it. This can happen if you are not using the MSM (Multi Site Manager) feature of Adobe Experience Manager, or if this is a page with regionalized content that does not inherit content from a Blueprint page. ■ If this check box is selected, users *can* send out content for translation if it does not have a relationship to a Blueprint page. ■ If this check box is cleared, users *cannot* send out content for translation if it does not have a relationship to a Blueprint page. **Important:** The Connector treats certain page properties (`jcr:content`, `jcr:title`, `jcr:description`) as *unlocked* page properties. Therefore, if you want the Connector to send these page properties for translation, you must select this check box. **Recommendation:** Select this check box if you are using either the live-copy or the language-copy features. **Note about Blueprint pages:** If the **Pickup Content From Blueprint Pages** setting is specified, then the Connector always acts as though this option is selected, even when it is not. This occurs because only content from locked components is rolled out from Blueprint pages to Livecopy pages. For more information, see "Enabling Content Collection from Blueprint Pages" on page 142.

Configuration Option	Description
Translate Page Content	**Important:** To send out words on pages for translation, you must select this option. The corresponding check box is displayed when sending out content for translation from: ■ the Bulk Translation wizard (only if **Pages** is selected in the **Item Type** page of the wizard) ■ the **Translation** tab of the Globalization Tool ■ the **Translate Content** page in Adobe Experience Manager's Touch-Optimized UI (relevant only for Adobe Experience Manager versions 6.3 and higher)
Translate Metadata	This option enables users to send out for translation metadata fields that are defined in the **Page Metadata Configuration** section of the **Advanced Settings** page. For details, see "Configuring which Page Metadata is Available for Copying and Translation" on page 168. These are properties under the /jcr:content node. The corresponding check box is displayed when sending out content for translation from: ■ the Bulk Translation wizard (only if Pages is selected in the Item Type page of the wizard) ■ the **Translation** tab of the Globalization Tool ■ the **Translate Content** page in Adobe Experience Manager's Touch-Optimized UI (relevant only for Adobe Experience Manager versions 6.3 and higher)

Configuration Option	Description
Target Page Revisioning	This sub-section specifies the settings for the Target Page Revisioning feature. By default, this feature is not enabled. You use this feature to configure the Connector to support editing multiple versions of a source page concurrently. This is useful in scenarios where your publishing cycle is shorter than your translation cycle, because you can retain and publish a previous version of the translated content while the current version of the source content is out for translation. For information on page revisioning in Adobe Experience Manager, refer to the Adobe Experience Manager documentation at: https://helpx.adobe.com/experience-manager/6-5/sites/authoring/using/working-with-page-versions.html.

Important: This feature is relevant and available only when updating existing content, that is, when the target page already exists. If you are creating a new language copy, the Connector does not create a revision, because there is no pre-existing target content.

Recommendation: If you use this feature, an administrator should occasionally purge the version history to reduce the repository size. For more information, refer to the Adobe Experience Manager documentation at https://helpx.adobe.com/experience-manager/6-5/sites/deploying/using/version-purging.html. |

Configuration Option	Description
Use Revisioning	Selecting this check box enables the Target Page Revisioning feature, described above. ■ When this check box is cleared, the Connector ignores the values of the **Remove Revisions on Completion** and **Restore Target Pages while under Translation** check boxes, described below. ■ When this check box is selected, the Connector creates the following revisions of the target page during the translation process, and the job name is part of the revision name: ▦ `Before <job name>`: The Connector creates this revision before modifying the page to send it out for translation. This is the original target content. ▦ `During <job name>`: The Connector creates this revision after it sends out the job for translation. This is the source content for translation that the Connector copied to the target, to send out for translation. ▦ `Completed <job name>`: The Connector creates this revision after the translated content returns from translation and the Connector imports it into Adobe Experience Manager. This is the target page that has been updated with translated content. **Note:** The page revision name is visible only in Adobe Experience Manager's Classic UI. In Adobe Experience Manager's Touch-Optimized UI, the revision is displayed without a name.
Remove Revisions on Completion	If you select this check box, then after the Connector imports the translated content into Adobe Experience Manager, it removes the `Before <job name>` and `During <job name>` revisions, described above. The Connector does not remove the `Completed <job name>` revision, because this is the target page that has been updated with translated content. **Note:** Relevant only if the **Use Revisioning** check box, described above, is selected. Otherwise, the Connector ignores this setting.

Configuration Option	Description
Restore Target Pages while under Translation	If you select this check box, then as soon as the Connector sends out content for translation, it restores the `Before <job name>` revision of the page. This revision contains the previously translated version of the page. If you do not select this check box, then the updated source content that has been sent out for translation is the current target content, which is the default Connector behavior. **Important:** Relevant only if the **Use Revisioning** check box, described above, is selected. Otherwise, the Connector ignores this setting.

5.1.13.1 Sidekick Options
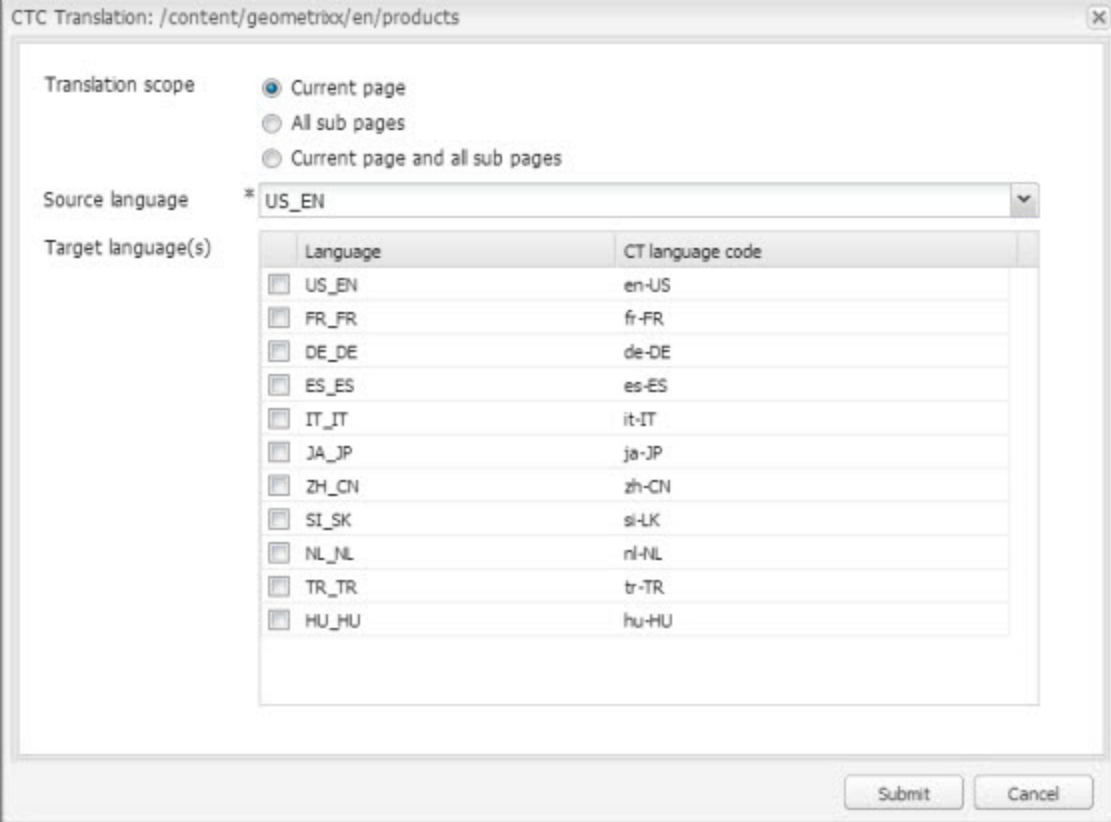
The following table describes the possible values for the **Translation on Sidekick** option in the **UI and Default Settings** section of the **Configuration** page. This page is described in "UI and Default Settings" on page 59.

Translation on Sidekick Value	Where User Can Submit Content	User Interface	Advanced Translation Options Available
Simple UI	Translation Queue only	dialog box	
Simple UI with all options	Translation Queue only	dialog box	✓
Wizard	Translation Queue or directly to translation	two-page wizard	
Wizard with all options	Translation Queue or directly to translation	two-page wizard	✓

Screen captures of each option follow. For a detailed description of the translation interface within Sidekick, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

Simple UI

This option enables users to submit content to the **Translation Queue**. It does not display advanced translation options.

CTC Translation: /content/geometrixx/en/products	✕

Translation scope	● Current page
	○ All sub pages
	○ Current page and all sub pages
Source language	* US_EN ▾

Target language(s)	Language	CT language code
	☐ US_EN	en-US
	☐ FR_FR	fr-FR
	☐ DE_DE	de-DE
	☐ ES_ES	es-ES
	☐ IT_IT	it-IT
	☐ JA_JP	ja-JP
	☐ ZH_CN	zh-CN
	☐ SI_SK	si-LK
	☐ NL_NL	nl-NL
	☐ TR_TR	tr-TR
	☐ HU_HU	hu-HU

Submit Cancel

Simple UI with options

This option enables users to submit content to the **Translation Queue**. It displays advanced translation options.

Translate Content: /content/geometrixx/en/products/square		☒

Translation Scope	⦿ Current page
	○ All sub pages
	○ Current page and all sub pages
Source Language*	en ⌄
Target language(s)	☐ Select all target language(s)

	Language	CT language code
☐	de	de-DE
☐	es	es-ES
☐	fr	fr-FR
☐	it	it-IT

Select if using Blueprint/Live-copy	☐
	Unique source content is already in target page(s), it will not be overwritten
Translate Locked Content	☐
	Only translate content from locked components on this page
Unlock When Done	☐
	Unlock the component(s) after translated content returns
Translate Non-Sync'd Components	☑
	Allows translation of content in any non-Sync'd components on this page
Use localTM	☐
	Use existing translation where possible

Submit   Cancel

Wizard

This option enables users to send content either to the **Translation Queue** or directly out for translation. It does not display advanced translation options. It is a two-page wizard.

Note: You can configure whether by default the wizard sends content to the **Translation Queue** or directly out for translation. For details, see "Configuring the default value of the Submit Translation dropdown list in the Sidekick wizard" on page 81.

Wizard with options

This option enables users to send content either to the **Translation Queue** or directly out for translation. It displays advanced translation options. It is a two-page wizard.

Note: You can configure whether by default the wizard sends content to the **Translation Queue** or directly out for translation. For details, see "Configuring the default value of the Submit Translation dropdown list in the Sidekick wizard" on page 81.

Configuring the default value of the Submit Translation dropdown list in the Sidekick wizard

You can configure the default value of the **Submit Translation** dropdown list in the Sidekick wizard.

- To change the default from `Add to queue` to `Send as a new job`:

    a. In CRX, edit the `/etc/ctctranslation/sidekickUI` node.

    b. Add a new property named `skOptionDefaultSubmitType`, of type `String`, with value `job`.

    c. Save all.

    d. On the page with Sidekick, press `Ctrl` and `F5` to delete the client-side cache.

    The default is now `Send as a new job`.

- To hide the `Add to queue` value:

    a. In CRX, edit the `/etc/ctctranslation/sidekickUI` node.

    b. Add a new property named `skOptionHideSubmitType`, of type `String`, with value `queue`, which is a multi-value property.

    c. Save all.

    d. On the page with Sidekick, press `Ctrl` and `F5` to delete the client-side cache.

    The `Add to queue` option is no longer displayed.

5.1.13.2 MSM and Rollout Settings

Adobe Experience Manager's MSM and the Rollout Process

Adobe Experience Manager includes the powerful Multi Site Manager (MSM), which facilitates managing multiple versions of web sites. The versions may be region specific, for example, a car company may have a different English version of its web site for each English-speaking country where it sells cars. Typically, one version of the site is considered the "source" site. Content in each target website may have different kinds of relationships to the version in the "source" site:

- Some content may be common to all web sites, such as the car company's history.

- Some content may be a mix of common and specific. For example, the company may sell the same cars in many countries, but the cars may have slightly different features in some countries, depending on local regulations.

- Some content may be specific to a specific version of the site, such as information about car dealerships in a particular country.

Rollout is a process that propagates the changes made from the source (Blueprint) to the target (live copy). When you *roll out* a site, Adobe Experience Manager copies the *Blueprint* (source) to the *live copy* (target).

If the components are *locked*, then whenever the source content changes, Adobe Experience Manager automatically updates the target content.

The following Adobe Experience Manager concepts are helpful to understanding MSM and rollout, and how to configure and use the Connector accordingly:

Concept	Description
Blueprint	A source template for multiple pages, which can be *rolled out*.
Live copy	A copy of an existing page or Blueprint, which is the target. Adobe Experience Manager can automatically update the live copy when changes occur to the source. **Important:** If you use this feature, you must select the **Select if using Blueprint/Live-copy** option. The **Allow translate content from Not-Sync components** setting is optional.
Locked	Specifies the inheritance relationship between the target and the source. When the source changes, Adobe Experience Manager automatically updates a locked component in the target. In the car company example, this is useful for pages that have the same content in all versions, such as information about the history of the company.
Unlocked	Specifies the inheritance relationship between the target and the source. When the source changes, Adobe Experience Manager does not update an unlocked component in the target. In the car company example, this is useful for regionalized pages that should not be updated, such as a list of local car dealerships.

For more information about these features and the rollout process, refer to the Adobe Experience Manager user documentation, available at: https://helpx.adobe.com/experience-manager/6-4/sites/administering/using/msm-sync.html

Important: For instructions on configuring the Rollout feature, see page 135.

Why Integrate the Connector with Rollout

The Connector extends the MSM functionality by adding the translation component to the rollout feature. This facilitates using rollout not only to manage multiple region-specific sites, but also to manage multiple language-specific sites. The following table describes the advantages of using the Connector with rollout:

	Using Rollout	Not Using Rollout
Process	Roll out pages, which automatically sends them to the Translation Queue.	1. Roll out a same-language version. 2. Translate copied version.
Number of steps	One step.	Two steps.

	Using Rollout	Not Using Rollout
link between source and content	Source and target can be linked, so when source is updated, changes are automatically sent to the Translation Queue.	No linkage between source and target.

How the Connector Fits into MSM and Rollouts

The Connector does not have its own user interface during rollout: when you roll out content, you use Adobe Experience Manager's rollout interface. The Connector manages the translation during the rollout based on your company's settings for the following options:

- Only translate content from locked components
- Select if using Blueprint/Live-copy
- Unlock the component after translated content come back
- Allow translated content from Not-Sync components

5.2 Configuring Connector Languages

You configure the language branches in the Web site structure where the Connector returns translated content, and you configure the language options for the Bulk Translation wizard and Sidekick.

You must correctly configure all the languages you are using on your site before sending any jobs for translation.

Note about Adobe Experience Manager built-in languages: In Adobe Experience Manager, the Connector provides default language mapping for Adobe Experience Manager built-in languages. Additional setup is not required, and therefore, these languages are not available for further configuration, as shown below. However, you can add additional language mappings, as described in this section.
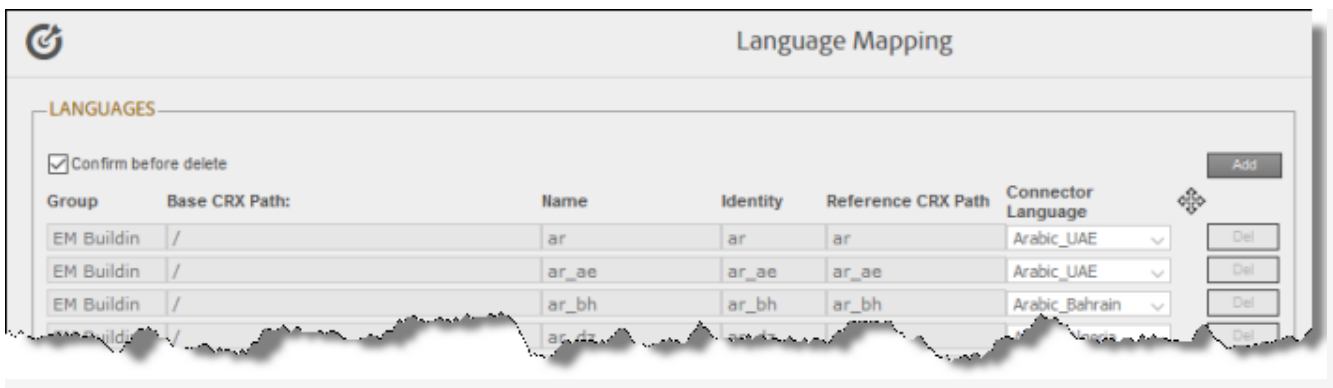
Note about adaptive forms: If you plan to send adaptive forms for translation, add all required default Adobe built-in languages in this page. Do not rely on the default Adobe language mapping.

Note about i18n dictionary items: If you plan to send i18n dictionary items for translation, you must configure the languages for these items separately, as described in the Adobe Experience Manager documentation, here: https://helpx.adobe.com/experience-manager/6-3/sites/developing/using/i18n-translator.html. In addition, the i18n dictionaries language codes may be different from the language codes used in pages. For details, see: https://helpx.adobe.com/experience-manager/6-3/sites/developing/using/i18n-translator.html#ManagingSupportedLanguages.

Important: Do not change the name of a language or delete a language if there is translation content in the Translation Queue, or if there are translation jobs in progress.

Note: You can also adding custom Connector languages and codes. For details, see page 87.

To configure languages for the Connector:

1. Click **Admin Tools > Language Mapping** in the Lionbridge Connector rail to open the **Language Mapping** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.
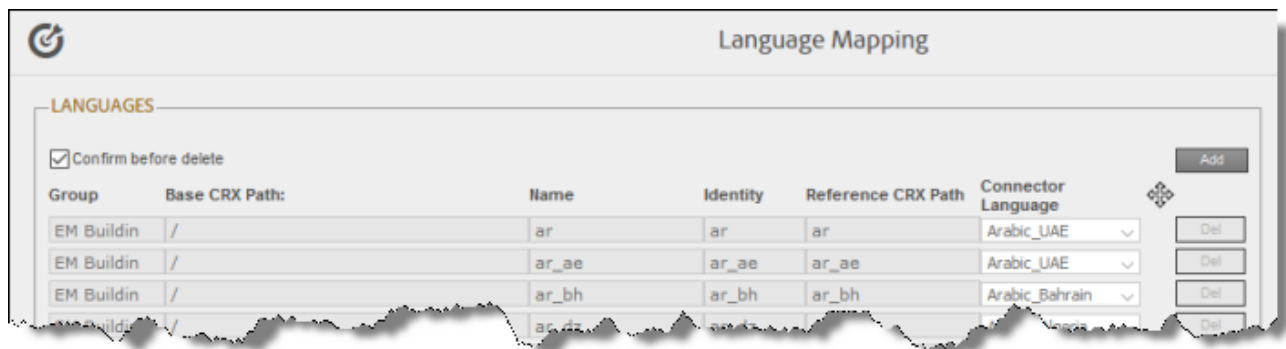
2. Click **Add** in the top-right corner of the page to add a new language.

   A blank row is displayed at the bottom of the list. Enter the new language in this row.

3. Enter the following information in the appropriate columns:

   Note: If you have multiple sites in the same Adobe Experience Manager instance with different language structures (for example, `en` and `en_US`), and you want to convert links to point to the corresponding pages in the target language, then you must map the languages for these sites to each other, using the **Group**, **Base CRX Path**, and **Identity** columns, as described below. Otherwise, leave these columns blank. For information about this feature, see the descriptions of the **Language Conversion (URL Reference)** and **Language Conversion (Content Link)** check boxes in the **Translation Settings** section of the **Configuration** page, in "Translation Settings" on page 49.

Column	Description	Example
Group	Required only if you have multiple sites with different language structures, and if you want to convert links to point to the corresponding pages in the target language. This is the site identifier. For example, if the web1 site has the `/content/web1/en/us` and `/content/web1/fr/fr` pages, and the web2 site has the `/content/web2/en` and `/content/web2/fr` pages, then you can define two groups, `web1` and `web2`: ■ `web1` is the group for `web1-us-en` (Reference CRX Path: `en/us`) and `web1-fr-fr` (Reference CRX Path: `fr/fr`). ■ `web2` is the group for `web2-en` (Reference CRX Path: `en`) and web2-fr (Reference CRX Path: `fr`). **Note:** Do not use the "AEM" built-in group for any custom languages. That group is only for default AEM languages. Maximum length is 50 characters.	Site1
Base CRX Path	Required only if you have multiple sites with different language structures, and if you want to convert links to point to the corresponding pages in the target language. This is the base content path for the group, described above. For example: ■ web1 has the base CRX path: `/content/web1`. ■ web2 has the base CRX path: `/content/web2`. There are additional configuration options: ■ To separate multiple base content paths, use a comma (`,`) separator: `'/content/web1' , '/content/web2/'`. ■ To exclude a base content path, add an exclamation mark (`!`) prefix: `'!/content/web1/'`. ■ To substitute a wildcard as part of the path, use an asterisk (`*`): `'*/libs/' , '!*/app/'`.	/content
Name	The name of the language, which is the language identifier. **Note:** Do not use a space between the language code and country code. Instead, use an underscore (_).	CA_FR

Column	Description	Example
Identity	Required only if you have multiple sites with different language structures, and if you want to convert links to point to the corresponding pages in the target language. Links the same language across multiple sites. For example, both `web1-us-en` (Reference CRX Path: `en/us`) and `web2-en` (Reference CRX Path: `en`) have the same identity: `en-us`. **Notes about adaptive forms :** In the **UI and Default Settings** sub-section of the **Configuration** page, clear the **Disable default language mapping (6.1+)** check box. For details, see "UI and Default Settings" on page 59. If you are translating adaptive forms into a custom language, then enter the corresponding default Adobe language code in this column. This step is required because adaptive forms support only the locales defined in Adobe languages.	en_us
Reference CRX Path	The path to the content for the language in CRXDE Lite. ■ If the CRX content path is similar to `/content/geometrixx/en/products`, this should be similar to `en`. ■ If the CRX content path is similar to `/content/geometrixx/us/en/products`, this should be similar to `us/en`.	ca/fr
Connector Language	The corresponding Connector language code. Select it from the list. For a list and description of Connector language codes, see "Appendix: Language Codes" on page 246.	French_Canada

Note: Any new language you add is not automatically displayed in the Bulk Translation wizard or in Sidekick. For the language to be displayed there, you must add it to the relevant team profile, as described in "Configuring Team Profiles" on page 110.

4. Repeat steps 2 and 3 for any additional languages to add.

5. You can modify the values for any other languages in the list.

6. You can drag-and-drop the languages on this page to modify the order in which they are displayed in the list of languages for the users.

7. When you are done, click **Save Configuration** at the bottom of the page.

This language configuration will be displayed in the Bulk Translation wizard and when accessing the Connector from Sidekick.

▶ To delete a language so that it will no longer be displayed in the Bulk Translation wizard and when accessing the Connector from Sidekick, click the corresponding **Del** button. A confirmation message box is displayed before the language is deleted.

> **Tip:** To prevent displaying the confirmation message box each time you delete a language mapping, clear the **Confirm before delete** check box.

▶ To export the language settings to an XML file, click **Export** at the bottom of the page. The Connector downloads the XML file.

5.2.1 Adding Custom Connector Languages and Codes

The Connector SDK includes a list of pre-defined languages and language codes. If your company wants to use an additional language that does not have a corresponding Connector language and code, then you can create a custom Connector language and language code support.

However, your company will be sending content to a translation management system (TMS) that does not support your new language code. Therefore, you must contact both Lionbridge Connector Support and the translation provider so that they can map your language codes to those supported by the TMS.

> **Recommendation:** Use standard Connector language codes. For a list and description of Connector language codes, see "Appendix: Language Codes" on page 246.

1. To add a custom language, do one of the following:

   ▦ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ▦ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ▦ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the navigation pane on the left, navigate to `/etc/ctctranslation/ctaddlanguages`.

3. Select the sample language node, and copy and paste it as a new node.
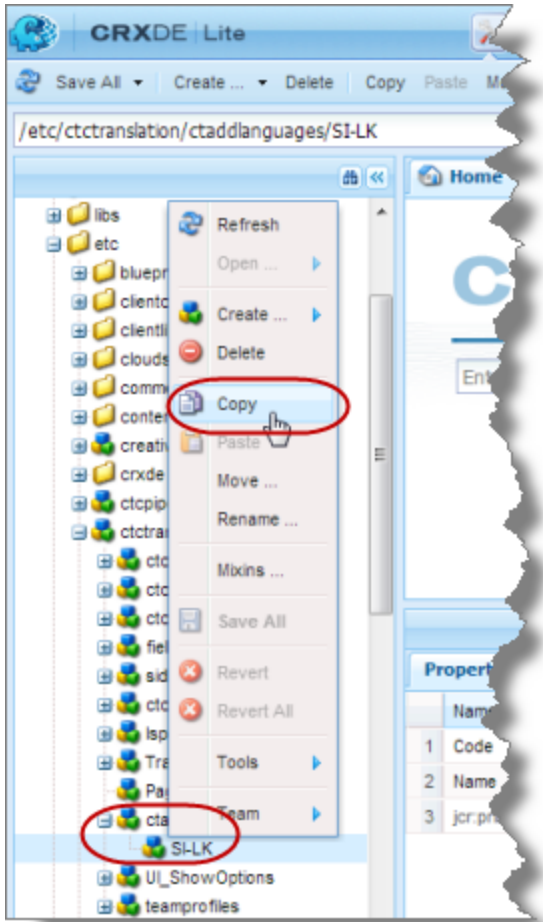
4. Rename the new node, and change the values of the **Code** and **Name** properties.
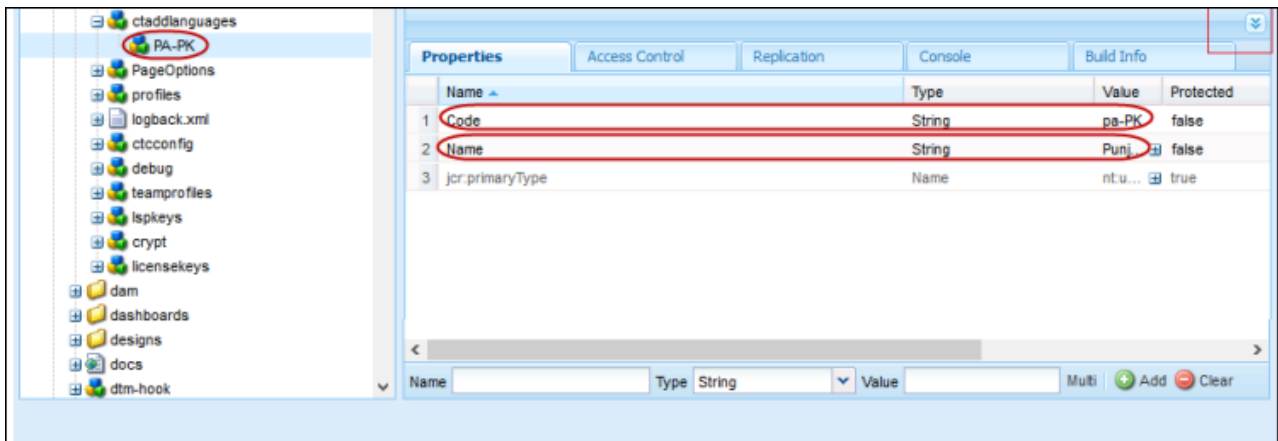
5. In the CRXDE Lite Menu, click **Save All**.

The new language code is now available for selection in the **Language Mapping** page, which is described on "Configuring Connector Languages" on page 83.
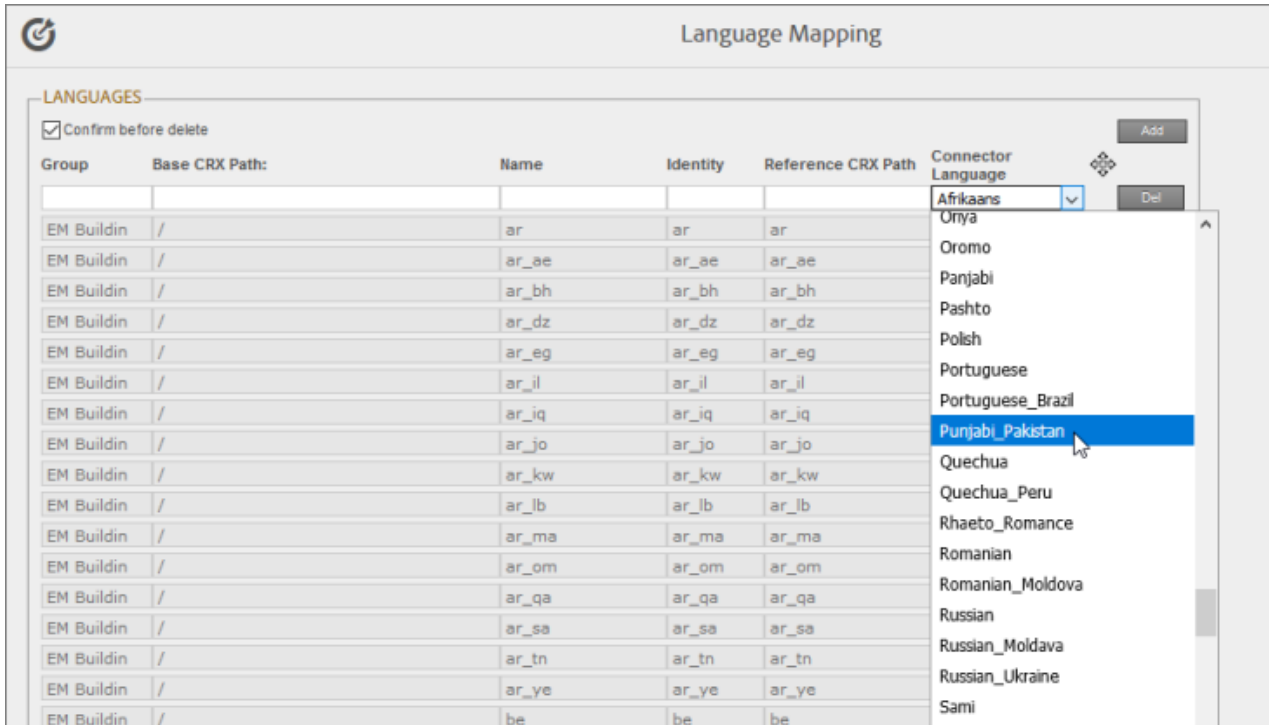
5.3 Configuring which Components and Properties to Send Out for Translation

The content of an Adobe Experience Manager page is created from a collection of page *components*. A component has different *properties*, which are types of fields. You must configure which components and properties the Connector can send out for translation.

Note: This is not required when sending out adaptive forms, Content Fragments, i18n dictionaries, and tags for translation.

To configure which components and properties the Connector sends out for translation:

1. Click **Admin Tools > Component Mapping** in the Lionbridge Connector rail to open the **Component Mapping** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.
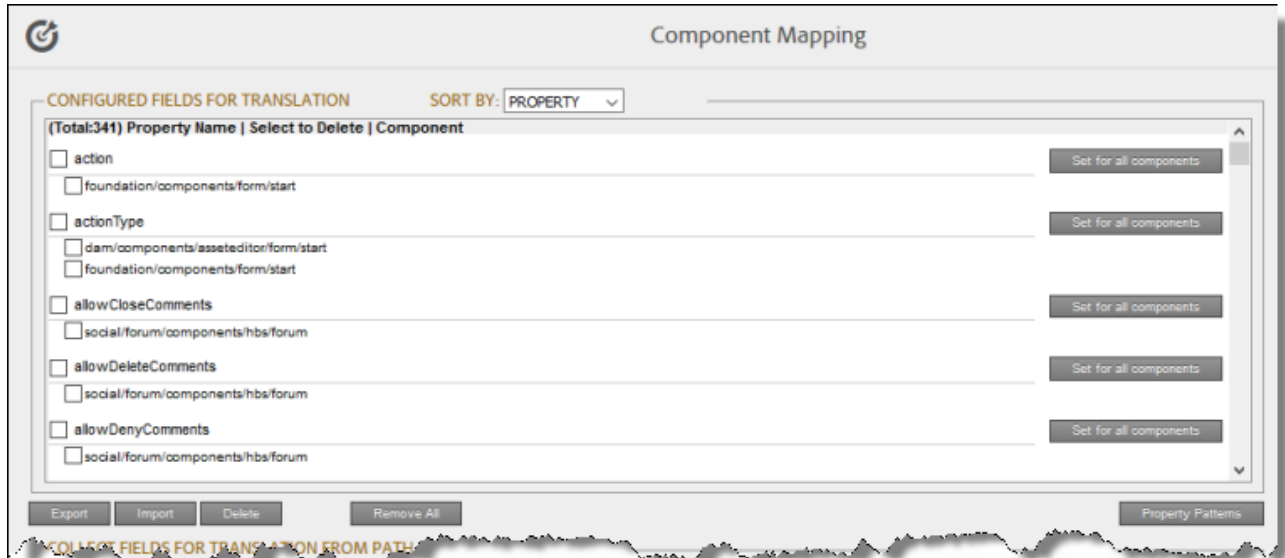
For information on using this page to subscribe to email notifications when new components are added, see "Subscribing to Email Notifications about New Fields and Components" on page 94.

The **Configured Fields for Translation** section at the top of the page displays all the components and properties that are currently configured for the Connector to send out for translation.

2. Optional. You view a list organized either by property, or by the component.

   ▥ To view the list organized by property, in the **Sort By** field, select `Property`. This is the default setting.

   ▥ To view the list organized by component, in the **Sort By** field, select `Component`.

3. Optional. You can instruct the Connector to collect all properties that are in a specific component for translation. Similarly, you can instruct the Connector to collect all components that have a specific property for translation. You can also remove any component or property from the list, so that the Connector does not collect it to send for translation.

   ▥ If you are viewing the list organized by property, then the properties are displayed in alphabetical order. Each component that has this property is displayed underneath it. The components are listed alphabetically by path.

      ▥ To instruct the Connector to send all components with a specific property for translation, click the corresponding **Set for all components** button. The list under the property updates, and the Connector displays [ALL] instead of a list of all components.

> **Note:** When selecting components to instruct the Connector to send digital asset properties for translation, click the corresponding **Set for all components** button, so that the Connector displays [ALL] instead of a list of all components. Additional steps are required to configure translation settings for digital assets. For details, see "Configuring Translation Settings for Digital Assets" on page 127.

      ▥ To remove a component from the list for a property, select the corresponding check box and click **Delete**. This prevents the Connector from sending out for translation this property in this component.

   ▥ If you are viewing the list organized by component, then the components are displayed in alphabetical order. Each property in a component is displayed underneath it. If there are any properties displayed in all components, these are at the top of the list, under [ALL].

      ▥ To remove a component from the list, so that the Connector does not send it out for translation, select the corresponding check box and click **Delete**.

      ▥ To remove a property under a component from the list, so that the Connector does not send out that property for translation when it is in that component, select the corresponding check box and click **Delete**.

4. Optional. To remove the mapping for all configured components, click **Remove All**.

5. Optional. You can export as an XML file the list of fields that the Connector sends out for translation. Click **Export** at the bottom of this section. The Connector downloads the file, fields4trans.xml.

6. Optional. You can import an XML or a CSV file:

   ▥ You can import a previously exported XML file that is in the same format as fields4trans.xml, described above. This is useful for restoring backed-up properties.

   ▥ You can import a CSV file with comma-separated property names. The Connector will add the properties in this file to all components.

> **Note:** The Connector recognizes both ComponentPath and PropertyName as headers and not as actual data.

To import a file:

a. Click **Import** at the bottom of this section.

The **Select a file to upload** dialog box opens.
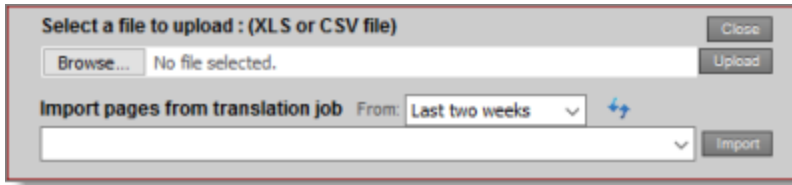
b. Click **Choose File**.

c. In the browser dialog box that opens, navigate to the `XLS` or `CSV` file to import, select it, and click **Open**, or similar, to close the browser dialog box.

The **Select a file to upload** dialog box displays the path of the file you selected.

d. Click **Upload** to upload the file.

The Connector imports the file and updates the configured properties and components.

7. Optional. To add a string to a property name to instruct the Connector either to send that property for translation or to avoid sending that property for translation, click **Property Patterns**.
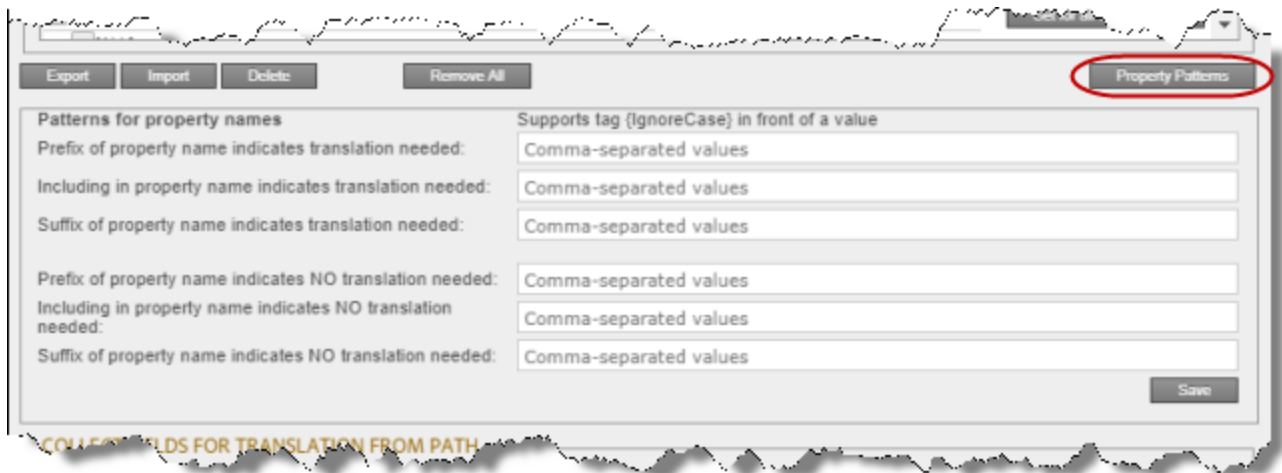
The **Patterns for property names** subsection is displayed. Add tags to configure one or more of the settings below.

Note: The tags are not case sensitive.

Setting	Description
Prefix of property name indicates translation needed	The string at the *beginning* of a property name indicating that translation *is required*.
Including in property name indicates translation needed	The string in the *middle* of a property name indicating that translation *is required*.

Setting	Description
Suffix of property name indicates translation needed	The string at the *end* of a property name indicating that translation *is required*.
Prefix of property name indicates no translation needed	The string at the *beginning* of a property name indicating that translation *is not required*.
Including in property name indicates no translation needed	The string in the *middle* of a property name indicating that translation *is not required*.
Suffix of property name indicates no translation needed	The string at the *end* of a property name indicating that translation *is not required*.

8. Optional. In the **Collect Fields for Translation from Path** section, you can add additional properties to the list that the Connector can send out for translation.

   a. In the **Site path** field, specify the highest-level folder that contains the component with the properties you want to include.

      ▦ Click the arrow at the end of the field ⬇ , browse to the folder, and click **Select**.

      ▦ Enter the CRX path of the folder in the following format: `/content/www/us/en`.

   b. Click **Collect**.

   The Connector searches all components and finds the string-type properties (fields) for all items. When it is done, the Connector displays the lists of properties in the specified folder in the **Collected Possible Property Fields for Translation** list. Under each property, the Connector displays the path of the component where it is located. To the right, the Connector displays the sample value of the string and underneath it, the path of origin of the sample value.
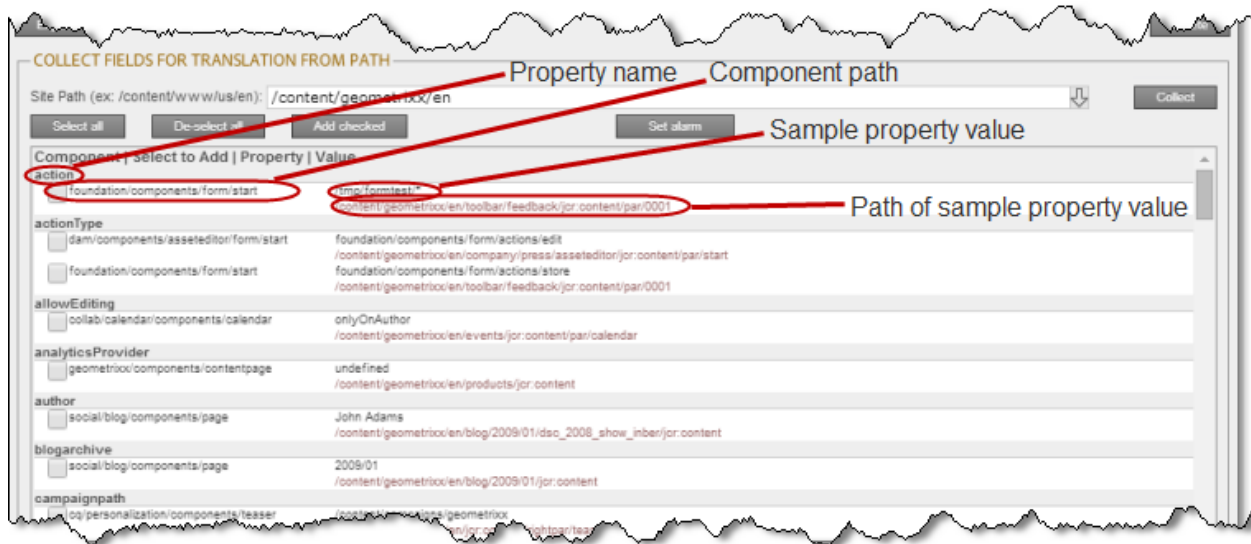
   c. Select the check boxes for all the properties you want the Connector to send out for translation.

   d. Click **Add checked**.

These property fields are now displayed in the **Configured Fields for Translation** section at the top of the page.

In the **Collected Possible Property Fields for Translation** section, you can also perform the following actions:

▸ To clear all selected check boxes, click **De-select all**.

▸ To select all check boxes, click **Select all**.

▸ To subscribe to email notifications when new components are added to your site, click **Set alarm**. For details, see "Subscribing to Email Notifications about New Fields and Components" on page 94.

5.4 Subscribing to Email Notifications about New Fields and Components

If you are planning to add new components in the future, you can subscribe to receive email notifications when new components are added to your site or when previously deleted components are added back. In these scenarios, you receive an email notification listing the new components, and you can then configure the Connector to send out the new properties for translation.

Subscribing to email notifications about new fields and components is recommended in the following scenarios:

■ If you want to collect a lot of content for translation, for example, if you are still building your site.

■ If you are planning to add new components in the future. When new components are added, the specified user receives an email notification listing the new components.

1. Click **Admin Tools > Component Mapping** in the Lionbridge Connector rail to open the Component Mapping page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.
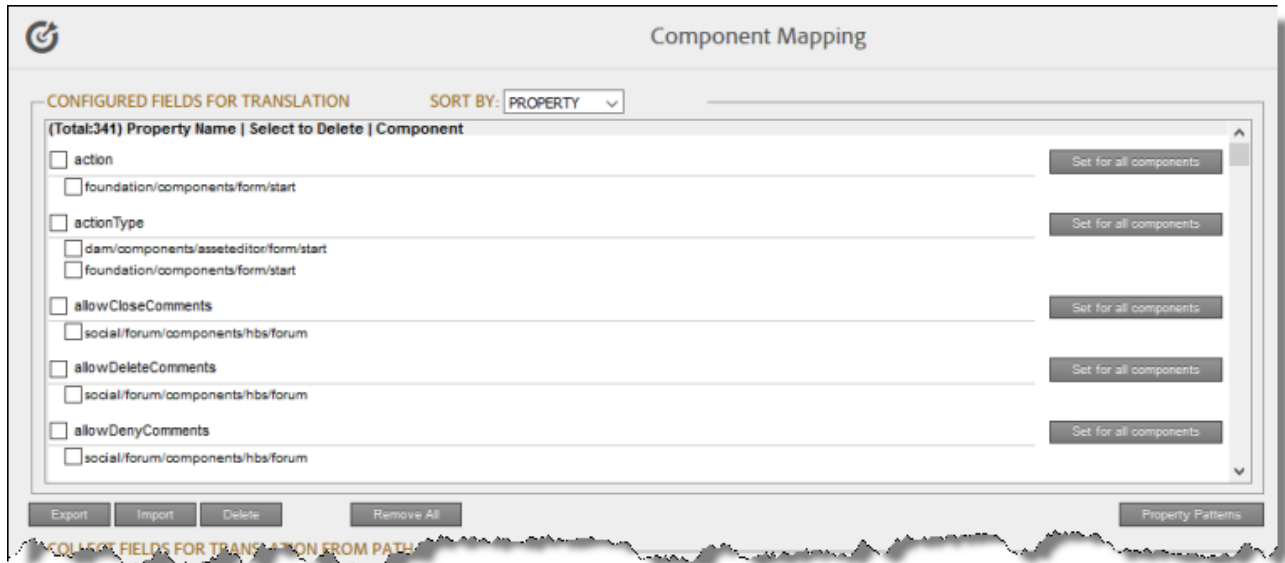
For information on using this page to configure which properties and components to send out for translation, see "Configuring which Components and Properties to Send Out for Translation" on page 89.

2. Click **Set alarm**.

The Setup alarm for new fields dialog box opens.

3. In the **Site path to search** box, type in the path to the content for which to receive email notifications when new components are added.

4. In the **Email address to notify** box, enter the email address that will receive email notifications when new components are added under the specified path.

5. Click **Save**.

Every hour, the Connector searches for and collects new components for translation. Whenever the Connector collects new components, it sends an email notification to the specified email address. The email notification is similar to the following:

```
From: claytabletqa@gmail.com [mailto:claytabletqa@gmail.com]
To: smith@example.com
Subject: Found 2 new Properties


Found 2 new added Properties.
1) Property Name: jcr:description
Value:
Component: foundation/components/form/text
Path:
/content/geometrixx/en/toolbar/feedback/jcr:content/par/0002
2) Property Name: options
Value:
Component: foundation/components/form/dropdown
Path:
/content/geometrixx/en/toolbar/profiles/edit/jcr:content/par/d
ropdown
```

6. After you receive this email notification, return to the **Component Mapping** page, and click **Load alarm fields**.

   The **Collected Possible Property Fields for Translation** list displays the collected properties.
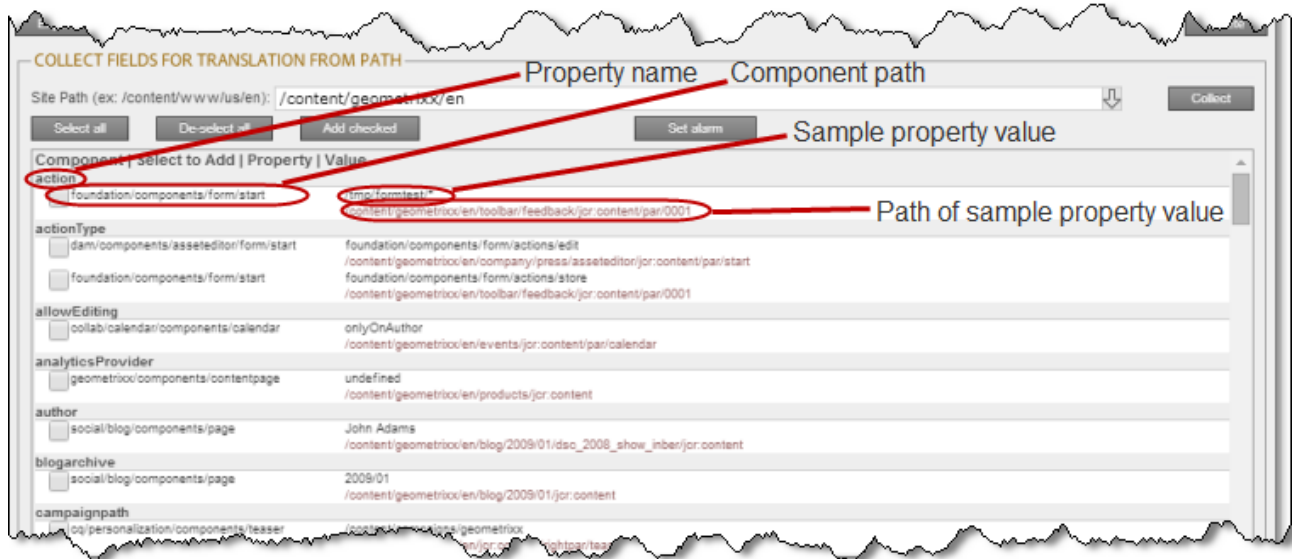
7. Select the check boxes for the properties to add, and click **Add checked**.

This configures the Connector to send out the selected properties for translation.

5.5 Configuring Translation Providers and License Keys

Lionbridge Connector Support generates the license keys for you using the license ID number you entered in the **Translation Platform** section of the **Configuration** page. For details, see "Translation Platform" on page 42. You then configure these license keys in the **LSP & Keys** page.

Important - Keys: The Connector always initiates calls to the Clay Tablet Platform. However, the license keys enable establishing a secure, discrete connection between the Connector instance and the Platform. Do not duplicate these keys or install them on multiple Adobe Experience Manager Author Server instances, because this is a violation of the License Agreement. Using the same keys on multiple Adobe Experience Manager Author Server instances will cause the Connector to behave unexpectedly, which can result in lost translation content, orphaned projects, and inaccurate translation status reports. Lionbridge will support technical issues caused by duplicating or incorrectly installing keys only on a time and materials basis.

In the **LSP & Keys** page:

- If you are upgrading your Connector installation from version 3.x to 4.x, you must migrate the license keys for your current translation providers to the new license server. For detailed instructions, see "Migrating a License Key" on page 97.

- You can add a license key for a new translation provider. For detailed instructions, see "Adding a New License Key" on page 101.

- You can edit a license key for a current translation provider. For detailed instructions, see "Editing a License Key" on page 104.

   Note: You must migrate a license key to the new license server before you can edit it.

Tip: To delete a license key, open it for editing, as described in "Editing a License Key" on page 104, and then click **Delete**.

5.5.1 Migrating a License Key

If you are upgrading your Connector installation from version 3.x to 4.x, you must migrate the license keys for your current translation providers to the new license server. To obtain your new license keys, contact Lionbridge Connector Support. For details, see page 11.

Note: During the upgrade process, after the Connector migrates all your previous license keys, it automatically removes those keys.

To migrate a license key:

1. Click **Admin Tools > LSP and Keys** in the Lionbridge Connector rail to open the **LSP & Keys** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **LSP & Keys** page opens.
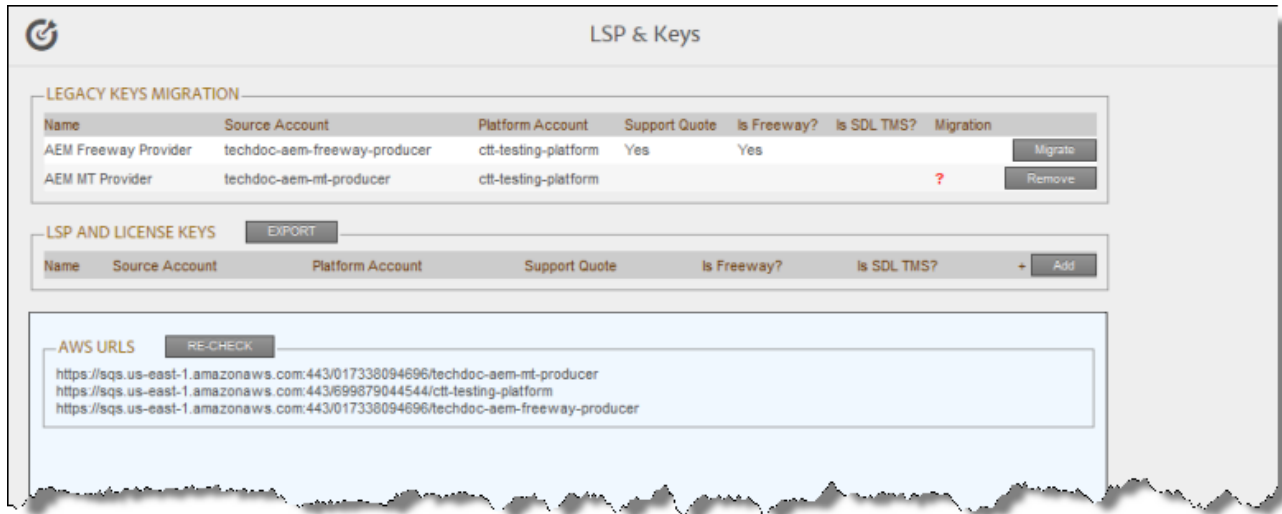
The **Legacy Keys Migration** section at the top of the page displays the following information about the translation providers that were configured in an earlier version of the Connector.

Column	Description
Name	The name of the translation provider as it is displayed when users send content for translation.
Source Account	The legacy license key of the translation provider, which was generated for you by Lionbridge Connector Support.
Platform Account	The key to the Clay Tablet Platform, which was generated for you by Lionbridge Connector Support.
Support Quote	Indicates whether this translation provider supports providing a quote before starting a translation job.
Is Freeway?	Indicates whether this translation provider is Lionbridge Freeway.
Is SDL TMS?	Indicates whether this translation provider is SDL TMS.

Column	Description

Migration	Indicates the migration status of this legacy license key:
	■ If this column is blank, this key is ready for migration, because Lionbridge Connector Support has generated a replacement license key.
	■ If this column displays a red check mark (**?**), this key is *not* ready for migration, because either:
	  ▦ Lionbridge Connector Support has *not* generated a replacement license key.
	  ▦ A replacement key was generated, but it has already been used.
	  Contact Lionbridge Connector Support for assistance. For details, see page 11.
	■ If this column displays Migrated, then this key has already been migrated to the replacement key.

When Lionbridge Connector Support has created new license keys for you, the **Migration** column is blank, and the **Migrate** button is displayed in the row for the translation provider.

Note: If a red question mark is displayed in the **Migration** column, this means that there is no new license key for the corresponding translation provider. Contact Lionbridge Connector Support for assistance. For details, see page 11. If the translation provider is no longer relevant, and you do not want to migrate its license key, you can click the **Remove** button to remove it from the list.

2. In the row of the translation provider to migrate, click **Migrate**.

In the **Legacy Keys Migration** section of the page, `Migrated` is now displayed in the **Migration** column for the migrated translation-provider key. The **LSP and License Keys** section of the page displays the replacement license key.

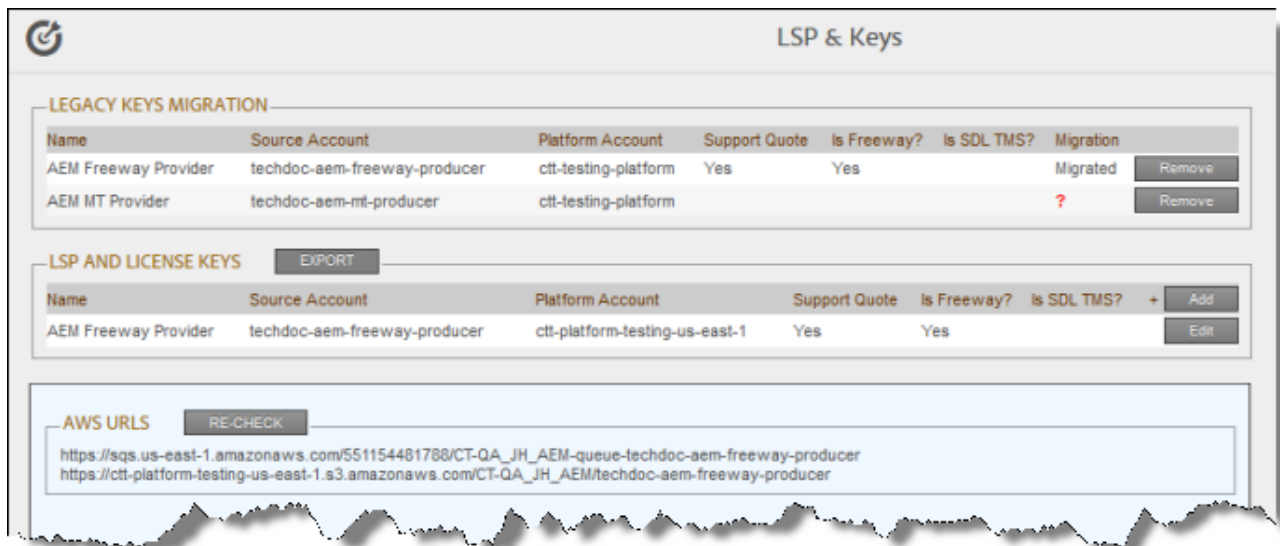| Column	Description
Name	The name of the translation provider as it is displayed when users send content for translation.
Source Account	The new license key of the translation provider, which was generated for you by Lionbridge Connector Support.
Platform Account	The key to the Clay Tablet Platform, which was generated for you by Lionbridge Connector Support.
Support Quote	Indicates whether this translation provider supports providing a quote before starting a translation job.
Is Freeway?	Indicates whether this translation provider is Lionbridge Freeway.
Is SDL TMS?	Indicates whether this translation provider is SDL TMS.

▪ For information on adding a new license key, see "Adding a New License Key" on page 101.

▪ For information on editing information about a license key displayed in this section, see "Editing a License Key" on page 104.

3. Repeat step 2 for each translation provider to migrate. Click **Remove** to remove the license key for any obsolete translation providers that you do not want to migrate.

   When you are done, the **Legacy Keys Migration** section is no longer displayed. All current license keys are displayed in the **LSP and License Keys** section of the page.

   After you migrate multiple translation providers, the **Default LSP** dropdown list is displayed at the top of the **LSP and License Keys** section of the page.

4. Optional. Select your default translation provider and click **Save**.

5. Optional. To export and download the information in the **LSP and License Keys** section as an XML file, click **Export**.

6. Optional. The **AWS URLs** section displays a list of URLs used by the Clay Tablet Platform, which is hosted on AWS (Amazon Web Services). This is useful if you are using a proxy server to control the network traffic, so that you can whitelist these URLs. Click **Re-Check** to update this list.

Note: If the Connector displays errors about checking LSP keys when sending out content for translation, then instead of whitelisting the entire address, exclude the key names from the URL. For example, enter `ctt-platform-prod-us-east-1/*`.

5.5.2 Adding a New License Key

You can add a new license key, for example, if you add a new translation provider.

To add a new license key:

1. Click **Admin Tools > LSP and Keys** in the Lionbridge Connector rail to open the **LSP & Keys** page. For information on opening the Lionbridge Connector rail, see .

    The **LSP & Keys** page opens.

Note: If the **Legacy Keys Migration** section is displayed at the top of the page, you must migrate the license keys for translation providers that were created in an earlier version of the Connector. For detailed instructions, see .

2. In the **LSP and License Keys** section, click the **Add** button in the top-right corner.

The New Provider dialog box opens.

3. Specify the following licensing information:

Field	Description
LSP Name	The name of the translation provider that will be displayed when users send content for translation.
LSP Type	Your translation provider, if displayed. If your translation provider is not displayed, then select `Generic`. The type of translation provider determines whether additional configuration is required.
Support Quote	This check box indicates whether this translation provider supports providing a quote before starting a translation job.
License Key	The license key of the translation provider, which was generated for you by Lionbridge Connector Support. To populate the list of available license keys, click **Retrieve** and select the license key for the translation provider. **Note:** After a key has been configured, you cannot select it again for use. It is displayed in the drop down list as unavailable, in gray. **Troubleshooting:** ■ If keys are not displayed in the dropdown list, verify that you entered the license ID in the **Translation Platform** section of the **Configuration** page, as described in "Freeway Config" on page 44. ■ If keys are still not displayed, you may need to configure a proxy server, as described in "Network Configuration" on page 41.

Field	Description
Translation Status	Optional. A custom translation-status value that will be displayed in the page list of the Globalization Tool for all pages translated by this provider. ■ A single value, such as `MT` (for machine translation) or `HT` (for human translation). ■ A paired value, which is a value-title pair, with the `-│-` separator, for example `1-│-HT`, where `1` is the value stored in a custom page property, while `HT` is the value displayed in the Globalization Tool. This value will be stored in a custom page property that you create. For instructions, see "Creating a Page Property to Store Custom Translation-Status Values" on page 155.
Key Alias Key Password Use blank	These fields, check box, and corresponding **Test** button are required only with the optional content encryption and decryption feature, which is available only when using the Clay Tablet Translation Connector for SDL TMS or the Clay Tablet Translation Connector for Lionbridge Freeway. For detailed instructions, see page 108.

4. When you are done, click **Add**.

   If there are multiple translation providers, the **Default LSP** dropdown list is displayed at the top of the **LSP and License Keys** section of the page.

5. Optional. Select your default translation provider and click **Save**.

6. Optional. To export and download the information in the **LSP and License Keys** section as an XML file, click **Export**.

7. Optional. The **AWS URLs** section displays a list of URLs used by the Clay Tablet Platform, which is hosted on AWS (Amazon Web Services). This is useful if you are using a proxy server to control the network traffic, so that you can whitelist these URLs. Click **Re-Check** to update this list.

   Note: If the Connector displays errors about checking LSP keys when sending out content for translation, then instead of whitelisting the entire address, exclude the key names from the URL. For example, enter `ctt-platform-prod-us-east-1/*`.
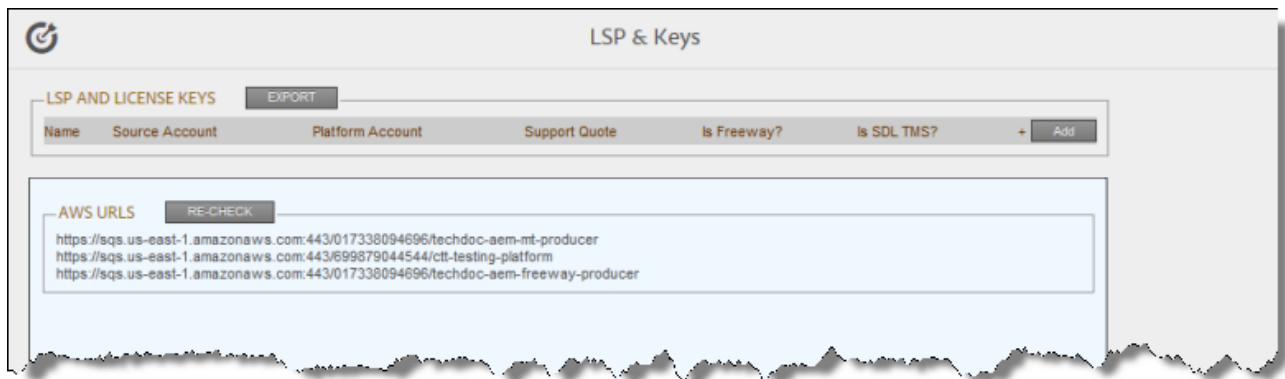
5.5.3 Editing a License Key

You can edit information for an active license key, for example, if you want to change the name of the associated translation provider as it is displayed to users when sending out content for translation or when viewing the status of a translation job.

To edit license key information:

1. Click **Admin Tools > LSP and Keys** in the Lionbridge Connector rail to open the **LSP & Keys** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

    The **LSP & Keys** page opens.
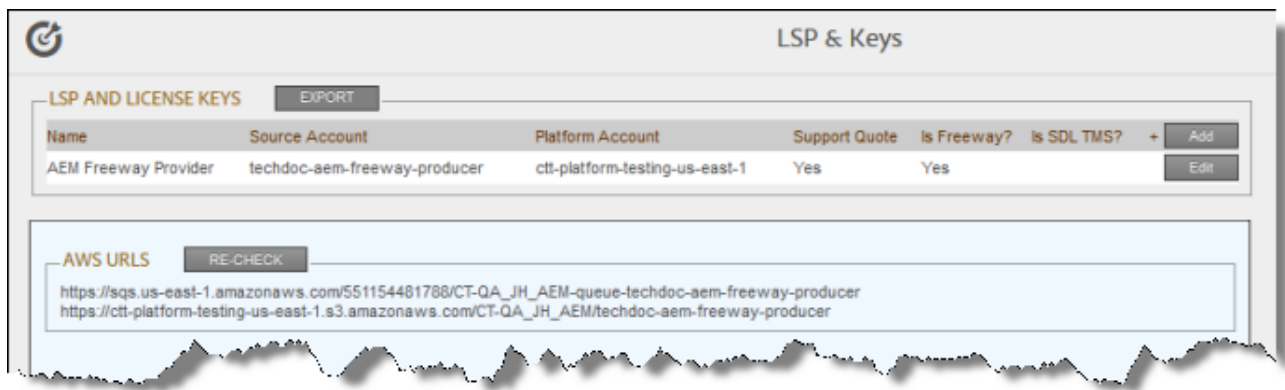
> **Note:** If the **Legacy Keys Migration** section is displayed at the top of the page, you must migrate the license keys for translation providers that were created in an earlier version of the Connector. For detailed instructions, see "Migrating a License Key" on page 97.

    The **LSP and License Keys** section displays all license keys that are available for editing.

2. To edit a license key in this section, click the corresponding **Edit** button.

The **Edit Provider** dialog box opens.
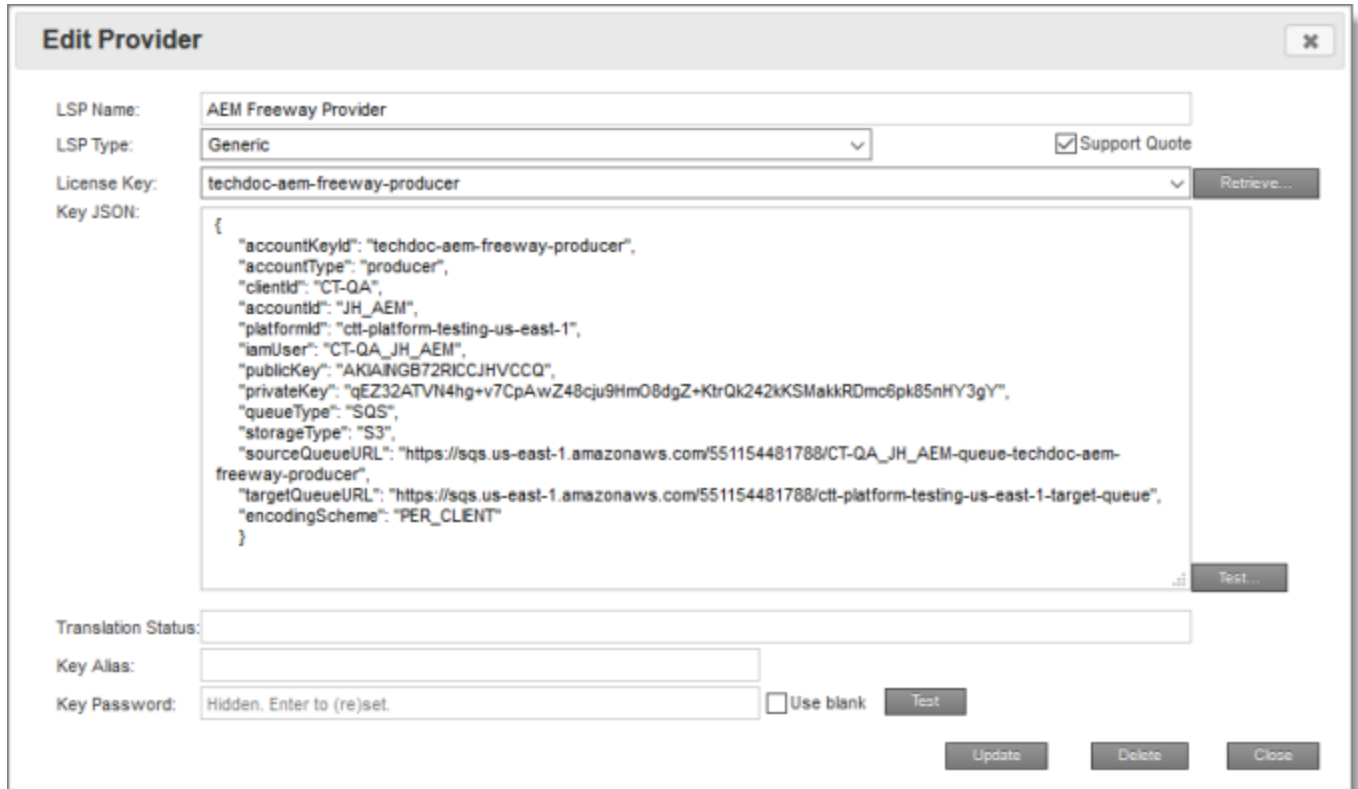
3. Edit any of the following licensing information:

Field	Description
LSP Name	The name of the translation provider that is displayed when users send content for translation.
LSP Type	Your translation provider, if displayed. If your translation provider is not displayed, then select `Generic`. The type of translation provider determines whether additional configuration is required.
Support Quote	This check box indicates whether this translation provider supports providing a quote before starting a translation job.

Field	Description
License Key	The license key of the translation provider, which was generated for you by Lionbridge Connector Support. To select a different license key, click **Retrieve** and select the license key for the translation provider. **Note:** After a key has been configured, you cannot select it again for use. It is displayed in the drop down list as unavailable, in gray. **Troubleshooting:** ■ If keys are not displayed in the dropdown list, verify that you entered the license ID in the **Translation Platform** section of the **Configuration** page, as described in "Freeway Config" on page 44. ■ If keys are still not displayed, you may need to configure a proxy server, as described in "Network Configuration" on page 41.
Key JSON	The license key information in JSON format. In general, you should not modify this text, which should be retrieved automatically from the license server. However, if your firewall setting blocks access to the license server, you may need to input it manually. For assistance, please contact Lionbridge Connector Support, as described in "How to Contact Lionbridge Connector Support" on page 11. If you modify this text, click **Test** beside the **Key JSON** box. A message box indicates whether this key passed the test.
Translation Status	Optional. A custom translation-status value that will be displayed in the page list of the Globalization Tool for all pages translated by this provider. ■ A single value, such as MT (for machine translation) or HT (for human translation). ■ A paired value, which is a value-title pair, with the -|- separator, for example 1-|-HT, where 1 is the value stored in a custom page property, while HT is the value displayed in the Globalization Tool. This value will be stored in a custom page property that you create. For instructions, see "Creating a Page Property to Store Custom Translation-Status Values" on page 155.
Key Alias Key Password Use blank	These fields, check box, and corresponding **Test** button are required only with the optional content encryption and decryption feature, which is available only when using the Clay Tablet Translation Connector for SDL TMS or the Clay Tablet Translation Connector for Lionbridge Freeway. For detailed instructions, see page 108.

4. When you are done, click **Update**.

If there are multiple translation providers, the **Default LSP** dropdown list is displayed at the top of the **LSP and License Keys** section of the page.

5. Optional. Select your default translation provider and click **Save**.

6. Optional. To export and download the information in the **LSP and License Keys** section as an XML file, click **Export**.

7. Optional. The **AWS URLs** section displays a list of URLs used by the Clay Tablet Platform, which is hosted on AWS (Amazon Web Services). This is useful if you are using a proxy server to control the network traffic, so that you can whitelist these URLs. Click **Re-Check** to update this list.

    Note: If the Connector displays errors about checking LSP keys when sending out content for translation, then instead of whitelisting the entire address, exclude the key names from the URL. For example, enter `ctt-platform-prod-us-east-1/*`.

5.5.4 Configuring Translation Providers and License Keys when Installing a New or Updated Connector

When you install a new or updated Connector package, you must reconfigure your translation providers and keys. If your keys are displayed in gray and you cannot select them when you attempt to retrieve them, please contact Lionbridge Connector Support to request releasing your license keys. For details, see "How to Contact Lionbridge Connector Support" on page 11.

5.6 Configuring Content Encryption and Decryption (Lionbridge Freeway and SDL TMS only)

Note: This feature is available only when using the Clay Tablet Translation Connector for SDL TMS or the Clay Tablet Translation Connector for Lionbridge Freeway.

You can generate your own keys to encrypt and decrypt content you send for translation from the Lionbridge Connector for Adobe Experience Manager ("Connector for Adobe Experience Manager") to either:

- the Clay Tablet Translation Connector for SDL TMS ("Connector for SDL TMS")
- the Clay Tablet Translation Connector for Lionbridge Freeway ("Connector for Freeway")

Before translation:

1. The Connector for Adobe Experience Manager uses the generated keys to encrypt the content once it is ready for translation.

2. The Connector for Adobe Experience Manager sends the encrypted content via the Clay Tablet Platform to the Connector for SDL TMS or to the Connector for Freeway.

3. Either:

   ▦ The Connector for SDL TMS uses the generated keys to decrypt the content before sending it to SDL TMS.

   ▦ The Connector for Freeway delivers encrypted content to Freeway.

After translation:

1. Relevant to SDL TMS only. The Connector for SDL TMS uses the generated keys to encrypt the translated content once it is ready to send back to Adobe Experience Manager.

2. The Connector for SDL TMS or the Connector for Freeway sends the encrypted content via the Clay Tablet Platform to the Connector for Adobe Experience Manager.

3. The Connector for Adobe Experience Manager uses the generated keys to decrypt the content before sending it to Adobe Experience Manager.
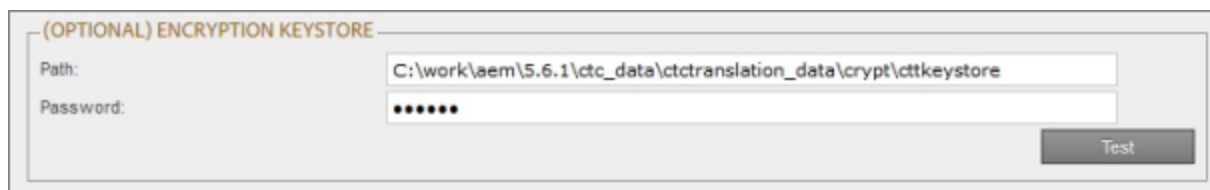
This feature is currently supported only if either:

- The translation connector is the Connector for Freeway and the Add-On for Lionbridge Freeway is installed.

- The translation connector is the Connector for SDL TMS and the Add-On for SDL TMS is installed.

Note about Lionbridge Freeway: Contact your Lionbridge Freeway account manager to arrange sending your keystore to the Connector for Freeway. This enables Lionbridge to decrypt content after delivery to Freeway and encrypt content before delivering translated content.

To configure this option:

1. Click **Admin Tools > Configuration** in the Lionbridge Connector rail to open the **Configuration** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

2. Scroll down to the **Encryption Keystore** section.

(OPTIONAL) ENCRYPTION KEYSTORE	
Path:	C:\work\aem\5.6.1\ctc_data\ctctranslation_data\crypt\cttkeystore
Password:	••••••
	Test

a. In the **Path** field, enter the file path of the encryption keystore.

b. In the **Password** field, enter the keystore password.

c. Click **Test** to test the password.

   A message box indicates whether the password passed the test.

3. Click **Admin Tools > LSP and Keys** in the Lionbridge Connector rail to open the **LSP & Keys** page.

4. In the **LSP and License Keys** section, click **Edit** next to the translation provider.

   a. Do one of the following:

   ▪ If your translation provider is Lionbridge Freeway and the corresponding add-on is installed, then in the **LSP Type** dropdown list, select `Lionbridge Freeway`. This indicates that your translation connector is the Connector for Lionbridge Freeway.
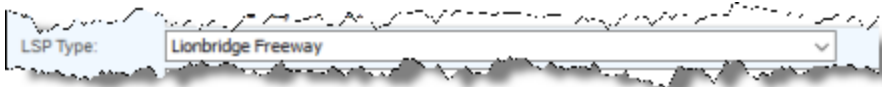
   ▪ If your translation provider is SDL TMS and the corresponding add-on is installed, then in the **LSP Type** dropdown list, select `Yes`. This indicates that your translation connector is the Connector for SDL TMS.

   b. In the **Key Alias** field, enter the name for identifying a key within the keystore.

   c. In the **Key Password** field, enter the password for securing the key. This ensures that even someone who can authenticate against the keystore cannot read an individual protected key entry.

   d. To use a blank password, select the **Use blank** check box.

   Note: Select this check box if there is no password for the key. The Java keytool utility, which you use to generate the encryption key, supports blank passwords. In this case, the keystore password unlocks the key.

   For more information about the **LSP & Keys** page, see "Editing a License Key" on page 104.

5. Click **Update** to save your changes.

5.7 Configuring Team Profiles

A team profile defines a set of Connector users who are allowed to send content out for translation from the specified source languages, to the specified target languages, using the specified translation providers.

To create a team profile:

1. Click **Admin Tools > Team Profiles** in the Lionbridge Connector rail to open the **Team Profiles** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **Team Profiles** page opens, displaying any team profiles that have already been created.

2. In the top-right corner of the page, click **Add**.

   The page expands, displaying the **Profiles** section.
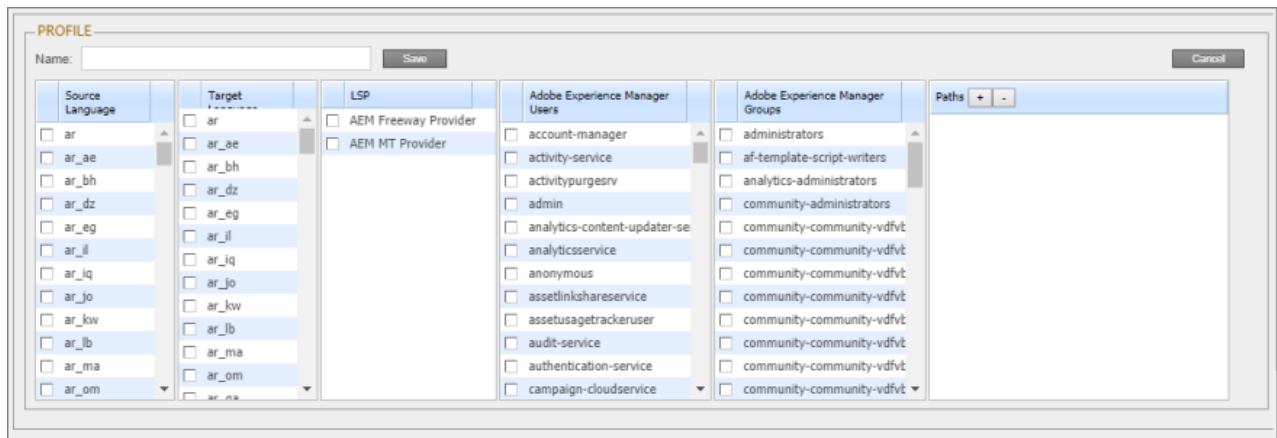
3. Specify the following information about the team profile:

Field/Column	Description
Name	The name of the team profile.
Source Language	Select the check boxes of the source languages in which team members can send out content for translation. The list of available languages is based on the configured languages. For details, see "Configuring Connector Languages" on page 83. **Warning:** Do not include languages from different groups in a single team profile, because submitted jobs will fail. For example, if you use the rollout feature to submit jobs, then the Connector removes items from the job and it stops, with an error message that the source asset is not found.

Field/Column	Description
Target Language	Select the check boxes of the target languages for which team members can send out content for translation. The list of available languages is based on the configured languages. For details, see "Configuring Connector Languages" on page 83. **Warning:** Do not include languages from different groups in a single team profile, because submitted jobs will fail. For example, if you use the rollout feature to submit jobs, then the Connector removes items from the job and it stops, with an error message that the source asset is not found.
LSP	Select the check boxes of the translation providers to which team members can send out content for translation. The list of available translation providers is based on the configured translation providers. For details, see "Configuring Translation Providers and License Keys" on page 97.
Adobe Experience Manager Users	Select the check boxes of the Adobe Experience Manager users to include in the team profile. Adobe Experience Manager users are identified by their display names. If a display name is not configured for an Adobe Experience Manager user, the email address is displayed instead.
Adobe Experience Manager Groups	Select the check boxes of the Adobe Experience Manager groups to include in the team profile.
Paths	If one or more paths are specified, then team members can send pages for translation only if the content is in these paths. ■ To add a path, click the plus icon ⊞ and navigate to the path, and then click **Select**. ■ To remove a path, select it and then click the minus icon ⊟. **Note:** This feature is supported only for pages. It is not supported for digital assets, tags, and dictionaries (i18n items).

4. Click **Save**.

5. You can also perform the following optional actions on this page:

   ▦ To export the team profiles and settings as an XML file, click **Export** in the top-left corner of this page. The Connector downloads the file, `teamprofiles.xml`.

   ▦ To update the list of team profiles, click **Refresh** in the top-left corner of this page.

▦ To edit an existing team profile, select the team profile in the list, and in the top-right corner of the page, click **Edit**. Then follow the instructions in steps 3 and 4 above.

▦ To delete a existing team profile, select the team profile in the list, and in the top-right corner of the page, click **Delete**. A message box confirms that you want to delete the team profile. Click **OK** to continue.

5.8 Configuring Adobe Experience Manager User Permissions for Translation Users

You configure user permissions in the **Permissions** tab of the **User Admin** page on your Adobe Experience Manager instance. In your browser, navigate to `/useradmin` on your Adobe Experience Manager instance to open this page.

Suppose that your Adobe Experience Manager instance has the following user groups:

■ Translation Submission

■ Translation User

■ Translation Admin

Users assigned to these groups can send content for translation as follows:

User Group	Bulk Translation	Blueprint Rollout	Sidekick
Translation User	Users can send content only to the Translation Queue. The required user permissions are `Read`, `Modify`, `Create`, and `Delete`.	Users can send content only to the Translation Queue. The required user permissions are: `Read`, `Modify`, `Create`, and `Delete`.	Users can send content only to the Translation Queue. The required user permissions are: `Read`, `Modify`, `Create`, and `Delete`.
Translation Submitter	Users can send content either to the Translation Queue or directly out for translation. The required user permission is `Read`.		
Translation Admin			Users can send content either to the Translation Queue or directly out for translation. The required user permissions are: `Read`, `Modify`, `Create`, and `Delete`.

> **Tip:** Ensure that you set up the correct permissions for this group in the **Folder and Permissions** section of the **Configuration** page. For detailed instructions, see "Folder and Permissions" on page 47.

5.9 Configuring Connector Search Agents

The Connector can use a search agent to collect pages for translation in the Bulk Translation wizard. The Connector installs the following pre-configured agents:

- Page agents:
  - ▦ `Get current page`
  - ▦ `Get all children pages`
  - ▦ `Get current page and all children pages`
- Tag agent: `Get current and child tags`
- i18n-dictionary agent: `Get i18n`

You can create additional custom search agents to find any kind of content in your site for translation.

To make a custom search agent available to the Bulk Translation wizard:

1. Write a search agent as a Java class and upload it.

   This Java class should implement the `PageSearchProcess` interface. It should use the following method: `public List<CollectedPage> collectPages4Translation(String searchRootPath, Session session, PageManager pageManager)`.

   This requires the Connector for Adobe Experience Manager API, which includes sample code. To request this API, contact Lionbridge Connector Support, as described on page 11.

2. Upload the search agent you just created. You can do this either by including this in the Connector for Adobe Experience Manager package you install, or you can install it separately using the Apache Felix Web Console, which you access at `/system/console/components` on your Adobe Experience Manager instance.

3. Click **Admin Tools > Search Agents** in the Lionbridge Connector rail to open the Search Agents page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The Search Agents page opens, displaying the pre-configured agents.

4. Click **Add** in the top-right corner of the page.

The page expands to display the **Add a New Page Search Agent** section.
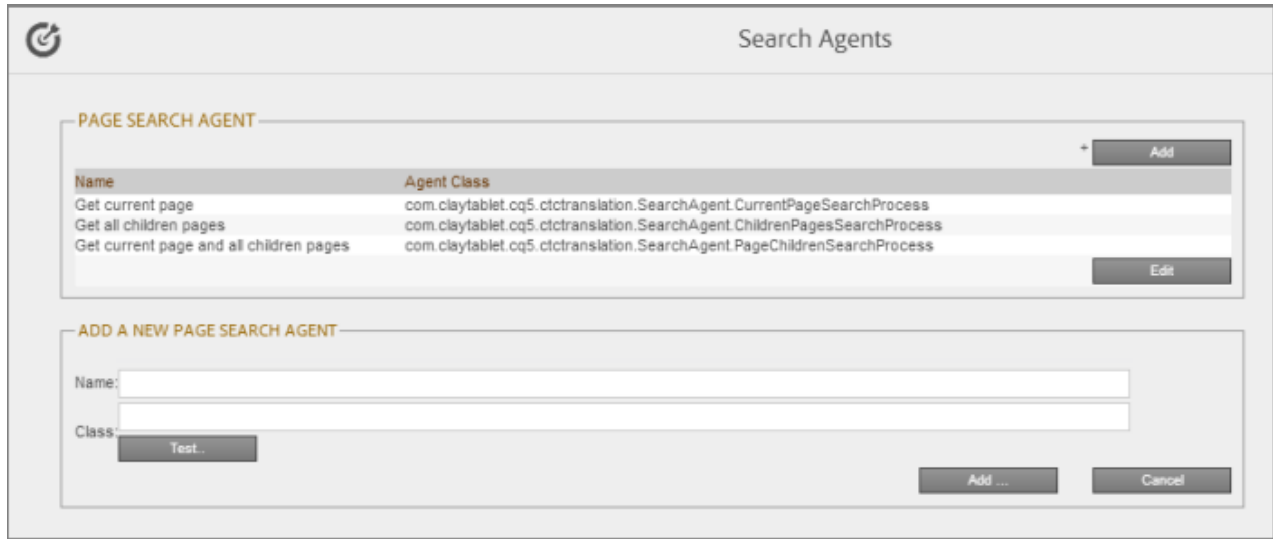
5. In the **Add a New Page Search Agent section**, add the following information:

   ▥ **Name:** The name that will be displayed for the custom agent in the **Search using agent** dropdown
       list in the Bulk Translation wizard.

   ▥ **Class:** The Java class for the custom agent.

6. Click **Test**.

    A window opens where you enter an Adobe Experience Manager folder path. The Connector then calls
    the new agent class to search the path you entered. This tests whether the Connector can call the new
    agent and search successfully for pages.

7. If the test is successful, click **Add** at the bottom-right corner of the page to add the custom agent to the
     user interface of the Bulk Translation wizard.

5.10 Scheduling Translation Jobs to Send Out Content from the Translation Queue

You can create a schedule that sends out translation jobs from the Translation Queue. The schedule
defines the parameters for these jobs, including source and target languages, which content items to
include, and when to send out the jobs. You can create multiple schedules, each with a different set of
parameters for the translation jobs it creates.

To create a schedule that sends out translation jobs from the Translation Queue:

1. Click **Admin Tools > Queue Scheduler** in the Lionbridge Connector rail to open the **Queue Scheduler** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.
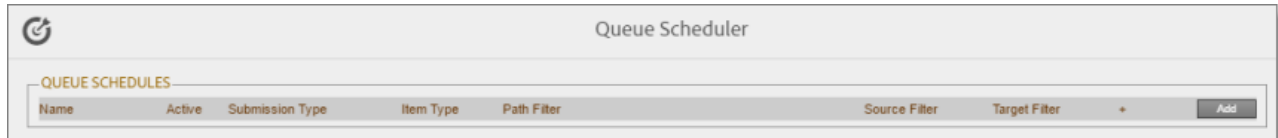
2. Click **Add**.

The page expands to display the **Queue Schedule** box, where you can create a schedule for translation jobs.
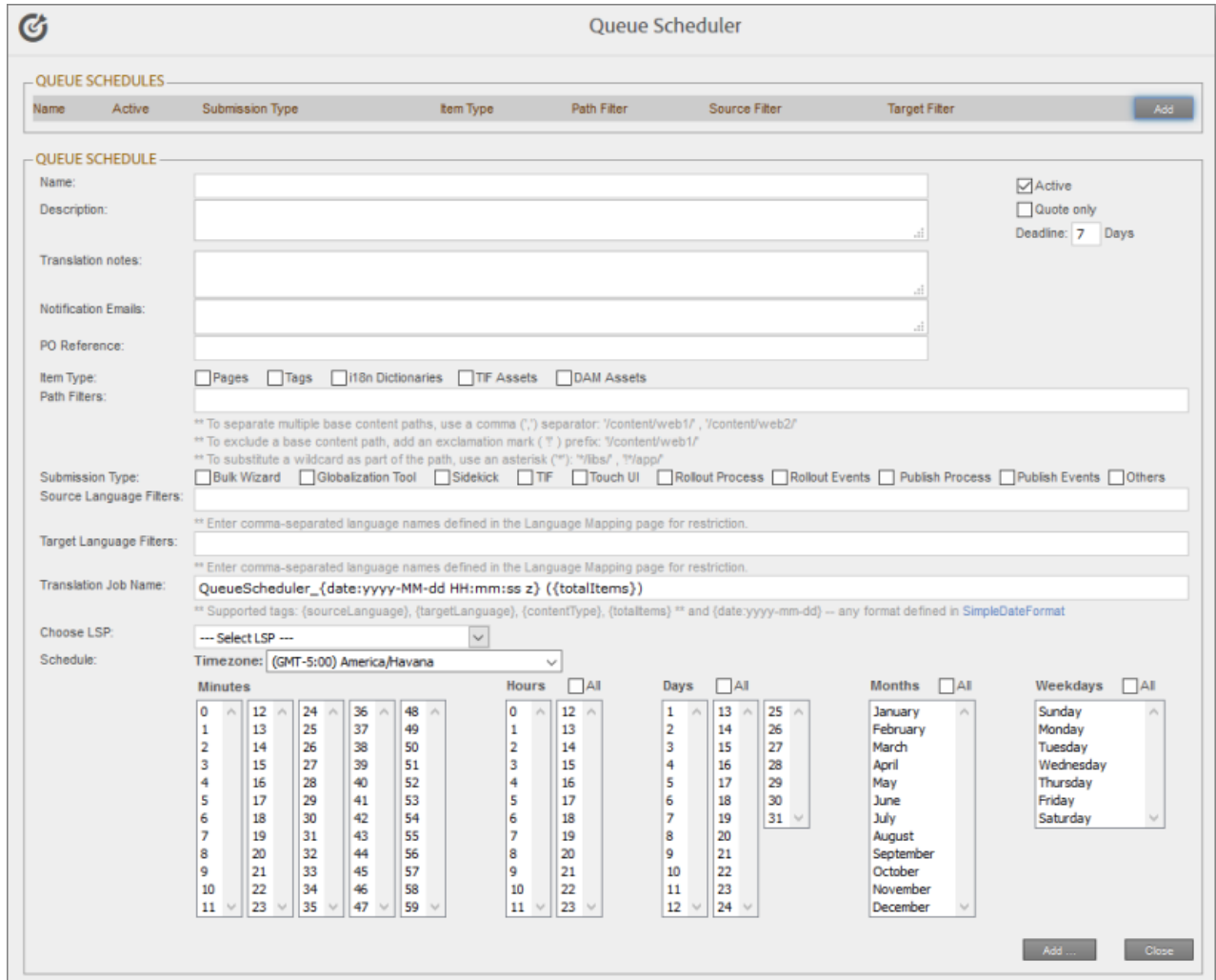
3. Enter the following information and settings for the translation jobs that this schedule sends:

Setting	Description
Name	Your name for this schedule, which sends out translation jobs from the Translation Queue.
Active	Select this check box if the schedule is active, which means that it creates translation jobs based on the parameters and schedule you define below.

Setting	Description
Description	Additional information about the translation jobs created by this schedule. This is stored in the `CQJobDescription` attribute in the XML that the Connector sends to the translation provider.
Quote only	Select this check box to inform the translation provider that you want to receive a quote before the translation process starts. **Note:** This check box is displayed only if the selected translation provider is configured to support providing a quote before the translation process starts.
Deadline / Days	The number of days requested for receiving the translated item back from the translation provider.
Translation notes	Enter any additional information about translation jobs created by this schedule. This information is sent to the translation provider as a comment in the metadata of the translation package.
Notification Emails	Enter one or more email addresses that will receive notification when the content leaves Adobe Experience Manager and when it returns to Adobe Experience Manager. Use a comma to separate multiple email addresses.
PO Reference	The purchase order reference number for this translation job.

Setting	Description
Item Type	Select one or more of the following check boxes to specify the types of content items to include in translation jobs created by this schedule: ■ **Pages**: Web pages. ■ **Tags**: Metadata assigned to a content item within Adobe Experience Manager (usually a page), which act as keywords or labels attached to that content item. ■ **i18n Dictionaries**: Texts and their translations in a CQ5 Translator dictionary. ■ **TIF Assets**: Translation files packaged and sent to the Translation Queue by Adobe's Translation Integration Framework (TIF). These files are packaged in Adobe Experience Manager TIF's own format. ■ **DAM Assets**: Digital assets.

Setting	Description
Path Filters	Optional. Enter the base path of content items to include in translation jobs created by this schedule: ■ To separate multiple base content paths, use a comma (`,`) separator, for example: `'/content/web1/'` , `'/content/web2/'` ■ To exclude a base content path, add an exclamation mark (`!`) prefix, for example: `'!/content/web1/'` ■ To substitute a wildcard as part of the path, use an asterisk (`*`), for example: `'*/libs/'` , `'!*/app/'`

Setting	Description
Submission Type	Select one or more of the following check boxes to specify how the items to include in translation jobs created by this schedule are submitted to the Translation Queue: ■ **Bulk Wizard**: The items (including pages, i18n dictionaries, and tags) were submitted to the queue from the Bulk Translation wizard. ■ **Globalization Tool**: The pages were submitted to the queue from the **Translation** tab of the Globalization Tool. ■ **Sidekick**: The pages were submitted to the queue from the Sidekick. ■ **TIF**: The pages were submitted to the queue from Adobe's Translation Integration Framework (TIF). ■ **Touch UI**: The pages were submitted to the queue from the **Translate Content** page in Adobe Experience Manager's Touch-Optimized UI. Relevant only for Adobe Experience Manager versions 6.3 and higher. ■ **Rollout Process**: The pages were submitted to the queue by the `CTCRolloutTranslation` workflow, which is part of your company's rollout configuration. ■ **Rollout Events**: The pages were submitted to the queue from a rollout event, based on your company's rollout configuration. ■ **Publish Process**: The pages were submitted to the queue by the `Add`

Setting	Description
	`Published Page to Translation Queue` step in your workflow, based on your company's Connector configuration. ■ **Publish Events**: The pages were submitted to the queue from a publish event, based on your company's Connector configuration. ■ **Others**: The pages were submitted to the queue in another submission manner, such as a custom pipeline.
Source Language Filters	Optional. By default, the schedule sends content items out for translation in all available source languages. However, you can use this field to restrict the source language(s) of the content items in the translation job. Enter comma-separated language names, as they are defined in the **Language Mapping** page, described in "Configuring Connector Languages" on page 83.
Target Language Filters	Optional. By default, the schedule sends content items out for translation into all available target languages. However, you can use this field to restrict the target languages of the content items in the translation job. Enter comma-separated language names, as they are defined in the **Language Mapping** page, described in "Configuring Connector Languages" on page 83.

Setting	Description
Translation Job Name	By default, the names of the translation jobs created by this schedule have the following format: `QueueScheduler_ {date:yyyy-MM-dd HH:mm:ss z} ({totalItems})`. However, you can use any of the following tags to change the format: ■ `{sourceLanguage}`: The language name, as it is defined in the **Language Mapping** page. ■ `{targetLanguage}`: The language name, as it is defined in the **Language Mapping** page. ■ `{contentType}`: The type of content items, which is one of the values listed in **Content Type**, described above. ■ `{totalItems}`: The total number of content items in the translation job. ■ `{date:yyyy-MM-dd}`: Any format defined in Java's `SimpleDateFormat` class. For details, see : https://docs.oracle.com/javase/7/api/java/text/SimpleDateFormat.html .
Choose LSP	If multiple translation providers are defined for your company, select the translation provider to whom you want to send this translation job.

Setting	Description
Schedule	Specify the days and times to send out a translation job from the Translation Queue.

- **Minutes**: Highlight the *minute* components of the times to send out a translation job. For example, to send translation jobs every 15 minutes, you can highlight `00`, `15`, `30`, and `45`. To highlight multiple values, press and hold the `Ctrl` button.

- **Hours**: Highlight the *hour* components of the times to send out a translation job. The hour components are based on a 24-hour clock. For example, to send translation jobs at 9 a.m. and 9 p.m., you highlight `9` and `21`. To highlight multiple values, press and hold the `Ctrl` button. To highlight all hour components, select the corresponding **All** check box.

- **Days**: Highlight the *day* components of the dates to send out a translation job. For example, to send translation jobs on the 1st and 15th days of the month, you highlight `1` and `15`. To highlight multiple values, press and hold the `Ctrl` button. To highlight all day components, select the corresponding **All** check box.

- **Months**: Highlight the *month* components of the dates to send out a translation job. For example, to send translation jobs in January and July, you highlight those months. To highlight multiple values, press and hold the `Ctrl` button. To highlight all

Setting	Description
	month components, select the corresponding **All** check box. ■ **Weekdays**: Highlight the weekdays to send out a translation job. For example, to send translation jobs on Mondays and Thursdays, you highlight those weekdays. To highlight multiple values, press and hold the `Ctrl` button. To highlight all weekdays, select the corresponding **All** check box.

4. Click **Add**.

   The schedule is added to the **Queue Scheduler** list at the top of the page.
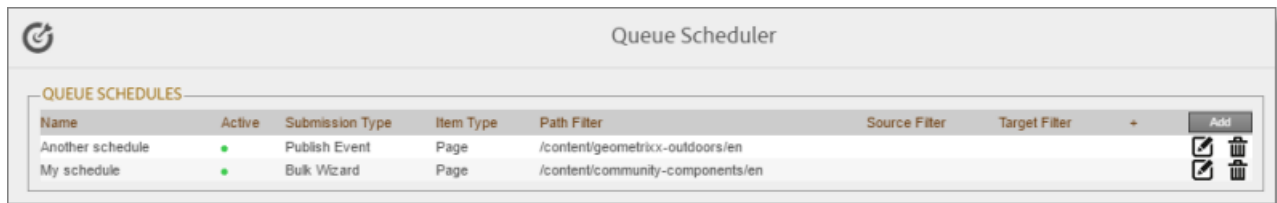
   This list displays the following information about the schedules in the list:

   ▦ **Name**: Your name for the schedule.
   ▦ **Active**: A green dot indicates that the schedule is active.
   ▦ **Submission Type**: How the items in translation jobs created by this schedule are submitted to the Translation Queue. For a list of submission types, see the previous step.
   ▦ **Item Type**: The types of content items to include in translation jobs created by this schedule. For a list of item types, see the previous step.
   ▦ **Path Filter**: The base path of content items to include in translation jobs created by this schedule.
   ▦ **Source Filter**: If the schedule sends content items in all available source languages, this is blank. If the schedule is restricted to specific source language(s), this displays the comma-separated language names, as they are defined in the **Language Mapping** page, described in "Configuring Connector Languages" on page 83.
   ▦ **Target Filter**: If the schedule sends content items for translation into all available target languages, this is blank. If the schedule is restricted to specific target languages, this displays the comma-separated language names, as they are defined in the **Language Mapping** page, described in "Configuring Connector Languages" on page 83.

5. You can do one of the following:

   ⠿ To add another schedule, click **Add**, and enter the information described in step 3, above.

   ⠿ To edit an existing schedule, click the corresponding edit icon ☑ . After you edit the schedule, click **Update** to save your changes.

   ⠿ To delete, a schedule, click the corresponding delete icon 🗑 . A message box confirms that you want to delete the schedule. Click **OK**.

5.11 Configuring the Service Components

You can configure how frequently the Connector checks for processing, sending, and receiving translations.

■ The `ctcPrepareService` agent controls the frequency that the Connector checks for processing translations.

■ The `ctcUploadService` agent controls the frequency that the Connector checks for sending and receiving translations.
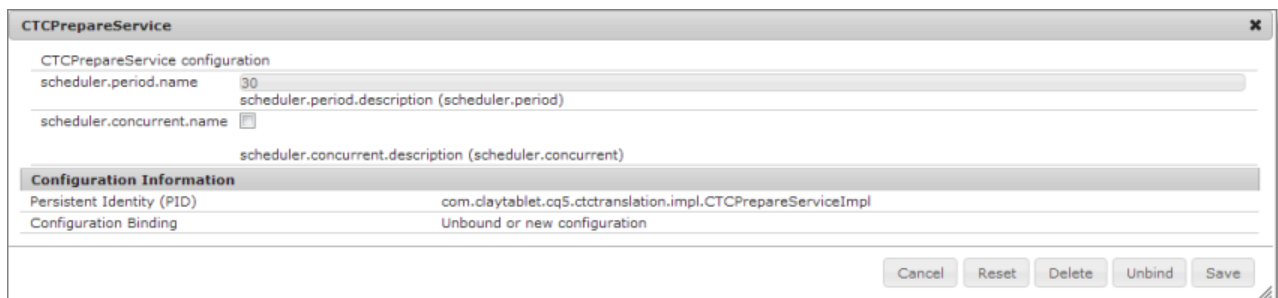
To configure these agents:

1. If the **Adobe Experience Manager Web Console Components** page is not already open, then in your browser, navigate to `/system/console/components` on your Adobe Experience Manager instance to open it.

   This page displays all components alphabetically, by name.

2. Scroll down to locate one of these Connector components in the list:

   ⠿ com.claytablet.cq5.ctctranslation.impl.CTCPrepareServiceImpl

   ⠿ com.claytablet.cq5.ctctranslation.impl.CTCUploadServiceImpl

3. In the **Actions** column, click the corresponding Configure button 🖊 .

   The configuration dialog box for the service opens.

4. In the **scheduler.period.name** field, you can edit the frequency of this task.

    ▒ The default value of the `ctcPrepareService` agent is 30 seconds.

    ▒ The default value of the `ctcUploadService` agent is 60 seconds.

    You can change this value to meet your particular requirements.

5. Click **Save** to save your changes.

6. If desired, repeat steps 2-5 for the other agent.

5.12 Configuring Translation Settings for Digital Assets

You can send digital assets for translation from the Bulk Translation wizard or the Globalization Tool. Adobe Experience Manager stores digital assets in the following location: `/content/dam`.

The Connector can send digital assets for translation when they are under a *correctly configured language root*, for example: `/content/dam/geometrixx/en/icons/office-building.png`. For more information, refer to "Preparing Assets for Translation" in the Adobe Experience Manager documentation, at: https://docs.adobe.com/docs/en/aem/6-3/author/assets/managing-assets-touch-ui/preparing-assets-for-translation.html.

You configure translation settings for digital assets in the **UI and Default Settings** section of the **Configuration** page, which is described in "UI and Default Settings" on page 59:

▶ To configure sending the properties of the asset metadata for translation, you select the **Translate Asset Metadata** check box.

> **Important:** You must configure the asset properties to send for translation in the **Component Mapping** page, in the same way that you configure other component. After you click **Collect** for an asset to add it to the component list, you must click **Set for all components** to send all components with a specific property for translation. For detailed instructions, see "Configuring which Components and Properties to Send Out for Translation" on page 89

▶ To configure sending the actual asset for translation, such as the JPG or PDF file, you select the **Translate Asset Binary** check box.

> **Note:** When the Connector sends the actual asset for translation, it sends the *original rendition*. There may be multiple renditions of an asset, for example, there may be multiple versions of an image with different resolutions, such as for Web and print. For more information, refer to "Managing Renditions" in the Adobe Experience Manager documentation, at: https://docs.adobe.com/docs/en/aem/6-3/author/assets/managing-assets-touch-ui.html#Managing%20Renditions.

Depending on whether you select one or both check boxes, the Connector will generate either one or two items from one asset in a job. Each item will be listed in the job details.

> **Tip:** You can create a custom asset handler that modifies the translation settings of specific asset types, such as digital assets. For details, see "Creating a Custom Asset Handler" on page 128.

5.13 Creating a Custom Asset Handler

You can create a custom asset handler that modifies the translation settings of specific asset types. This can be useful, if for example, you want to change settings for a type of digital assets that you send for translation. For example, suppose that when you translate video subtitles, you do not want to use the Language Mapping configurations to convert the path of the source subtitle text files to the path of the target files. Instead, you want the translated video subtitle text files to be in the same location as the source video subtitle text files, but you want to change the name of the translated subtitle files.

In this scenario, you can now create a custom asset handler to configure a custom path mapping for converting source paths to target paths. For example, you can convert `/content/dam/wwww/us/en/…/video/subtitle/12345_us_en_xxxxx.txt` to `/content/dam/wwww/us/en/…/video/subtitle/12345_fr_fr_xxxxx.txt`, instead of to `/content/dam/wwww/fr/fr/…/video/subtitle/12345_us_en_xxxxx.txt`

To create a custom asset handler:

1. Click **Admin Tools > Asset Handlers** in the Lionbridge Connector rail to open the **Custom Asset Handlers** page. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

2. Click **Add** in the top-right corner of the page to add a new custom asset handler.

The **New Asset Handler** dialog box opens.

3. In the **Name** field, enter the name for the new custom asset handler.

4. In the **Asset Types** section, select the check boxes of the asset types for which this asset handler is relevant.

5. In the **Path Filters** box, you can specify the base content path of the assets for applying this custom handler. By default, the value is `/`, so it is relevant to all paths.

   ▦ To specify multiple base content paths, use a comma (`,`) separator between the paths, for example: `/content/web1/` , `/content/web2`.
   ▦ To exclude a base content path, use an exclamation mark (`!`) prefix, for example: `!/content/web1/`.
   ▦ To substitute a wildcard for part of a base content path, use an asterisk (`*`), for example: `*/libs/` or `!*/app/`.

6. In the **Handler Class** field, enter the full class name of your custom asset handler, as instructed by Lionbridge Connector Support. For details, see "How to Contact Lionbridge Connector Support" on page 11.

   Note: You must also deploy your handler bundle to Adobe Experience Manager.

7. In the **Extra Configurations** box, enter any additional configuration for this custom handler, such as XML or JSON.

8. Click **Add** to save your changes and close the dialog box.

5.14 Configuring Advanced Settings in CRXDE Lite

You can use *CRXDE Lite* to configure the some Connector options. CRXDE Lite (Content Repository Extreme Development Environment Lite) is embedded into Adobe Experience Manager. It enables you to perform standard development tasks in the browser. For more information about CRXDE Lite, refer to the Adobe documentation, at: https://helpx.adobe.com/experience-manager/6-4/sites/developing/using/developing-with-crxde-lite.html. If you have a different version of Adobe Experience Manager, you can navigate to the correct version of the documentation from that page.

You can use CRXDE Lite to configure the following Connector options:

5.14.1 Configuring How the Connector Handles Special Characters

You can configure how the Connector handles special characters. This is important because it determines how special characters are displayed for your translators.

Background

The Connector exports your content from Adobe Experience Manager and sends it for translation as XML files. A valid XML file cannot contain any of the special characters listed in the table below. Instead, a valid XML file must use the following entity references to represent special characters:

Special Character	Represented by This Entity Reference
<	<
>	>

Special Character	Represented by This Entity Reference
&	&
'	'
"	"

Escaping is the term that describes creating valid XML by converting any XML special characters to their entity references.

How does Adobe Experience Manager handle special characters?

There are two types of text within Adobe Experience Manager:

- plain text

- rich text, which can contain HTML formatting, links. etc.

You can use CRXDE Lite to view how Adobe Experience Manger stores content.

CRXDE Lite handles special characters differently, depending on whether they are in a *plain text* title, or a *rich text* paragraph.

- In *plain text*, CRXDE Lite *does not escape* special characters. It displays them as the actual characters. For example, it displays & as &.

- In *rich text*, CRXDE Lite *escapes* special characters. It displays them as their corresponding entity references. For example, it displays & as &.

How does the Connector handle special characters?

When the Connector prepares content for translation, it packages all content into XML translation files. This necessitates escaping all special characters into their corresponding entity references. However, the Connector does not differentiate between plain text (which displays the actual special characters) and rich text (which displays the entity references instead of the special characters). Therefore, the Connector escapes all special characters.

As a result, the rich text that the translator receives may contain a combination of special characters and entity references.

For example:

Suppose that the rich-text paragraph contains the text that is rendered as follows in the CRXDE Lite viewer: `&`.

CRXDE Lite actually stores this rich-text content as its corresponding entity reference: `&`.

When the Connector processes this rich-text content to create XML files to send out for translation, it escapes this content as follows:

- `&` becomes `&`
- `amp;` remains `amp;`

As a result, this content is *escaped twice* (once by CRXDE Lite and then by the Connector).

The Connector then stores this content as `&amp;` in the XML translation file, which it sends to the translator.

However, some translation systems cannot handle double-escaped special characters such as `&amp;` or a mix of single-escaped and double-escaped special characters.

5.14.1.1 Why Do Translators Encounter Problems with Special Characters?

Some translation systems can handle double-escaped special characters, such as `&amp;`, by displaying them as `&` or `&`. However, some translation systems cannot handle double-escaped special characters, such as `&amp;`.

There are several ways to handle this.

Recommendation 1 – Same as Source option

If your translator's translation system supports the "Same as Source" option, then instruct your translator to select this option. This converts and returns all special characters–actual characters, escaped characters, and double-escaped characters–as they were received.

However, this feature is not supported by all translation systems or they may not be able to change this setting. In those scenarios, or if you see a combination of single- and double-escaped characters, consider one of the following recommendations.

Recommendation 2 – All single encoded

Your translator should handle each type of special character consistently. For example, in the target XML:

■ Your translator can return the following special characters as single escaped:

   ▦ `<`

   ▦ `>`

   ▦ `&`

■ Your translator can return the following special characters as the actual characters:

   ▦ `'`

   ▦ `"`

Recommendation 3 – Use CData tags

Changing the `Use_CData` setting from its default value of `false` to `true`. This setting instructs the Connector to wrap content in `CData` tags, which prevents the Connector from escaping special characters, and avoids the scenario of double-escaped characters. However, this setting does not prevent Adobe Experience Manager from single-escaping special characters in rich text.

Note: The Connector adds and removes the `CData` tags, so they are not displayed within Adobe Experience Manager's CRXDE Lite.

Important: If you change this setting, your translators must return the translated content in `CData` tags, just as they received the source content in `CData` tags. They should not run any post-translation scripts to escape the special characters before returning the content.

Warning: If you change this setting in the middle of a translation job, it can interfere with the integrity of the translation memory.

For detailed instructions on changing the `Use_CData` setting from its default value of `false` to `true`, see .

5.14.1.2 Adding CData Tags to Translation Files

You can change the `Use_CData` setting from its default value of `false` to `true` to add `CData` tags to translation files, which prevents your translators from viewing double-escaped special characters, such as `&amp;`.

To configure this setting:

1. Do one of the following to open CRXDE Lite:

   ▒ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ▒ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ▒ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/TransOptions`.

3. Locate the `Use_CData` property.

4. Double-click in the **Value** column, and select `true` from the dropdown list.

5. In the CRXDE Lite menu, click **Save All**.

The Connector will now automatically wrap every XML translation file it sends out for translation in `CData` tags.

5.14.2 Configuring Custom Content Types

When you send content for translation using the Bulk Translation wizard, the Translation Queue, or Sidekick you can use the *content type* to filter the content you want to send.

Note: Specifying the content type in Sidekick is available only when working with the Sidekick wizard user interfaces.

The Connector can also configure routing rules to send content of each type to a different translation provider.

By default, the Connector includes three content types, which have the following default labels:

■ Marketing
■ Technical
■ Legal

You can change these labels to reflect your company's needs. For example, you can send all your marketing content to your translation provider, and all your user-generated content to a machine translation service. In the Clay Tablet Platform, the Connector can configure content rules based on content types as follows:

■ You can send different content types to different translation providers.

■ You can send different content types to different TMSs (translation management systems).

■ You can send different content types to different processing profiles within a single TMS instance.

Note: Please contact Lionbridge Connector Support before proceeding. For details, see page 11.

1. Do one of the following to open **CRXDE Lite**, where you can configure custom content types:

   ⁞ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ⁞ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ⁞ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the navigation pane on the left, navigate to `/etc/ctctranslation/ctcconfig_ ContentTypes`.
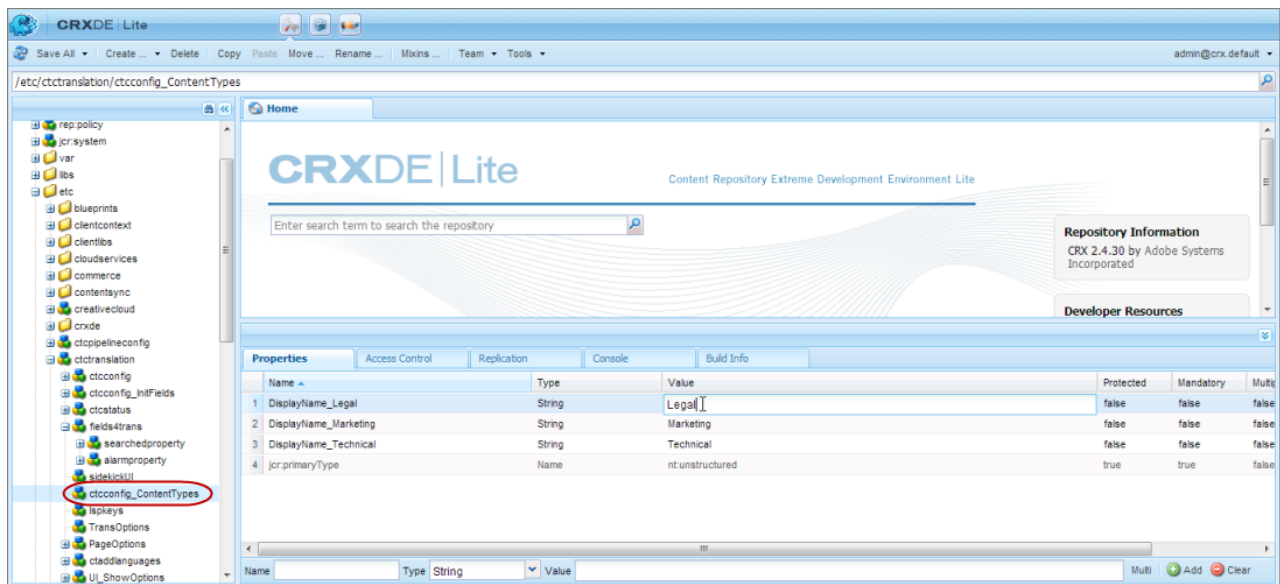
3. In the **Properties** tab in the **Home** tab, double-click in the **Value** column of the content-type label to change, and type the new label.

4. Repeat the previous step for each content-type label you want to change.

5. In the CRXDE Lite Menu, click **Save All**.

5.14.3 Configuring the Rollout Feature

If the Rollout feature is enabled, then when users roll out files, the Connector automatically sends them to the Translation Queue, using your company's default translation settings. There are three settings for this

feature. The setting you choose determines the configuration method you use:

- You can configure the Connector to send all your rollout pages to the Translation Queue.

- You can configure the Connector to send only some of your rollout pages to the Translation Queue, using a workflow.

- You can configure the Connector to send only some of your rollout pages to the Translation Queue, using a filter.

Note: The setting determines the configuration method you use.

Important information: Adobe Experience Manager has language-mappings that are included by default and that cannot be removed. When you roll out pages, the Connector automatically sends *all* configured languages, including these defaults, to the Translation Queue. You can configure the Connector to send *only* configured languages to the Translation Queue. For more information and detailed instructions, see "Configuring Default Language-Mapping Settings for the Rollout Feature" on page 141.

Configure the Connector to send all rollout pages to the Translation Queue

1. In the Translation Settings section of the Configuration page, select the **Catch rollout pages to [Rollout] Queue** check box. For details, see "Translation Settings" on page 49.

2. When creating a Livecopy site, use the default Adobe Experience Manager rollout configuration.

Configure the Connector to send only some rollout pages to the Translation Queue, using a workflow

Important information for updated Connector installations: For new installations of the Connector, no additional steps are required. If you are updating your Connector installation from a version before 2.3.0, you must perform the steps described in "Update the CTCRolloutTranslation workflow" on page 137 to update the workflow before performing the following steps.

1. In the Translation Settings section of the Configuration page, clear the **Catch rollout pages to [Rollout] Queue** check box. For details, see "Translation Settings" on page 49.

2. Create your own rollout configuration in CRXDE Lite that includes the CTCRolloutTranslation workflow. For detailed instructions on creating a rollout config, refer to the Adobe Experience Manager documentation at: https://helpx.adobe.com/experience-manager/6-5/sites/administering/using/msm-sync.html#CreatingaRolloutConfiguration.

   For a description of the CTCRolloutTranslation workflow, see "Viewing the Rollout Workflow" on page 192.

3. When creating a Livecopy site, select the rollout configuration you created.

Update the `CTCRolloutTranslation` workflow

Important: These steps are required only for a Connector installation updated from a version before 2.3.0, and when configuring the Connector to send only some rollout pages to the Translation Queue using a workflow, as described above.

1. In your Web browser, navigate to `/libs/cq/workflow/content/console.html` on your Adobe Experience Manager instance to open the **AEM WCM** page.

2. Locate the `CTCRolloutTranslation` workflow. Click to select it, and then right-click and select **Edit** from the context menu.

   The workflow opens for editing in a new Web page.

3. Mouseover the **CTC Rollout Translation** workflow, right-click, and select **Edit** from the context menu.

4. In the **Process** tab:

   a. Ensure that the **Process** is `com.claytablet.cq5.ctctranslation.workflow.RolloutCTCQueueProc ess` (and not `RolloutCTCTranslationProcess`).

   b. Select the **Handler Advance** check box.

   c. Click **OK** to close the dialog box.

5. Click **Save** to save your changes.

Configure the Connector to send only some rollout pages to the Translation Queue, using a filter

1. In your browser, navigate to: `/system/console/components` on your Adobe Experience Manager instance.

   The **Adobe Experience Manager Web Console Components** page opens. This page displays all components alphabetically, by name.

2. Scroll down to locate the Connector components, whose names all start with `com.claytablet.`

3. Verify that the following Clay Tablet component is installed and active in Adobe Experience Manager: `com.claytablet.cq5.ctctranslation.impl.CTCRolloutCheckServiceImp l.`

4. Code a filter class to call the following Clay Tablet interface: `com.claytablet.cq5.ctctranslation.service.Rollout.IRolloutTransl ationFilter.` See the sample code, at the bottom of this section.

5. Implement the following function:

```
public boolean catchRolloutToTranslation(
final String bluePrintPage,
final String liveCopyPage,
final Session jcrSession,
final ResourceResolver resourceResolver,
final LiveRelationshipManager liveRelationshipManager,
final CTCPageService ctcPageService,
final CTLogService ctcLogService,
final CTCDataService ctcDataService
);
```

6. If the Connector Translation Queue will capture the rollout pages, the function should return a Boolean value of `True`.

7. Do one of the following to open **CRXDE Lite**, where you can configure the Rollout Filter in the Adobe Experience Manager CRXDE interface:

   ▦ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ▦ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ▦ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

8. In the navigation pane on the left, navigate to `/etc/ctcpipelineconfig/ctcRolloutTranslationFilter`.

9. Create a child note of type `nt:unstructured` and give it a human-readable name, for example, `CustomTestFilter`.

10. Add the following node properties:
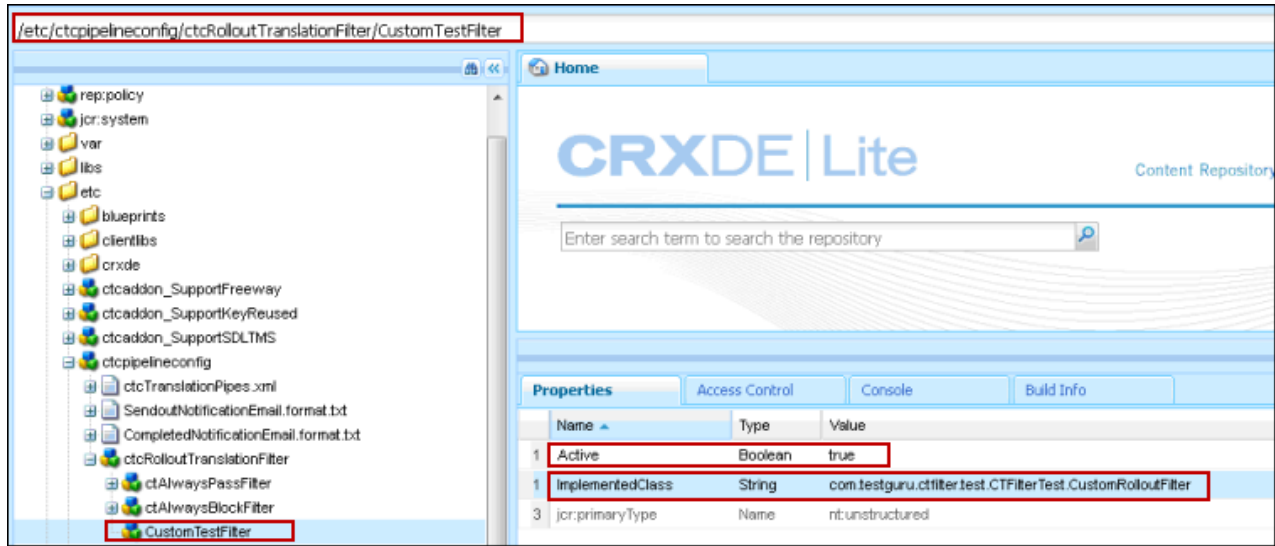
a. **Name** = `Active`, **Type** = `Boolean`, **Value** = `True`

b. **Name** = `ImplementedClass`, **Type** = `String`, **Value** = Filter Class name, for example:
   `com.testguru.ctfilter.test.CTFilterTest.CustomRolloutFilter`

11. In the CRXDE Lite Menu, click **Save All**.

Clay Tablet interface sample code

Note:. The following sample code is also included in the following package, which is in the following location in CRXDE Lite:
`/apps/CTFilterTest/src/impl/src/main/java/com/testguru/ctfilter/test/`
`CTFilterTest/impl/Activator.java.` You can install this package using the CRX Package Manager. For detailed instructions on using the CRX Package Manager, see

```
package com.testguru.ctfilter.test.CTFilterTest;


import javax.jcr.Session;

import org.apache.sling.api.resource.ResourceResolver;

import com.claytablet.cq5.ctctranslation.service.CTCDataService;

import com.claytablet.cq5.ctctranslation.service.CTCPageService;

import com.claytablet.cq5.ctctranslation.service.CTLogService;
```

```
import com.day.cq.wcm.msm.api.LiveRelationshipManager;
import
com.claytablet.cq5.ctctranslation.service.Rollout.IRolloutTranslat
ionFilter;


public class CustomRolloutFilter implements
IRolloutTranslationFilter
{

  public boolean catchRolloutToTranslation(final String
  bluePrintPage,
           final String liveCopyPage, final Session jcrSession,
           final ResourceResolver resourceResolver,
           final LiveRelationshipManager liveRelationshipManager,
           final CTCPageService ctcPageService,
           final CTLogService ctcLogService,
           final CTCDataService ctcDataService )
  {
  ctcLogService.LogRolloutDebug("[CustomRolloutFilter] passed
  Blueprint page: "
           + bluePrintPage );
  ctcLogService.LogRolloutDebug("[CustomRolloutFilter] passed
  liveCopyPage page: "
           + liveCopyPage );


  // Add your own logic here.
    if (bluePrintPage.startsWith("/content/geometrixx/en/blog"))
    {
      ctcLogService.LogRolloutDebug("[CustomRolloutFilter]
      Blueprint page " +
              "is starting with path
              [/content/geometrixx/en/blog], ignored.");
      return false;
```

```
  }
  else
    return true;
// Do not close passed JCR Session and ResourceResolver. Clay
Tablet needs these
// to do more filter calls.
  }
}
```

5.14.3.1 Configuring Default Language-Mapping Settings for the Rollout Feature

Adobe Experience Manager has language-mappings that are included by default and that cannot be removed. If the Connector is configured to send content to the Translation Queue when you roll out files, then it sends content to the queue for these default languages. You can configure the Connector so that it sends only content for *configured* languages to the queue.

To configure this setting:

1. Do one of the following to open CRXDE Lite:

   ▦ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ▦ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ▦ In your Web browser, navigate to /crx/de/index.jsp on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to /etc/ctctranslation.

3. If the debug node does not exist, then create it.

   a. Select the ctctranslation node.

   b. Select **Create > Create Node** from the context menu.

The **Create Node** dialog box opens.
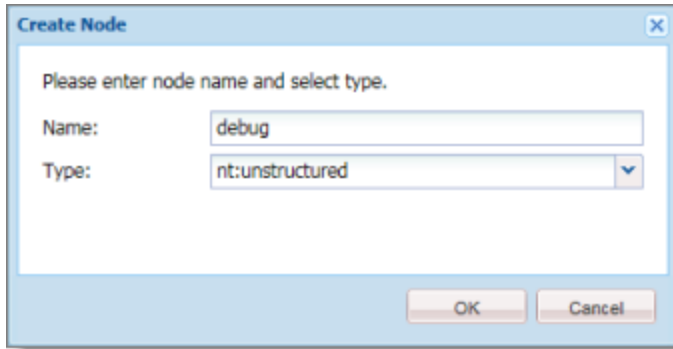
c. In the **Name** field, enter `debug`.

d. In the **Type** dropdown list, select `nt:structured`.

e. Click **OK**.

4. Right-click the `/etc/ctctranslation` node, and select **Refresh** from the context menu.

5. Create the `AEM61DefaultLanguageMapping` property in the `debug` node you just created.

a. Locate and select the `debug` node you just created.

b. In the **Name** field in the bottom of the right pane, enter `AEM61DefaultLanguageMapping`.

c. In the **Type** dropdown list in the bottom of the right pane, accept the default of `String`.

d. In the **Value** field in the bottom of the right pane, enter `disabled`.

e. Click **Add** ⊕ Add .

6. In the CRXDE Lite Menu, click **Save All**.

The `AEM61DefaultLanguageMapping` is displayed at the top of the pane.

The Connector will now send only configured languages to the Translation Queue when you roll out pages.

5.14.4 Enabling Content Collection from Blueprint Pages

You can instruct the Connector to globally collect content from Blueprint pages using the **Pickup Content from Blueprint Pages** CRX setting in CRXDE Lite.

Note: When this feature is enabled, the Connector synchronizes non-translatable properties, such as images, from a locked component.

How the Pickup Content From Blueprint Pages setting interacts with other related settings

■ This setting is available only when the **Select if using Blueprint/Live-copy** check box is selected.

■ If this setting is specified, the Connector always acts as though the **Translate Non-Sync'd Components on this page** check box *is not* selected, even if it *is* selected. This occurs because only content from locked components is rolled out from Blueprint pages to live copy pages:

  ▫ In general, during MSM rollout, content from Blueprint pages overwrites the content of locked components in live copy pages. The Connector retrieves content from the live copy pages and sends it out for translation. Until the translation returns, the live copy page has the un-localized content from the Blueprint page.

  ▫ However, if there is no MSM rollout or if there is a custom rollout configuration that excludes copying over the content, then the content from the Blueprint page does not overwrite the content of the locked components in the live copy page. Live copy pages may contain the old version of localized content.

  In both scenarios, the Connector returns the translated content to the live copy page.

■ The `PickupContentFromBlueprintPages_LockedOnly` page option in CRXDE Lite enables the Connector to read properties of Blueprint pages for locked components of live-copy pages when the `PickupContentFromBlueprintPages` option is set to `true`. This setting enables collecting content for translation from locked components.

For descriptions of all the related settings, see "UI and Default Settings" on page 59.

To enable the Pickup Content From Blueprint Pages setting:

1. Do one of the following to open CRXDE Lite:

   ▫ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ▫ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ▫ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/PageOptions`.

3. Locate the `PickupContentFromBlueprintPages` property.

4. Double-click in the **Value** column, and select `true` from the dropdown list.

   The **Pickup Content From Blueprint Pages** setting is now enabled. This enables the Connector to collect content from locked components.

   Note: To turn off this setting, repeat the previous steps, but in the last step, select `false` from the dropdown list.

5. To force the Connector to collect content only from locked components, when the `PickupContentFromBlueprintPages` property is sent to `true`:

   a. In the same location, create a child note of type `nt:unstructured` and give it the following name: `PickupContentFromBlueprintPages_LockedOnly`.

   b. Add the following node properties: **Name** = `Active`, **Type** = `Boolean`, **Value** = `True`.

   The Connector can now collect content for translation from locked components only.

6. In the CRXDE Lite Menu, click **Save All**.

5.14.5 Configuring the TMX to Include the Original Translation

By default, when you use the **Update TM** functionality, the Connector updates the TM (translation memory) with the following information from the TMX file:

 - the original source content
 - the original translated content
 - the updated translated content
 - the name of the translation job
 - the page path and the property name

You can configure the Connector to also include the original translation returned by the translation provider in the TMX file.

To configure this setting:

1. Do one of the following to open CRXDE Lite:

 - In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

 - In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

 - In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/TransOptions`.

3. Locate the `TMXIncludeOriginalTranslation` property.

4. Double-click in the **Value** column, and select `true` from the dropdown list.

5. In the CRXDE Lite Menu, click **Save All**.

The Connector will now send the original translation returned by the translation provider to the TM.

5.14.6 Excluding Properties from Translation

You can use the `TargetPageExcludedProperties` property in the `etc/ctctranslation/PageOptions` node in CRXDE Lite to specify any properties in your content that you want to exclude from being sent for translation. This is useful, for example, if you have a custom identifier property for each file that you do not want to replicate in the target content.
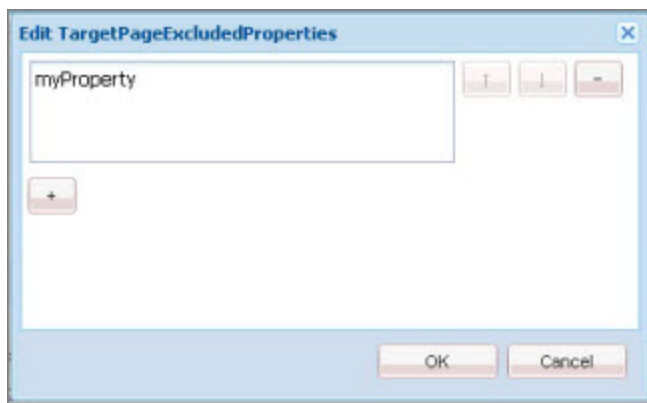
To exclude properties from translation:

1. Do one of the following to open CRXDE Lite:

   ⠿ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ⠿ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ⠿ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/PageOptions`.

3. Double-click the `TargetPageExcludedProperties` property.

   The **Edit TargetPageExcludedProperties** dialog box opens.

4. In the text box, enter the name of the property to exclude.

5. To exclude additional properties, click the plus button ⊞.

6. Click **OK**.

7. In the CRXDE Lite Menu, click **Save All**.

5.14.7 Excluding Child Nodes from Translation

Before the Connector sends out content for translation, it copies over the source files to the target location.
in CRXDE Lite:

- You can use the `TargetPageExcludedNodes` property in the
  `etc/ctctranslation/PageOptions` node to delete child nodes after copying from the
  source to the target.

- You can use the `TargetPagePreservedNodes` property in the
  `etc/ctctranslation/PageOptions` node to exclude child nodes when copying from the
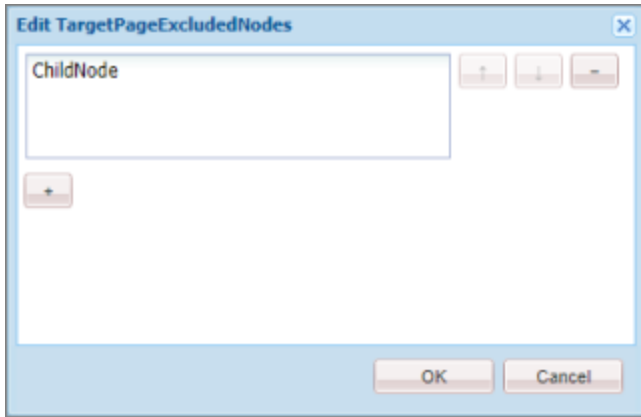 source to the target.

These settings are both useful if you want to exclude certain child nodes from translation while sending
their parent nodes for translation.

To exclude child nodes from translation:

1. Do one of the following to open CRXDE Lite:

    - In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience
      Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

    - In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

    - In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager
   instance.

    CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/PageOptions`.

3. Do one of the following:

    - To delete child nodes after copying from the source to the target, double-click the
      `TargetPageExcludedNodes` property.

The **Edit TargetPageExcludedNodes** dialog box opens. Click the plus button ⊞ .

░ To exclude child nodes when copying from the source to the target, double-click the
`TargetPagePreservedNodes` property.

The **Edit TargetPagePreservedNodes** dialog box opens. Click the plus button ⊞ .
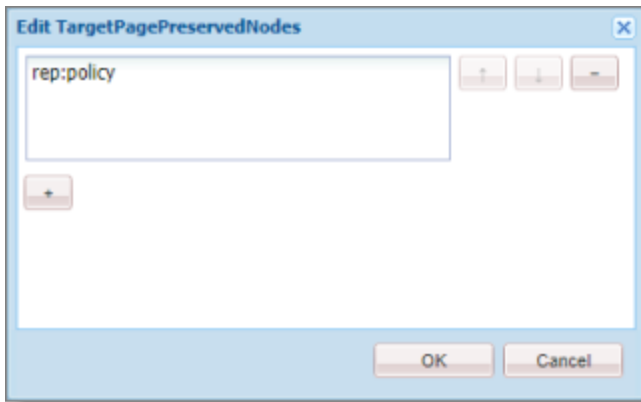
4. In the text box, enter the name of the node to exclude.

5. To exclude additional nodes, click the plus button ⊞ .

6. Click **OK**.

7. In the CRXDE Lite Menu, click **Save All**.

5.14.8 Configuring All Jobs to Pause

In CRXDE Lite, you can configure all jobs to pause before the Connector sends them out for translation. The jobs pause after `Preparing` status (`0%`) but before `Sending` status (`1%`). This is useful if you

want to review or export reports of content items, or download the XML files before sending them out for translation.

Note: You can also configure this setting using the **Pause job before sending** check box in the **UI and Default Settings** section of the **Configuration** page. For details, see "UI and Default Settings" on page 59.

To configure this setting:

1. Do one of the following to open CRXDE Lite:

   ⠿ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ⠿ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ⠿ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/TransOptions`.

3. Locate the `PauseBeforeSend` property.

4. Double-click in the **Value** column, and select `true` from the dropdown list.

5. In the CRXDE Lite Menu, click **Save All**.

The Connector will now automatically pause every job before it sends it out for translation.

Important: To resume the job and send it out for translation, in the **Translation Status** page, you must click **Resume** for the job. For detailed instructions, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

5.14.9 Configuring Catching Pages from Publish Events to the Translation Queue

Selecting the **Catch Pages from Publish Event to Queue** check box in the **Translation Settings** section of the **Configuration** page instructs the Connector to automatically listen to publish events and add published pages to the Translation Queue. By default, this check box is hidden. To display this check box, you add the `ShowCatchPublishEventPageToQueueInCTConfig` property to the `/etc/ctctranslation/ctcconfig` node in CRXDE Lite.

To display the Catch Pages from Publish Event to Queue **check box:**

1. Do one of the following to open CRXDE Lite:

- ⁝ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience
  Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

- ⁝ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

- ⁝ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager
  instance.

  CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/ctcconfig`.

3. Create the `ShowCatchPublishEventPageToQueueInCTConfig` property in this node.

   a. In the **Name** field in the bottom of the right pane, enter
      `ShowCatchPublishEventPageToQueueInCTConfig`.

   b. In the **Type** dropdown list in the bottom of the right pane, accept the default of `String`.

   c. In the **Value** field in the bottom of the right pane, enter `true`.

   d. Click **Add** .

4. In the CRXDE Lite Menu, click **Save All**.

   The `ShowCatchPublishEventPageToQueueInCTConfig` is displayed at the top of the
   pane.

The Connector will now display the **Catch Pages from Publish Event to Queue** check box in the
Translation Settings section of the **Configuration** page.

5.14.10 Configuring which Properties of i18n Dictionary Items and Tags to Collect for Translation

You can send out i18n dictionary items and tags for translation using the Bulk Translation wizard. For
detailed instructions, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

- In i18n dictionary items, by default the Connector sends out the `sling:message` property.

- In tags, by default the Connector sends out the `jcr:title` property.

In both i18n dictionary and tag items, if there is no source language specified, the Connector now uses the
default title or message as the source:

- For i18n dictionary items, if the `sling:message` property is empty, the Connector now uses the
  `sling:key` property.

- For tags, in the `jcr:title` property is empty, the Connector now uses the
  `jcr:title.<source language>` property, for example, `jcr:title.en`.

You can use the `disableUseDefaultAsSourceForTagsAndI18N` property to disable this behavior, which prevents the Connector from using the default title or message as the source if there is no source language specified.

To prevent the Connector from using the default title or message as the source if there is no source language specified:

1. Do one of the following to open CRXDE Lite:

   ⋮ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ⋮ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ⋮ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/ctcconfig/debug`.

3. Create the `disableUseDefaultAsSourceForTagsAndI18N` property in this node.

   a. In the **Name** field in the bottom of the right pane, enter `disableUseDefaultAsSourceForTagsAndI18N`.

   b. In the **Type** dropdown list in the bottom of the right pane, accept the default of `String`.

   c. In the **Value** field in the bottom of the right pane, enter any value.

   d. Click **Add** .

4. In the CRXDE Lite Menu, click **Save All**.

   The `disableUseDefaultAsSourceForTagsAndI18N` is displayed at the top of the pane.

If there is no source language specified for i18 dictionary items or tags, the Connector will now not use the default properties as source, when sending out items and tags for translation.

5.14.11 Disabling the Cache Service

The Connector's cache service caches the current user's settings, including:

- user permissions
- all the AEM groups to which the user belongs (since groups can be nested)
- the available source and target languages

The cache service enables the Connector to obtain the user's setting quickly, without querying Adobe Experience Manager each time, which is slower. By default, the Connector's the cache service is enabled.

You can disable the Connector cache service by adding the `usingCacheService` Boolean property with the `false` value to the `/etc/ctctranslation/debug` node in CRXDE Lite. This forces the Connector to query Adobe Experience Manager each time for user settings.

To disable the Connector cache service:

1. Do one of the following to open CRXDE Lite:

   ▦ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail. Then, in the **Navigation** page, click **CRXDE Lite**.

   ▦ In the Classic UI of Adobe Experience Manager, click **CRXDE Lite** in the right pane.

   ▦ In your Web browser, navigate to `/crx/de/index.jsp` on your Adobe Experience Manager instance.

   CRXDE Lite opens.

2. In the Explorer pane on the left, navigate to `/etc/ctctranslation/debug`.

3. Create the `usingCacheService` property in this node.

   a. In the **Name** field in the bottom of the right pane, enter `usingCacheService`.

   b. In the **Type** dropdown list in the bottom of the right pane, select `boolean`.

   c. In the **Value** field in the bottom of the right pane, enter `false` to disable the cache service.

   Tip: Alternatively, to re-enable the cache service after disabling it, enter `true`.

   d. Click **Add** [Add].

4. In the CRXDE Lite Menu, click **Save All**.

   The `usingCacheService` property is displayed at the top of the pane.

The Connector will now use the specified setting to enable or disable the cache.

5.15 Configuring Advanced Settings in the User Interface

In the **Advanced Settings** page, you can configure advanced Connector settings. To open the **Advanced Settings** page, click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail.

The advanced Connector settings are organized into the following sections:

Section	Description	For Detailed Configuration Instructions, See…
Translation Status	You can create a page property to store custom translation-status values that are attached to individual pages, for example MT (for machine translation) or HT (for human translation). After you associate a custom value with a translation provider (LSP), you can view this value for translated pages in the page list of the Globalization Tool.	"Creating a Page Property to Store Custom Translation-Status Values" on page 155
Prevent Translation of Pages	You can prevent the Connector from sending pages with certain properties for translation.	"Preventing the Translation of Pages" on page 156
Report Fields Configuration	You specify which fields are available to generate the Field Report, which you generate from the **Reporting** tab of the Globalization Tool.	"Configuring which Fields Are Available for the Field Report" on page 157
Workflow Selections	You specify which workflows are available to run on multiple pages, including language copies of these pages, in the **Run Workflows** tab of the Globalization Tool.	"Configuring which Workflows Are Available to Run" on page 158
Action Permissions	You configure which user group has permission to perform specific actions in the Globalization Tool.	"Configuring Who Can Use the Globalization Tool" on page 159
Prevent URL Conversions	If either or both of the **Language Conversion (URL Reference)** and **Language Conversion (Content Link)** options are configured in the **Translation Settings** section of the **Configuration** page, as described in "Translation Settings" on page 49, you can prevent the Connector from converting links to specific files or file types.	"Preventing Specific URL and Content-Link Conversions" on page 162

Section	Description	For Detailed Configuration Instructions, See...
Skip Translation with Local TM	You can configure which components, or property names of components, will be ignored by the local TM (translation memory) when users send content for translation with the **Use Local TM** option. This setting prevents the Connector from using any previous translations of the specified components that are stored in the local TM.	"Skipping Translations in the Local TM" on page 164
Log JCR Property During Translation	You specify which JCR properties to write to the log file during translation.	"Logging JCR Properties During Translation" on page 165
Page Metadata Configuration	You specify: ■ which metadata is available for copying to multiple pages, including multiple language copies of those pages ■ which metadata is available for sending out for translation ■ SEO flags to include in the XML translation files **Notes:** You can copy metadata to multiple pages from the **Copy Metadata** tab of the Globalization Tool. You can send metadata for translation from the Bulk Translation wizard, the Translation Queue, and the **Translation** tab of the Globalization Tool.	"Configuring which Page Metadata is Available for Copying and Translation" on page 168
Page Property Update Configuration	You specify which metadata fields are available for translation and copying to the **Page Property Updating** tab of the Globalization Tool.	"Configuring which Metadata Fields Are Available for Translation and Copying" on page 166
DAM Metadata Configuration	You specify which digital asset (DAM)A metadata is available for updating, including multiple language copies of those assets **Note:** You can update DAM metadata for multiple assets from the **DAM Metadata Update** tab of the Globalization Tool.	"Configuring which Digital Asset Metadata is Available for Updating" on page 170

Section	Description	For Detailed Configuration Instructions, See…
Configuration for Catching Published Pages to Queue	You configure the source and target languages and translation settings for the following options that add published pages to the Translation Queue: ■ **Catch Published Workflow Pages to Queue** ■ **Catch Pages from Publish Event to Queue** You specify both these features by selecting the corresponding check boxes in the **Translation Settings** section of the **Configuration** page. For more information about these features, see "Translation Settings" on page 49.	"Configuring Translation Settings for Catching Pages to the Translation Queue" on page 171
Configuration for Catching Rollout Pages to Queue	You configure the paths for adding rollout pages to the Translation Queue:	"Configuring Paths for Catching Rollout Pages to the Translation Queue" on page 176

You can perform the following actions on this page:

▶ To save your changes to each section, click the corresponding **Save Configuration** button.

> **Note:** The settings from each section are saved in a single file.

▶ To export your configuration settings as an XML file, at the top of the page, click **Export**. The Connector downloads the `advancedSettings.xml` file.

▶ To import a previously exported configuration file:

a. At the top of the page, click **Import**.

The **Select a file to upload** dialog box opens.
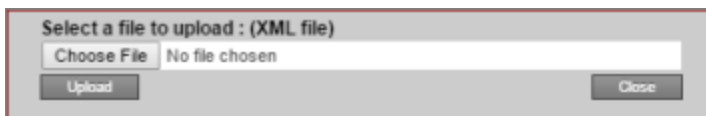
    b. Click **Choose File**.

    c. In the browser dialog box that opens, navigate to the `XML` file to import, select it, and click **Open**, or similar, to close the browser dialog box.

       The **Select a file to upload** dialog box displays the path of the file you selected.

    d. Click **Upload** to upload the file.

   The Connector imports the file and updates the configuration.

5.15.1 Creating a Page Property to Store Custom Translation-Status Values

In the **Translation Status** section of the **Advanced Settings** page, you can create custom translation-status properties that are attached to individual pages, for example `MT` (for machine translation) or `HT` (for human translation). After you associate a custom property with a translation provider (LSP), you can view this property for translated pages in the page list of the Globalization Tool.

To create custom translation-status properties:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

    The **Advanced Settings** page opens, displaying the **Translation Status** section at the top of the page.
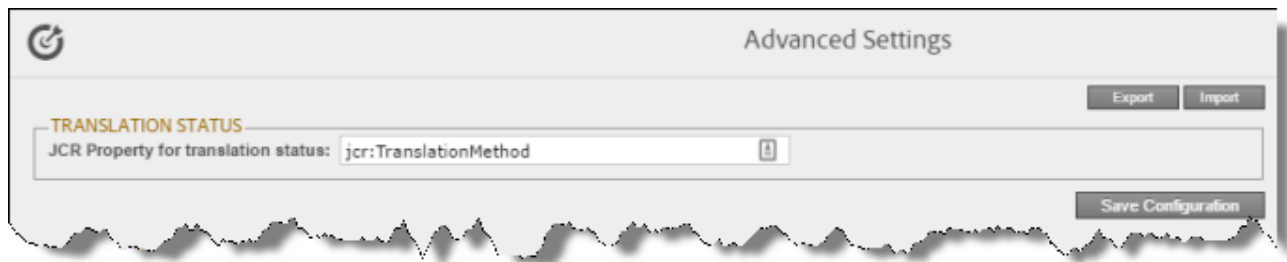
2. To create a JCR property that will hold custom translation-status values, enter it in the **JCR Property for translation status** field. For example, enter: `jcr:TranslationMethod`.

3. Click **Save Configuration** to save your changes.

    A message in red at the top of the page states that the metadata configuration was saved.

    This property is attached to pages after they return from translation.

4. To complete the configuration of this feature, you specify values for this property for each translation provider (LSP). These are the values that will be displayed in the page list of the Globalization Tool.

▦ For SDL TMS, you specify this value in the **Translation Status** field of the **TMS GUID Config** page. For detailed instructions, see "Installing the Add-On for SDL TMS" on page 23.

▦ For all other translation providers (LSPs), you specify this value in the **Translation Status** field of the **LSP & Keys** page. For detailed instructions, see "Editing a License Key" on page 104.

5.15.2 Preventing the Translation of Pages

In the **Prevent Translation of Pages** section of the **Advanced Settings** page, you can prevent the Connector from sending pages with certain properties for translation.

To prevent the Connector from sending certain pages for translation:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **Advanced Settings** page opens, displaying the **Prevent Translation of Pages** section near the top of the page.

2. Enter the page property or properties that identify pages for the Connector to ignore when sending content out for translation.

   ▦ To separate multiple page properties, use a comma (`,`) separator, for example: `PropertyName, PropertyName[PropertyValue]`.

   ▦ To find all pages that do not have properties, use an exclamation mark (`!`) prefix, for example: `!PropertyName[PropertyValue]`. For example, `!PropertyName` finds `!PropertyNameA`, `!PropertyNameB`, and `!PropertyNameC`.

   ▦ To find a page property whose values all contain some letters or numbers, use an asterisk wildcard (`*`) for the property value, for example: `PropertyName[Value*], PropertyName[*Value*]`.

   ▦ To instruct the Connector to ignore pages with specific multiple properties, use an ampersand (`&`), for example: `PropertyName1[PropertyValue1]&PropertyName2[PropertyValue2]`.

3. Click **Save Configuration** to save your changes.

5.15.3 Configuring which Fields Are Available for the Field Report

In the **Report Fields Configuration** section of the **Advanced Settings** page, you can configure which fields are available to include in the Field report. You can generate this report for multiple pages in the **Reporting** tab of the Globalization Tool. For instructions on generating this report, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

To configure the Field report:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **Advanced Settings** page opens. The **Report Fields Configuration** section of this page lists the JCR properties that are available for display in the **Reporting** tab of the Globalization Tool, where you can select them for inclusion in the generated Field report.
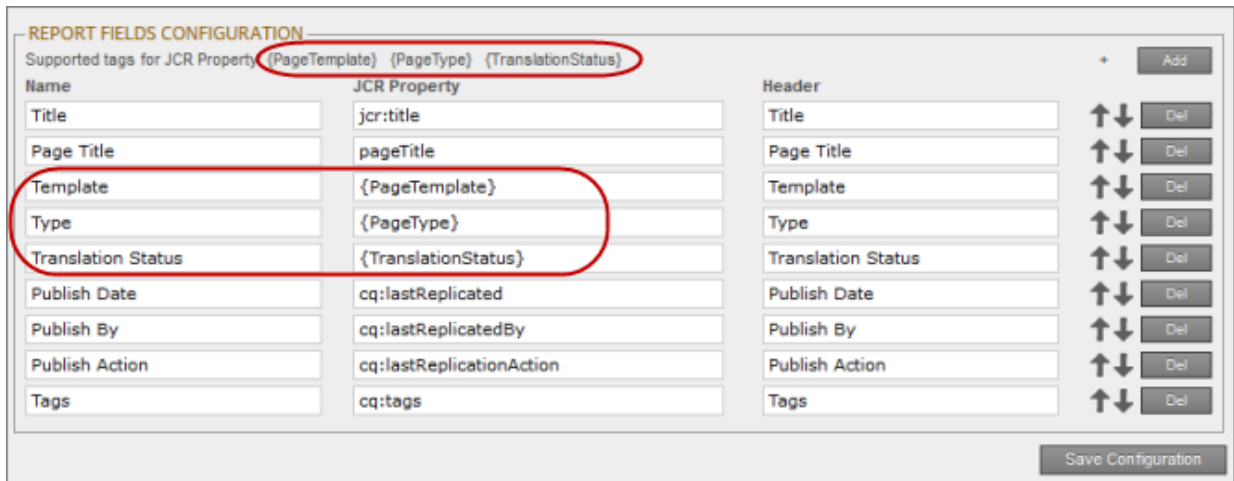
2. You can add, edit, or delete the JCR properties that are included in the Field report.

   ▥ To add a JCR property, so that it is included in the report, click **Add**, in the top-right corner of this section. This adds a blank row at the top of the list. In this row, enter the information about the property to add.

   ▥ To edit a JCR property, which modifies the information in the report, edit the corresponding information in the list.

▦ To delete a JCR property, so that it is excluded from the report, click **Del** in the corresponding row. A message box confirms that you want to delete this field in the report. Click **OK** to confirm.

▦ You can add the *{PageTemplate}*, *{PageType}*, and *{TranslationStatus}* tags to display the corresponding information in the report, for example:

Note: *{PageTemplate}* and *{PageType}* are standard fields in Adobe Experience Manager. *{TranslationStatus}* is a custom property defined in the **Translation Status** section at the top of this page. For details, see "Creating a Page Property to Store Custom Translation-Status Values" on page 155.

For a list and description of JCR properties, refer to the Adobe Experience Manager documentation, which is available at: https://docs.adobe.com/docs/en/aem/6-2/develop/components.html.

3. You can use the Move Up ⬆ and Move Down ⬇ buttons to modify the order in which the fields are displayed in the generated report.

4. Click **Save Configuration** to save your changes.

   A message in red at the top of the page states that the Field-report configuration was saved.

5.15.4 Configuring which Workflows Are Available to Run

In the **Workflow Selections** section of the **Advanced Settings** page, you can configure which workflows are available to run against multiple pages in the **Run Workflows** tab of the Globalization Tool. For instructions on running workflows against multiple pages, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

To configure which workflows are available to run:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **Advanced Settings** page opens. The **Workflow Selections** section of this page lists the workflows that are available for display in the **Run Workflows** tab of the Globalization Tool, where you can select them to run against multiple pages.
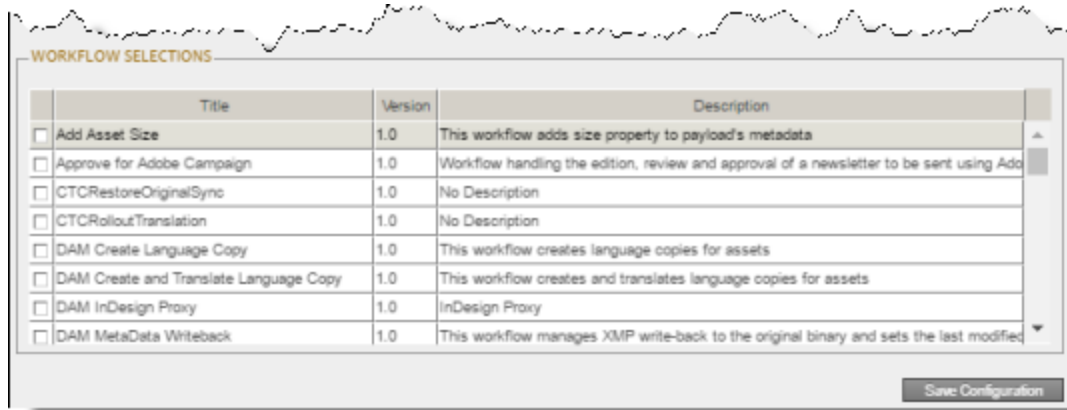
2. Select the check boxes for the workflows to display in the **Run Workflows** tab of the Globalization Tool.

3. Click **Save Configuration** to save your changes.

   A message in red at the top of the page states that your workflow selection was saved.

## 5.15.5 Configuring Who Can Use the Globalization Tool

In the **Action Permissions** section of the **Advanced Settings** page, you can configure which user groups can perform specific actions in the Globalization Tool.

For instructions on using the Globalization Tool, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

To configure which user groups can perform specific actions in the Globalization Tool:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The **Advanced Settings** page opens. The **Action Permissions** section at the bottom of this page lists all the actions that are available in the Globalization Tool.
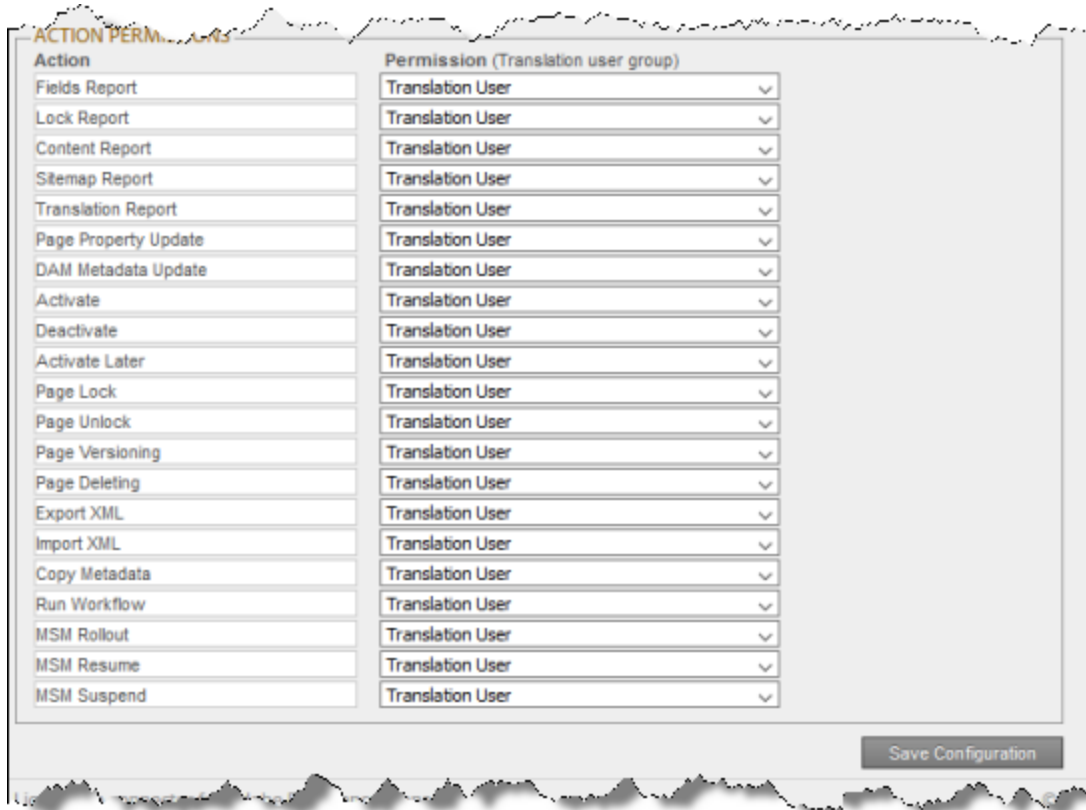
2. For each action, you can select the user group whose members can perform the action in the Globalization Tool. By default, members of the `Translation User` user group have permission to perform each action. For a list and description of user groups, see "Configuring Adobe Experience Manager User Permissions for Translation Users" on page 113.

Action	Description
Fields Report	Generating the Field report from the **Reporting** tab of the Globalization Tool.
Lock Report	Generating the Lockreport about multiple pages from the **Reporting** tab of the Globalization Tool.
Content Report	Generating the Content report about multiple pages from the **Reporting** tab of the Globalization Tool.
Sitemap Report	Generating the Sitemap report about multiple pages from the **Reporting** tab of the Globalization Tool.

Action	Description
Translation Report	Generating the Translation report about multiple pages from the **Reporting** tab of the Globalization Tool.
Page Property Update	Updating page properties for multiple pages from the **Page Property Updating** tab of the Globalization Tool.
DAM Metadata Update	Updating metadata for multiple digital assets (DAM) from the **DAM Metadata Update** tab of the Globalization Tool.
Activate	Activating multiple pages from the **Activation** tab of the Globalization Tool.
Deactivate	Deactivating multiple pages from the **Activation** tab of the Globalization Tool.
Activate Later	Specifying multiple pages to activate later from the **Activation** tab of the Globalization Tool.
Page Lock	Locking multiple pages from the **Activation** tab of the Globalization Tool.
Page Unlock	Unlocking multiple pages from the **Activation** tab of the Globalization Tool.
Page Versioning	Creating new versions of multiple pages from the **Activation** tab of the Globalization Tool.
Page Deleting	Deleting multiple pages and the corresponding translated pages from the **Activation** tab of the Globalization Tool.
Export XML	Exporting the content of multiple pages as XML from the **Activation** tab of the Globalization Tool.
Import XML	Importing the content of multiple pages as XML from the **Activation** tab of the Globalization Tool.
Copy Metadata	In the **Copy Metadata** tab of the Globalization Tool: ■ copying metadata to multiple pages ■ sending metadata from multiple pages for translation as a single job
Run Workflow	Running workflows on multiple pages from the **Run Workflows** tab of the Globalization Tool.
MSM Rollout	Rolling out changes to multiple pages from the **Rollout** tab of the Globalization Tool.
MSM Resume	Resuming the Livecopy relationships on multiple pages from the **Rollout** tab of the Globalization Tool.

Action	Description
MSM Suspend	Suspending the Livecopy relationships on multiple pages from the **Rollout** tab of the Globalization Tool.

3. Click **Save Configuration** to save your changes.

5.15.6 Preventing Specific URL and Content-Link Conversions

In the **Prevent URL Conversions** section of the **Advanced Settings** page, you can prevent the Connector from converting links to specific files or file types.

Note: This option is relevant only if either or both of the **Language Conversion (URL Reference)** and **Language Conversion (Content Link)** options are configured in the **Translation Settings** section of the **Configuration** page, as described in "Translation Settings" on page 49.

To prevent the Connector from converting specific URL and content links:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The **Advanced Settings** page opens, displaying the **Prevent URL Conversions** section near the top of the page.

2. In the **JCR Paths** field, enter the JCR (Java Content Repository) path of specific files or pages. This prevents the Connector from converting any links to these files or pages.

   Tip: You can also enter a file type, to prevent converting all links to files with a specific file type. For example, you can enter `*.jpg` to exclude all files with that extension.

   Notes: Use a comma (`,`) to separate multiple entries. Entries are not case sensitive.

3. In the **Exceptions** field, enter the JCR (Java Content Repository) path of pages or files to exclude from the exclusion list, in the **JCR Paths** field, above. For example, suppose you want to prevent converting links to all `.JPG` files, but you want to convert the link to `filename.jpg`: In the **JCR Paths** field, above, you enter `*.jpg`; while in the **Exceptions** field, you enter the path to `filename.jpg`. Use a comma (`,`) to separate multiple entries. Entries are not case sensitive.

   Notes: Use a comma (`,`) to separate multiple entries. Entries are not case sensitive.

4. In the **Skip URL Conversions for Node Properties** field, enter the names of node properties. This prevents the Connector from converting any URLs for these nodes. You can exclude either all instances of a node or only instances of a node for a specified path.

   ▦ To prevent URL conversion of a node for all sites, add the `/content` prefix for to the node property. For example, to exclude the `cq:master` node property from URL conversion for all sites, enter the base node path as `/content|cq:master`.

   ▦ To prevent URL conversion of a node for a specific path, specify that path. For example, to exclude the `cq:master` node property from URL conversion for the "company A" site, specify `/content/companyA|cq:master`.

   Tip: To substitute a wildcard as part of the property name, use an asterisk (*). For example, specifying `/content|cq:*` prevents URL conversion for any property whose name starts with `cq:` for all sites.

3. Click **Save Configuration** to save your changes.

   A message in red at the top of the page states that the configuration was saved.

5.15.7 Skipping Translations in the Local TM

In the **Skip Translation with LocalTM** section of the **Advanced Settings** page, you can prevent the Connector from using any previous translations of the specified components that are stored in the local TM.

Note: This option is relevant only if user select the **Use Local TM** option when sending out content for translation. For more information about this feature, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

To prevent the Connector from using any previous translations of the specified components that are stored in the local TM:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The **Advanced Settings** page opens. The **Skip Translation with LocalTM** section is in the middle of the page.

2. In the text box, enter either the names of the properties or component properties in the following formats:

▦ `propertyName`

▦ `componentPath|propertyName`

Notes: Use a comma (`,`) to separate multiple entries. Entries are not case sensitive.

3. Click **Save Configuration** to save your changes.

A message in red at the top of the page states that the configuration was saved.

5.15.8 Logging JCR Properties During Translation

In the **Log JCR Properties During Translation** section of the **Advanced Settings** page, you specify which JCR properties to write to the log file during translation.

To specify which JCR properties to write to the log file:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The **Advanced Settings** page opens, displaying the **Log JCR Properties During Translation** section in the middle of the page.

2. In the text box, enter the JCR properties to write to the log file during translation. Use a comma (**,**) separator to separate multiple JCR properties.

3. Click **Save Configuration** to save your changes.

    A message in red at the top of the page states that the configuration was saved.

5.15.9 Configuring which Metadata Fields Are Available for Translation and Copying

In the **Page Property Update Configuration** section of the **Advanced Settings** page, you can configure the Connector to translate and copy metadata fields to the **Page Property Updating** tab of the Globalization Tool.

To configure which metadata fields will be translated and copied:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The **Advanced Settings** page opens. In the **Page Property Update Configuration** section of this page, you can specify the parameters of the metadata fields that will be translated and copied to the **Page Property Updating** tab of the Globalization Tool.

2. To specify the parameters of the metadata fields to translate and copy:

   a. Click **Add**, in the top-right corner of this section.

      This adds a blank row at the top of the list.

   b. In this row, enter the following information:

Column	Description
Title	The title of the metadata field.
JCR Property	The JCR property of the metadata field, for example: `dc:title`.
Input Type	The type of metadata field.
Pre-Populating Value	The default value that will be displayed in the **Page Property Updating** tab of the Globalization Tool. Enter one value per line. ■ Supported format of value for selection is `Display Text|Value`, for example: `Machine Translation|MT`. ■ Supported tag of a value for date input: `{Today}`. ■ Supported tag of a value for date and time input: `{Now}`.

   For a list and description of JCR properties, refer to the Adobe Experience Manager documentation, which is available at: https://docs.adobe.com/docs/en/aem/6-2/develop/components.html.

   c. Repeat the previous sub-steps to add rows with additional metadata fields.

3. Click **Save Configuration** to save your changes.

   A message in red at the top of the page states that the metadata-field configuration was saved.

Tips: To edit a set of parameters, edit the corresponding information in the list. To delete a set of parameters, so that it is excluded from the list of metadata fields, click **Del** in the corresponding row. A message box confirms that you want to delete this field. Click **OK** to confirm.

5.15.10 Configuring which Page Metadata is Available for Copying and Translation

In the **Page Metadata Configuration** section of the **Advanced Settings** page, you can configure:

■ which metadata is available for copying to multiple pages, including multiple language copies of those pages, in the **Copy Metadata** tab of the Globalization Tool

■ which metadata is available to send out for translation by selecting the **Translate Metadata** check box in:

▦ the **Options** page of the Bulk Translation wizard
▦ the Translation Queue
▦ the **Translation** tab of the Globalization Tool
▦ the **Translation Options** tab of the Translate Content dialog box, available from the Touch-Optimized UI (Adobe Experience Manager version 6.3 and higher only
▦ the **LSP and Options** tab of the **Re-send translation job** dialog box

■ SEO flags to include in the XML translation files

For instructions on copying metadata and sending it for translation, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

For instructions on configuring which metadata of digital assets (DAM) is available for updating, including multiple language copies of those assets, see page 170.

To configure which metadata is available for copying and translation:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The **Advanced Settings** page opens. The **Page Metadata Configuration** section of this page lists the JCR properties that are available for selection in the **Copy Metadata** tab of the Globalization Tool, where you can copy metadata to multiple pages. You can also send these properties for translation, as described above.

2. To add the JCR properties as metadata available for selection to copy to multiple pages or to send for translation:

   a. Click **Add**, in the top-right corner of this section.

      This adds a blank row at the top of the list.

   b. In this row, enter the following information:

Column	Description
Title	The title of the metadata.
JCR Property	The JCR property of the metadata, for example: `jcr:title`.
Translation	Indicate whether the metadata is available only for copying or also for translation. Select one of the following: ■ `Yes`: The metadata is available for both translation and copying. ■ `No`: The metadata *is not* available for translation. It *is* available for copying.
SEO Flag	Specify the SEO flag to include in the XML translation files for this metadata. **Important:** To enable this feature, you must specify the **Indicate SEO field in translation file** option in the **UI and Default Settings** section of the **Configuration** page. For details, see "UI and Default Settings" on page 59.
Order	The order for copying or translating the metadata. This is the order in which the metadata is displayed in the file.

   For a list and description of JCR properties, refer to the Adobe Experience Manager documentation, which is available at: https://docs.adobe.com/docs/en/aem/6-2/develop/components.html.

   c. Repeat the previous sub-steps to add rows with additional metadata.

3. Click **Save Configuration** to save your changes.

A message in red at the top of the page states that the metadata configuration was saved.

Tips: To edit a JCR property, edit the corresponding information in the list. To delete a JCR property, so that it is excluded from the list of available metadata, click **Del** in the corresponding row. A message box confirms that you want to delete this field in the report. Click **OK** to confirm.

5.15.11 Configuring which Digital Asset Metadata is Available for Updating

In the **DAM Metadata Configuration** section of the **Advanced Settings** page, you can configure which metadata of digital assets (DAM) is available for updating, including multiple language copies of those assets, in the **DAM Metadata Update** tab of the Globalization Tool.

For instructions on updating metadata of digital assets, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

### To configure which metadata of digital assets is available for updating:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

The **Advanced Settings** page opens. In the **DAM Metadata Configuration** section of this page, you can enter the digital asset metadata fields that are available for selection in the **DAM Metadata Update** tab of the Globalization Tool, where you can update the metadata of multiple digital assets, including multiple language versions of these assets.

2. To add the JCR properties as metadata available for selection to update:

    a. Click **Add**, in the top-right corner of this section.

        This adds a blank row at the top of the list.

    b. In this row, enter the following information:

Column	Description
Title	The title of the DAM metadata.
JCR Property	The JCR property of the DAM metadata, for example: `dc:title`.
Input Type	The type of DAM metadata that is available for updating.
Pre-Populating Value	The default value for input or initial selection options. Enter one value per line. ■ Supported format of value for selection is `Display Text|Value`, for example: `Machine Translation|MT`. ■ Supported tag of a value for date input: `{Today}`. ■ Supported tag of a value for date and time input: `{Now}`.
Order	The order for updating the DAM metadata. This is the order in which the DAM metadata is displayed in the file.

    For a list and description of JCR properties, refer to the Adobe Experience Manager documentation, which is available at: https://docs.adobe.com/docs/en/aem/6-2/develop/components.html.

    c. Repeat the previous sub-steps to add rows with additional metadata.

3. Click **Save Configuration** to save your changes.

    A message in red at the top of the page states that the DAM metadata configuration was saved.

Tips: To edit a JCR property, edit the corresponding information in the list. To delete a JCR property, so that it is excluded from the list of available metadata, click **Del** in the corresponding row. A message box confirms that you want to delete this field in the report. Click **OK** to confirm.

5.15.12 Configuring Translation Settings for Catching Pages to the Translation Queue

In the **Configuration for Catching Published Pages to Queue** section of the **Advanced Settings** page, you specify the translation settings for published pages that you add to the Translation Queue, using one of the following features:

■ **Catch Published Workflow Pages to Queue**

■ **Catch Pages from Publish Event to Queue**

You specify both these features by selecting the corresponding check boxes in the **Translation Settings** section of the **Configuration** page. For more information about these features, see "Translation Settings" on page 49.

To configure the translation settings when sending published pages directly to the Translation Queue:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **Advanced Settings** page opens. The **Configuration for Catching Published Pages to Queue** section is near the bottom of the page.

2. Click **Add**.

   The section expands.
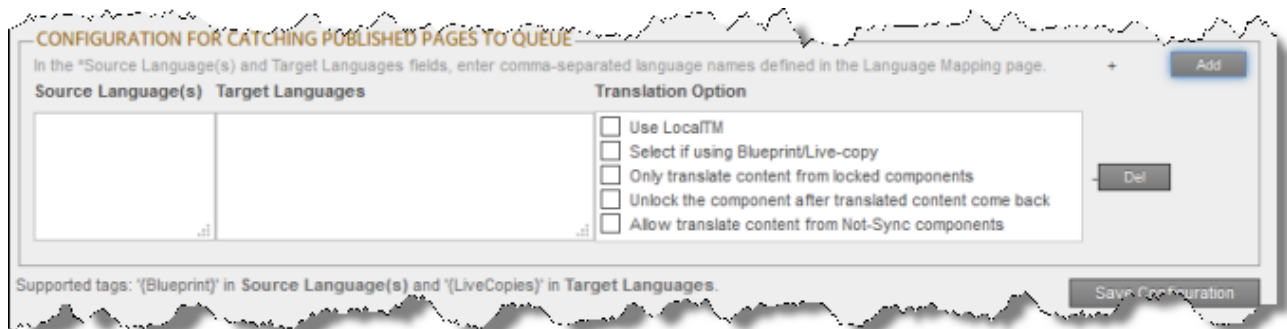
3. Specify the following translation settings for published pages that are added to the Translation Queue:

Field	Description
Source Language(s)	The source language(s) of the published pages to add to the Translation Queue. ▶ Enter comma-separated language names, as they are defined in the **Language Mapping** page, described in "Configuring Connector Languages" on page 83. ▶ To specify the source language that the Connector will detect from the relevant Blueprint pages, add the `{Blueprint}` tag.
Target Languages	The target languages into which to translate the published pages that are added to the Translation Queue. ▶ Enter comma-separated language names, as they are defined in the **Language Mapping** page, described in "Configuring Connector Languages" on page 83. ▶ To specify the target languages that the Connector will detect from the relevant live copies of Blueprint pages, add the `{LiveCopies}` tag.
Use LocalTM	This feature determines whether to check each component in the source version of the item for any content changes, and send only changed components out for translation. If a component was previously translated and it has not changed, then the Connector does not send it for translation again: Instead, it uses the stored translation. This feature reduces the quantity of content that the Connector sends to translation providers, which reduces your cost. However, it needs the Connector translation backup data, and it increases the Connector processing time before sending out the items for translation. ■ If this check box is selected, the Connector checks whether content was already translated before sending it out for translation. ■ If this check box is cleared, the Connector sends out content for translation without checking whether it has already been translated.

Field	Description
Select if using Blueprint/Live-copy	This option is relevant when the target pages are MSM (Multi Site Manager) live copy pages, which means that Adobe Experience Manager automatically updates a target page when the corresponding source page changes. It prevents the Connector from overwriting unique source content that already exists in the target pages.
	This is useful when you are sending a page for translation that has been used in the past to push content to other pages, and includes target page content which has been changed, for example, regionalized. In this scenario you do not want to overwrite the regionalized content as the translation process occurs. Select this option when you *do not* want the Connector to overwrite components in the target pages that include regionalized content with the newly translated content.
	■ If this check box is selected, the Connector *does not* overwrite unique source content that already exists in the target pages.
	■ If this check box is cleared, the Connector *does* overwrite unique source content that already exists in the target pages.
	Recommendation: Select this check box if you are using the live-copy feature.

Field	Description
Only translate content from locked components	This option enables users to send out only content from locked components for translation. ■ If this check box is selected, users can send out content for translation only if it is from a locked component. ■ If this check box is cleared, users can send out content for translation whether or not it is from a locked component. **Note:** Locked components have an inheritance relationship between a source Blueprint page and the connected live copy page. When sending content for translation using Sidekick, users can choose whether to send for translation the content from locked components, which is inherited from a Blueprint component. This is useful if, for example, the page has both global and regional information and you only want to translate (replace) the global content that is created via a Blueprint page. In this scenario, suppose that the regional content on the page is manually translated in house, and that it has not changed. You would not want to tamper with it. However, using the same scenario, the global content from head office *has* changed and needs translation. You would select this check box to separate the content and localize only the new, inherited content. **Note about Blueprint pages:** If the **Pickup Content From Blueprint Pages** setting is specified, then the Connector always acts as though this option is selected, even if it is not selected. This occurs because only content from locked components are rolled out from Blueprint pages to Livecopy pages. For more information, see "UI and Default Settings" on page 59.
Unlock the component after translated content come back	This option automatically unlocks a component after translated content returns. This option is relevant only when the **Select if using Blueprint/Live-copy** is been selected. After translated content returns, it automatically unlocks a component, which breaks the MSM inheritance. **Warning:** This breaks the inheritance between the component and its Blueprint page, so that it no longer inherits new content. However, you can use the `CTCRestoreOriginalSync` workflow to relock the component and recreate the inheritance. For details, see "Viewing the Restore Original Sync Workflow" on page 193. ■ If this check box is selected, the Connector automatically unlocks a component after translated content returns. ■ If this check box is cleared, the Connector does not automatically unlock a component after translated content returns.

Field	Description
Allow translate content from Not-Sync components	This option enables users to send content for translation even if it is not synchronized. This means it *does not* have a relationship to a Blueprint page, so it cannot be synchronized with it. This can happen if you are not using the MSM (Multi Site Manager) feature of Adobe Experience Manager, or if this is a page with regionalized content that does not inherit content from a Blueprint page. ■ If this check box is selected, users *can* send out content for translation if it does not have a relationship to a Blueprint page. ■ If this check box is cleared, users *cannot* send out content for translation if it does not have a relationship to a Blueprint page. **Important:** The Connector treats certain page properties (`jcr:content`, `jcr:title`, `jcr:description`) as *unlocked* page properties. Therefore, if you want the Connector to send these page properties for translation, you must select this check box. **Recommendation:** Select this check box if you are using either the live-copy or the language-copy features. **Note about Blueprint pages:** If the **Pickup Content From Blueprint Pages** setting is specified, then the Connector always acts as though this option is selected, even when it is not. This occurs because only content from locked components is rolled out from Blueprint pages to Livecopy pages. For more information, see "Enabling Content Collection from Blueprint Pages" on page 142.

4. Click **Save Configuration** to save your changes.

   A message in red at the top of the page states that the configuration was saved.

5.15.13 Configuring Paths for Catching Rollout Pages to the Translation Queue

In the **Configuration for Catching Rollout Pages to Queue** section of the **Advanced Settings** page, you can specify the paths to filter rollout pages to add to the Translation Queue.

Note: To enable the Connector to automatically add rollout pages to the Translation Queue, you must select the **Catch rollout pages to [rollout] queue** check box in the **Translation Settings** section of the **Configuration** page. For detailed instructions, see "Translation Settings" on page 49.

To specify the paths for filtering rollout pages to add directly to the Translation Queue:

1. Click **Admin Tools > Advanced Settings** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **Advanced Settings** page opens, displaying the **Configuration for Catching Rollout Pages to Queue** section near the bottom of the page.

2. In the text box, enter the live-copy paths to filter the rollout pages to catch and add to the Translation Queue, using the following formatting:

   ▥ Use a comma (,) separator to separate multiple paths.

   ▥ Use an asterisk (*) for to indicate a wildcard value in a path, for example: `*, /content/*, */LegalPage, */de/de/*`.

   ▥ Use an exclamation mark (!) prefix to indicate a path to exclude, for example: `!*/es/us/*`.

3. Click **Save Configuration** to save your changes.

   A message in red at the top of the page states that the configuration was saved.

6 Integrating the Connector with Adobe Experience Manager's Translation Integration Framework

This section describes how to integrate and configure Adobe Experience Manager's translation integration feature with the Connector. For detailed information about this feature, refer to the Adobe Experience Manager documentation, "Translating Content for Multilingual Sites," which is available at:

- version 6.2: http://docs.adobe.com/docs/en/aem/6-2/administer/sites/translation.html.

- version 6.3: http://docs.adobe.com/docs/en/aem/6-3/administer/sites/translation.html.

- version 6.4: https://docs.adobe.com/content/help/en/experience-manager-64/administering/introduction/translation.html.

- version 6.5: https://helpx.adobe.com/experience-manager/6-5/sites/administering/using/translation.html.

Note: For information on using this feature, refer to steps 4-6 in the Adobe documentation at the above link and "Using the Adobe Experience Manager Translation Integration Framework to Manage Translations" in the *Lionbridge Connector for Adobe Experience Manager User Guide*.

Important: When using the Connector with the Translation Integration Framework, the Connector's component-mapping, team-profiles, and language-mapping features are not available.

To integrate the Connector with Adobe Experience Manager's translation integration feature:

1. Unzip `ctc_data.zip`, and save it to a location on the file system that Adobe Experience Manager can access.

2. Install the Connector package. For detailed instructions, see "Installing the Lionbridge Connector" on page 22.

3. In Adobe Experience Manager, create a cloud configuration that connects to the Connector. For detailed instructions, see "Creating an Adobe Experience Manager Cloud Configuration for the Connector" on page 179.

4. In the Connector, configure the Connector for Adobe Experience Manager's Translation Integration feature. For detailed instructions, see "Configuring the Connector for the Translation Integration Framework" on page 181.

5. In the Connector, configure the translation provider and keys. For detailed instructions, see "Configuring LSP and Keys for the Translation Integration Framework" on page 182.

6. In the Connector, configure the Adobe Experience Manager team profile. For detailed instructions, see "Configuring an Adobe Experience Manager Team Profile for the Translation Integration Framework" on page 183.

7. In Adobe Experience Manager, edit the settings for your Lionbridge Connector cloud configuration. For detailed instructions, see "Editing Connector Cloud Configuration Settings" on page 183.

8. In Adobe Experience Manager, you create a translation integration configuration and edit its settings. This specifies the Adobe Experience Manager settings for translating your content. For detailed instructions, see "Creating a Translation Integration Configuration for the Connector" on page 185.

9. Optional. You can associate part of your web site (a page and descendent pages) with the Connector or with a specific Connector translation integration configuration. For detailed instructions, refer to "Configuring Pages for Translation" in the Adobe Experience Manager documentation at: http://docs.adobe.com/docs/en/aem/6-1/administer/sites/translation/tc-tic.html.

10. Optional. You can specify which content to translate. For detailed instructions, refer to "Identifying Content to Translate" in the Adobe Experience Manager documentation at: http://docs.adobe.com/docs/en/aem/6-1/administer/sites/translation/tc-rules.html.

6.1 Creating an Adobe Experience Manager Cloud Configuration for the Connector

Within Adobe Experience Manager's translation integration feature, you create a cloud configuration that connects to the Connector. Each configuration contains a set of Connector settings, which you will configure later. You can create multiple configurations. For example, you can create one configuration to send content to the Translation Queue, and you can created another configuration to send out content directly for translation. You can also create a different configuration for each translation provider.

To create a Connector configuration within Adobe Experience Manager's translation integration feature:

1. Do one of the following to open the **Adobe Cloud Services** page:

   ▤ In your Web browser, navigate to /etc/cloudservices.html in your Adobe Experience Manager instance.

   ▤ In the Touch-Optimized UI of Adobe Experience Manager, in the Adobe Experience Manager rail, either:

   ▦ Click **Tools > Operations > Cloud > Cloud Services** (Adobe Experience Manager versions 6.2-6.4).

   ▦ Click **Tools > Cloud Services > Legacy Cloud Services** (Adobe Experience Manager version 6.5).

The **Adobe Cloud Services** page opens.
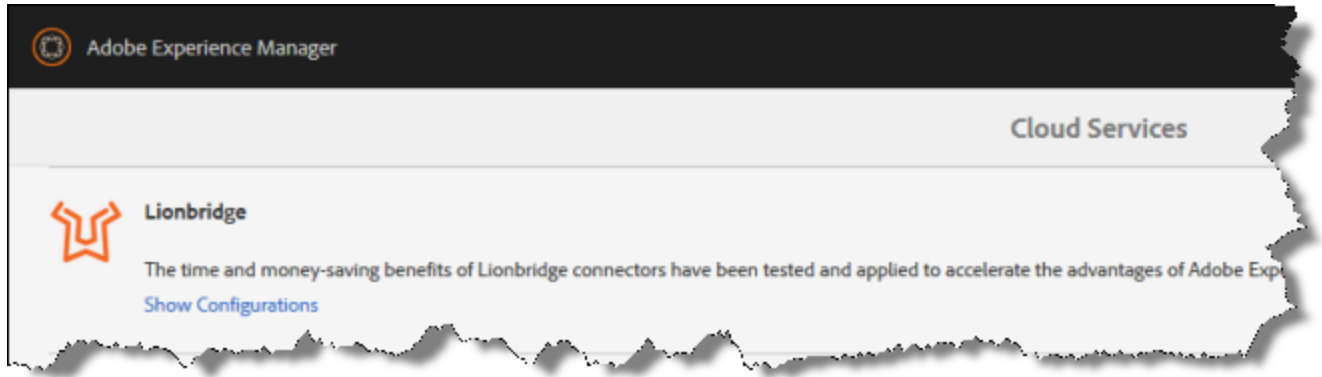
2. Create a cloud configuration that connects Adobe Experience Manager to the Lionbridge Connector:

   a. If you are using Adobe Experience Manager version 6.5, scroll down to the **Third Party Services** section at the bottom of the page.

   b. Scroll down to locate the **Lionbridge** entry.

   c. Click **Show Configurations**.

   d. Click the plus icon to create a new configuration.

      The **Create Configuration** dialog box opens.
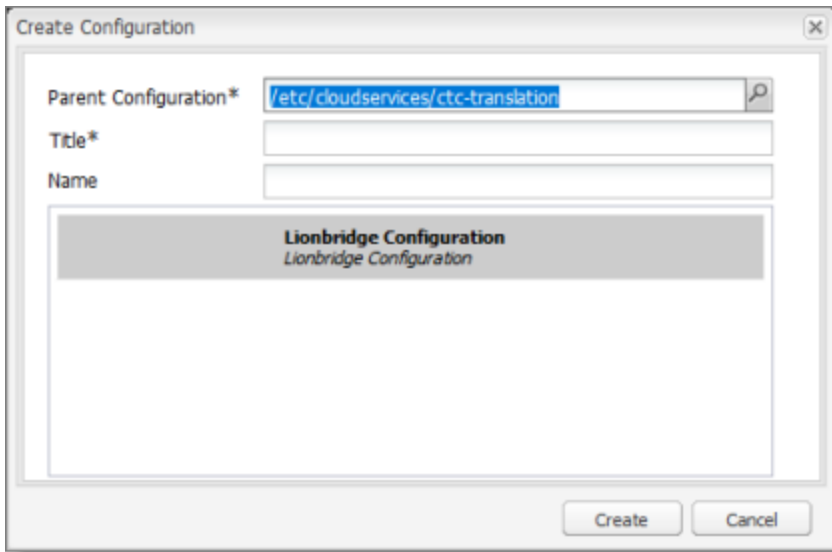
   e. In the **Title** field, enter a descriptive name to identify this configuration. For example, if you will use this configuration to send content directly to the **Translation Queue**, you can call this `queue`.

      Important: Do not modify the value in the **Parent Configuration** field.

   f. Click **Create** to save your changes.

The **Lionbridge Settings** page opens for the configuration you just created.
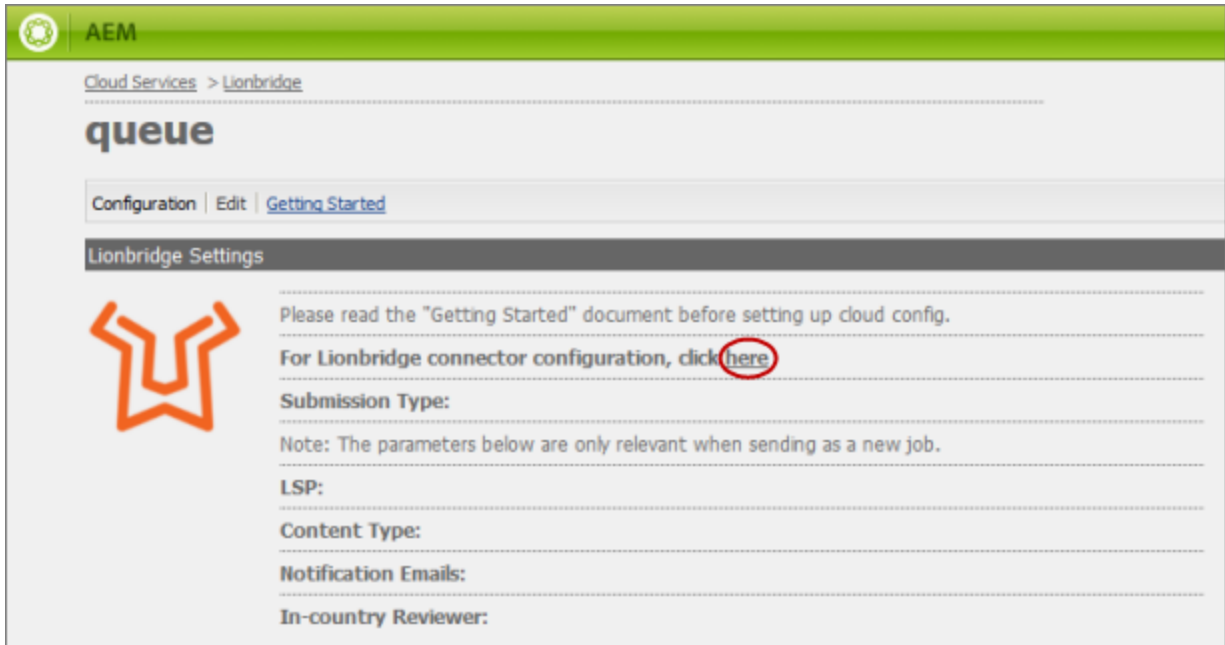
g. Click the following link to open the Connector's **Configuration** page: **For Lionbridge connector configuration, click here**, as shown above.

For detailed instructions on configuring the Connector on the **Configuration** page for Adobe Experience Manager's translation integration feature, see "Configuring the Connector for the Translation Integration Framework" on page 181.

6.2 Configuring the Connector for the Translation Integration Framework

For each Connector configuration that you create within Adobe Experience Manager's translation integration feature, you configure the Connector on its **Configuration** page:

To configure the Connector:

1. If the Connector's Configuration page is not already open, then open it. Either:

   ▥ Click the **here** link in the **Lionbridge Settings** page for the configuration you just created, as described at the end of "Creating an Adobe Experience Manager Cloud Configuration for the Connector" on page 179.

   ▥ In the Lionbridge Connector rail, click **Admin Tools > Configuration**.

   The **Configuration** page opens.

2. Scroll down to the **Translation Platform** section. In the **License ID** field, enter one of the following:

   ▦ the license uuid, sent by email

   ▦ the license ID from the `License_ID.txt` file in the package you downloaded

   For more information about this section of the Configuration page, see "Translation Platform" on page 42.

3. In the **JDBC SQL Connection** section:

   a. Enter the JDBC URL and login credentials.

   b. Click **Test** to verify the JDBC connection and credentials.

   After testing, a message box indicates whether your configuration passed the test.

   For more information about this section of the Configuration page, see "JDBC SQL Connection" on page 42.

4. In the **Folder and Permission** section:

   a. In the **Data Folder** field, enter the path to the location where you extracted `ctc_data.zip`, in step 1 of "Integrating the Connector with Adobe Experience Manager's Translation Integration Framework" on page 178.

   b. Click **Test** to verify that this path is correct.

   After testing, a message box indicates whether your configuration passed the test.

   For more information about this section of the Configuration page, see "Folder and Permissions" on page 47.

5. At the bottom of the page, click **Save Configuration**.

6.3 Configuring LSP and Keys for the Translation Integration Framework

You configure the translation providers and Clay Tablet Platform for Adobe Experience Manager translation integration. This supports selecting a translation provider from within the Adobe Experience Manager translation framework.

To configure keys for Adobe Experience Manager integration:

1. In the Lionbridge Connector rail, click **Admin Tools > LSP and Keys** to open the **LSP & Keys** page.

2. In the **LSP and License Keys** section, click **Add**.

3. In the **LSP Name** field, enter the name of the translation provider. For example, enter `MT`.

4. In the **LSP Type** dropdown list, select your translation provider, if displayed. If your translation provider is not displayed, then select `Generic`.

5. Next to the **License Key** dropdown list, click **Retrieve**.

6. Select the license key for the translation provider.

7. Click **Add**. This updates the **Name**, **Source Account**, and **Platform Account** columns in the **LSP and License Keys** section.

For more detailed instructions, see "Adding a New License Key" on page 101.

6.4 Configuring an Adobe Experience Manager Team Profile for the Translation Integration Framework

You configure an Adobe Experience Manager team profile for Adobe Experience Manager translation integration. This enables users in the team to access the Adobe Experience Manager translation framework.

To configure keys for Adobe Experience Manager integration:

1. In the Lionbridge Connector rail, click **Admin Tools > Team Profiles** to open the **Team Profiles** page.

2. In the **Name** field, enter a name for this team profile.

3. In the **Source Language** column, select the check box for the source language.

4. In the **Target Language** column, select the check box(es) for the target language(s).

5. In the **LSP** column, select the `MT` check box.

6. In the **Adobe Experience Manager Users** column, select the `admin` check box.

7. In the **Adobe Experience Manager Groups** column, select the `administrators` check box.

8. Click **Save**.

For more information about the Team Profiles page, see "Configuring Team Profiles" on page 110.

6.5 Editing Connector Cloud Configuration Settings

In Adobe Experience Manager, you edit the settings for your Connector cloud configuration that you created in "Creating an Adobe Experience Manager Cloud Configuration for the Connector" on page 179.

1. Do one of the following to return to the **Adobe Cloud Services** page:

- In your Web browser, navigate to `/etc/cloudservices.html` in your Adobe Experience Manager instance.

- In the Touch-Optimized UI of Adobe Experience Manager, click **Tools > Operations > Cloud > Cloud Services** in the Adobe Experience Manager rail.

2. Under **Lionbridge**, click **Show Configurations**.

3. Click the link for the configuration you created earlier.

4. At the top of the page that opens, click **Edit**.

   The **Edit Component – Lionbridge Translation Settings** dialog box opens.
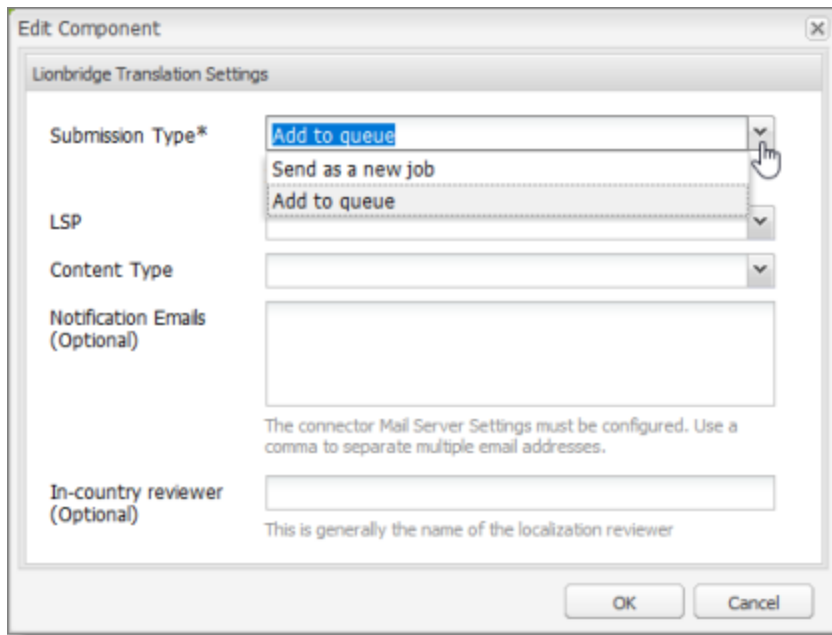
5. Enter values for the following settings:

Setting	Description
Submission Type	Select one of the following options: ■ `Add to queue`: The Connector adds the specified pages to the Translation Queue. In the Translation Queue, you can group items together by project, priority, and target language, and you can require additional approval before sending items out for translation. ■ `Send as a new job`: The Connector immediately sends out the specified pages for translation as a new translation job, according to your company's routing rules and the options you specify below.

Setting	Description
The remaining settings are relevant only if **Submission Type**, above, is `Send as a new job.` Specify the appropriate settings for your company.	
LSP	Select the translation provider for your translation jobs.
Content Type	You can tag the content in a translation job as a specific content type. Depending on your company's configuration, the Clay Tablet Platform may send the content to a specific translation provider based on the content type. Select one of the following content types: ■ Marketing ■ Technical ■ Legal **Note:** You may see different content types if your company has configured custom content types.
Notification Emails	Enter one or more email addresses that will receive notification when the content leaves Adobe Experience Manager and when it returns to Adobe Experience Manager. Use a comma to separate multiple email addresses.
In-country Reviewer	Optional. This is generally the name of the localization reviewer, which is stored in the `InCountryReviewer` attribute in the XML sent to the translation provider. By default, this field is hidden.

6. Click **OK** to save your changes and close the dialog box.

6.6 Creating a Translation Integration Configuration for the Connector

In Adobe Experience Manager, you create a translation integration configuration and edit its settings. These are the Adobe Experience Manager settings for how to translate your content. You can create multiple configurations, for example, if you have different translation providers for different sites, or if there are different kinds of content that you want to send out for translation for different sites.

To creating a translation integration configuration for the Connector:

1. Do one of the following to return to the **Adobe Cloud Services** page:

▦ In the configuration page (described in "Editing Connector Cloud Configuration Settings" on page
183), click the **Cloud Services** link in the top-left corner of the page.
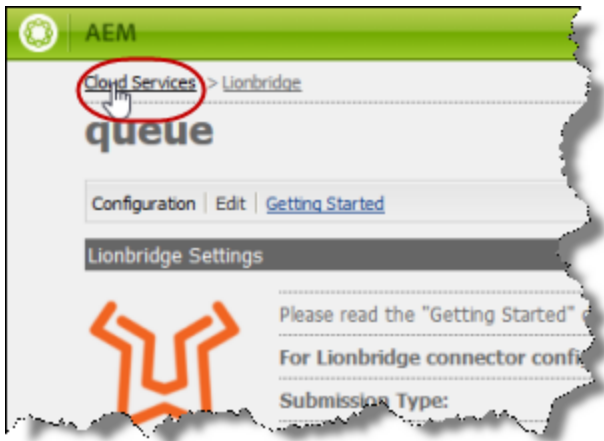
▦ In your Web browser, navigate to `/etc/cloudservices.html` in your Adobe Experience
Manager instance.

▦ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools > Operations > Cloud >
Cloud Services** in the Adobe Experience Manager rail.

2. Under **Translation Integration**, click **Show Configurations**.
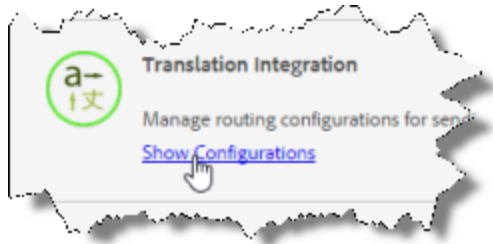
3. Click the plus sign beside **Available Configurations** to add a new configuration for the Lionbridge
Connector.

The **Create Configuration** dialog box opens.
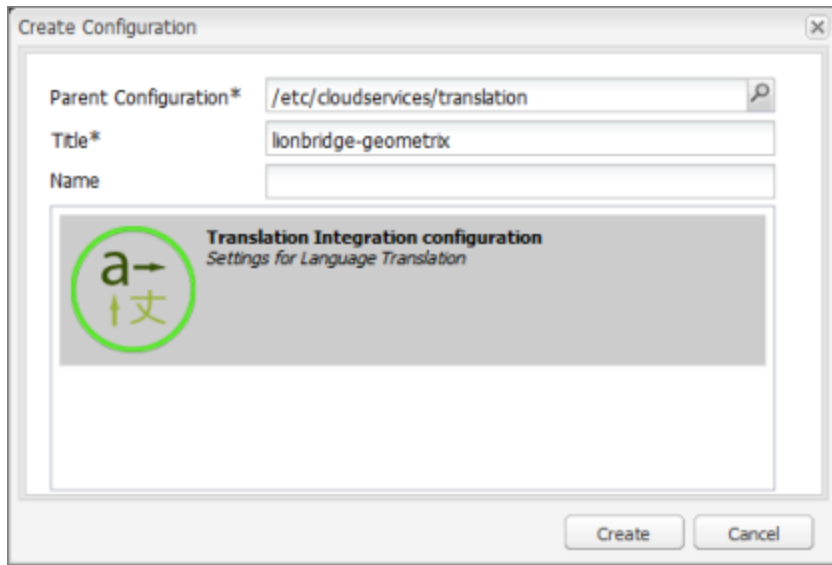
4. In the **Title** field, enter a descriptive title that includes both Lionbridge and the site, for example,
`lionbridge-geometrix`, and then click **Create**.

The **Translation Config** dialog box opens.
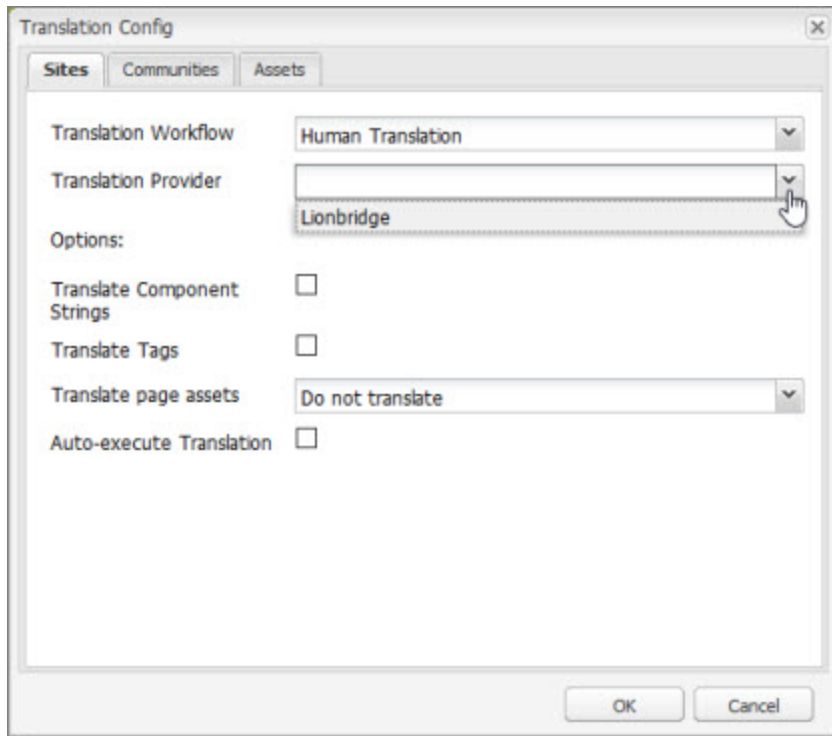
5. In the **Sites** tab:

   ▦ For **Translation Workflow**, select `Human Translation`.

   ▦ For **Translation Provider**, select `Lionbridge`. This name identifies the Connector in the Adobe
   Experience Manager translation integration framework.

   Note about Assets tab: Adobe Experience Manager extracts text associated with metadata into
   an XML file, which the Connector processes. Some translation providers, such as MT, may not support
   translating these files.

   For descriptions of the other fields and tabs, refer to "Creating a Translation Integration Configuration" in
   the Adobe Experience Manager documentation:

   ▦ version 6.2: http://docs.adobe.com/docs/en/aem/6-2/administer/sites/translation/tc-tic.html

   ▦ version 6.3: http://docs.adobe.com/docs/en/aem/6-3/administer/sites/translation/tc-tic.html

   ▦ version 6.4: https://docs.adobe.com/content/help/en/experience-manager-
   64/administering/introduction/tc-tic.html

   ▦ version 6.5: https://helpx.adobe.com/experience-manager/6-5/sites/administering/using/tc-tic.html

6. Click **OK** to close the dialog box.

7 Integrating the Connector with Adobe Experience Manager Workflows

This section is optional. The core Connector workflow package includes the
`CTCRestoreOriginalSync` and `CTCRolloutTranslation` workflows. If you want to use
the `Sample_CT_Workflow_Translation` workflow, you install the optional workflow package.

Workflow	Description
CTCRestoreOriginalSync	If the **Leave component unlock after putting back translated content** is specified, you can run this workflow to lock components and restore their original inheritance. This workflow does not require installation or customization. For a description of this workflow, see page 193.
CTCRolloutTranslation	This is the sample workflow for sending out files for translation when you roll out files. If you use this method to set up the rollout integration with the Connector, you include this workflow in your own rollout configuration. This workflow does not require installation or customization. For a description of this workflow, see page 192. **Note:** Alternatively, you can use the **Catch rollout pages to [Rollout] Queue** setting in the Translation Settings section of the Configuration page to set up the rollout integration with the Connector. For details, see "Translation Settings" on page 49. For more information on configuring this feature, see page 135.
Sample_CT_Workflow_ Translation	You can use the Sample_CT_Workflow_Translation workflow to send a page to the Translation Queue. You can customize this workflow. ■ For instructions on installing this workflow, see page 189. ■ For instructions on customizing this workflow, see page 190.

7.1 Installing the Optional Workflow Package

1. To install the optional workflow package, so that you can use the `Sample_CT_Workflow_ Translation` workflow, do one of the following:

   ▦ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience Manager rail, and then click **Deployment**. Then, in the **Navigation** page, click **Packages**.

   ▦ In the Classic UI of Adobe Experience Manager, scroll down and click **Packages** in the right pane.

   ▦ In your Web browser, navigate to `/crx/packmgr/index.jsp` on your Adobe Experience Manager instance.

The **CRX Package Manager** opens.
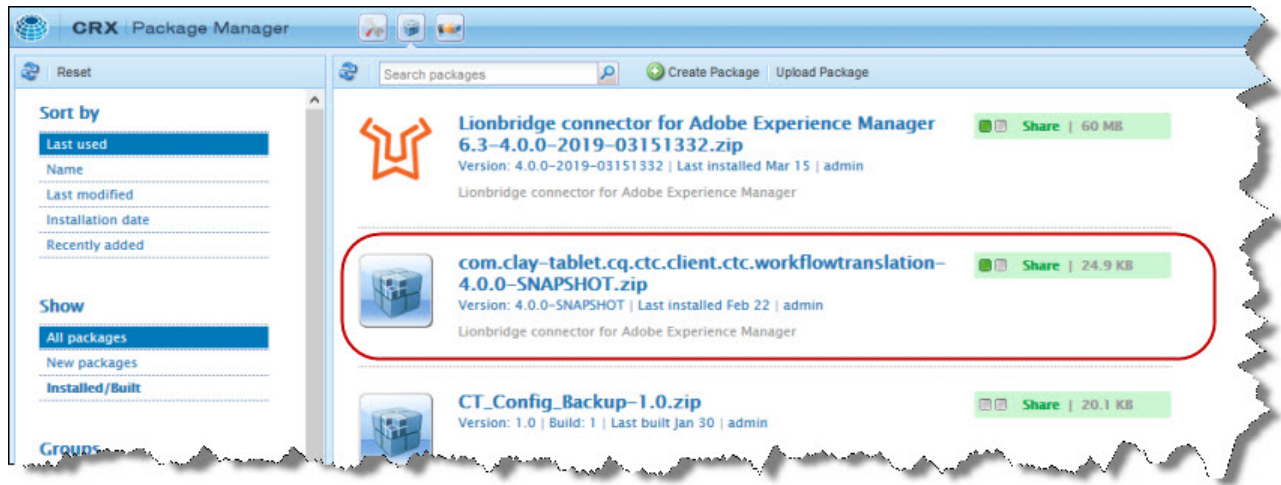
2. Click the Clay Tablet Sample Workflow package, and follow the on-screen instructions to install it.

3. After the package is installed, do one of the following to open the **AEM WCM** page:

   ▦ In the Touch-Optimized UI of Adobe Experience Manager, click **Tools** in the Adobe Experience
   Manager rail. Then, in the **CQ Operations** section, click **Workflows**.

   ▦ In the Classic UI of Adobe Experience Manager, click **Workflows** in the right pane.

   ▦ In your Web browser, navigate to `/libs/cq/workflow/content/console.html` on
   your Adobe Experience Manager instance.

   The workflows you installed are displayed in the page.

4. To customize a workflow, click to select it, and then right-click and select **Edit** from the context menu.

   Tip: To locate the `Sample_CT_Workflow_Translation` workflow , click the Next Page button
   ▶ .

For instructions on customizing the `Sample_CT_Workflow_Translation` workflow, see page
190.

7.1.1 Customizing the Standard Translation Workflow

You can customize the `Sample_CT_Workflow_Translation` workflow, which you can use to
send a page to the Translation Queue.

1. Open the **AEM WCM** page, as described on page 189.

2. Locate the `Sample_CT_Workflow_Translation` workflow. Click to select it, and then right-
   click and select **Edit** from the context menu.

Tip: To locate the `Sample_CT_Workflow_Translation` workflow , click the Next Page button
▶ .

The workflow opens in a new browser tab.
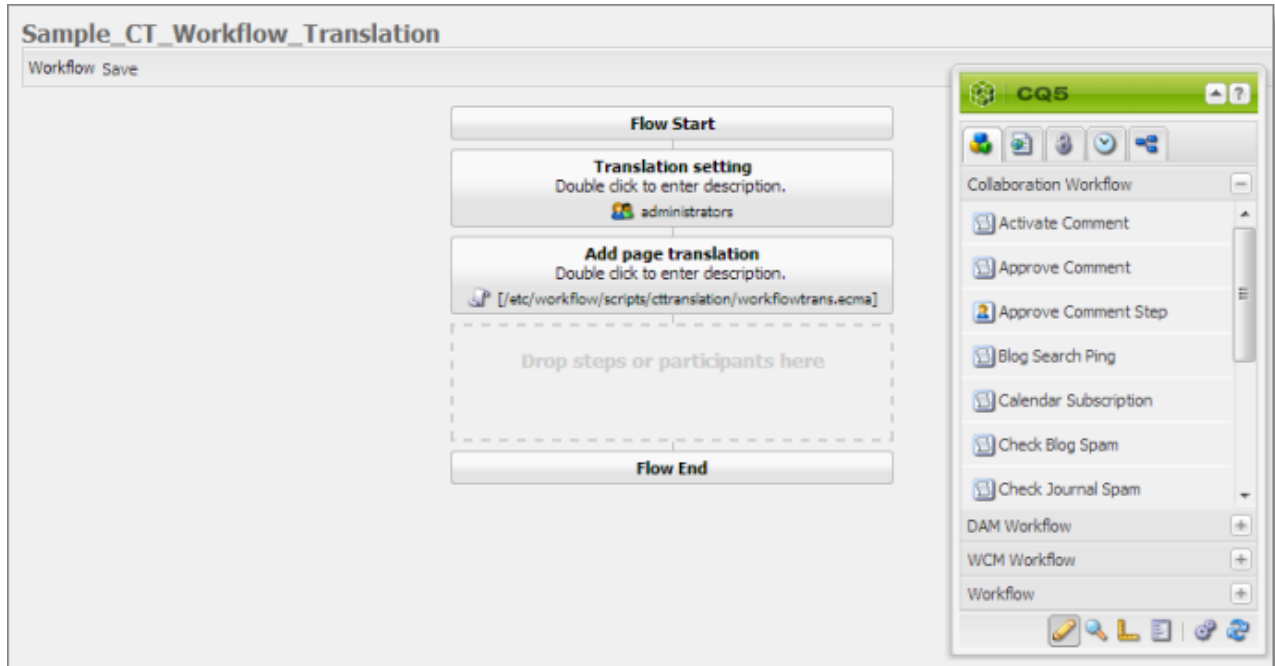
By default, this workflow includes the following two steps, which are required to integrate Adobe
Experience Manager with the Connector processes:

⋮ **Translation setting:** This is a *participant* type of workflow step, where a user must specify some
translation settings and can enter comments.

⋮ **Add page translation:** This is a *process* type of workflow step, where Connector retrieves
translation settings from the previous step and adds page translation properties.

Warning: Do not modify these steps, except for the titles. Otherwise the Connector integration with the
Adobe Experience Manager workflow may not work properly.

You can add additional steps as needed to meet your company's business requirements. For detailed
instructions on setting up workflows, refer to the Adobe Experience Manager workflow documentation,
available at: https://helpx.adobe.com/experience-manager/6-5/sites/administering/using/workflows-
starting.html.

7.2 Viewing the Rollout Workflow

You can add the `CTCRolloutTranslation` workflow to your custom rollout configuration to integrate the Connector with rollout. This is the configuration method to use when you want the Connector to send only some rollout files to the Translation Queue.

Note: Alternatively, you can use the **Catch rollout pages to [Rollout] Queue** setting in the Translation Settings section of the Configuration page to enable this functionality, as described in "Translation Settings" on page 49. This option is the configuration method to use when you want the Connector to send out all rollout files to the Translation Queue. For more information about configuring this feature, see page 135.

1. Open the **AEM WCM** page, as described on page 189.

2. Locate the `CTCRolloutTranslation` workflow. Click to select it, and then right-click and select **Edit** from the context menu.

   The workflow opens in a new browser tab.
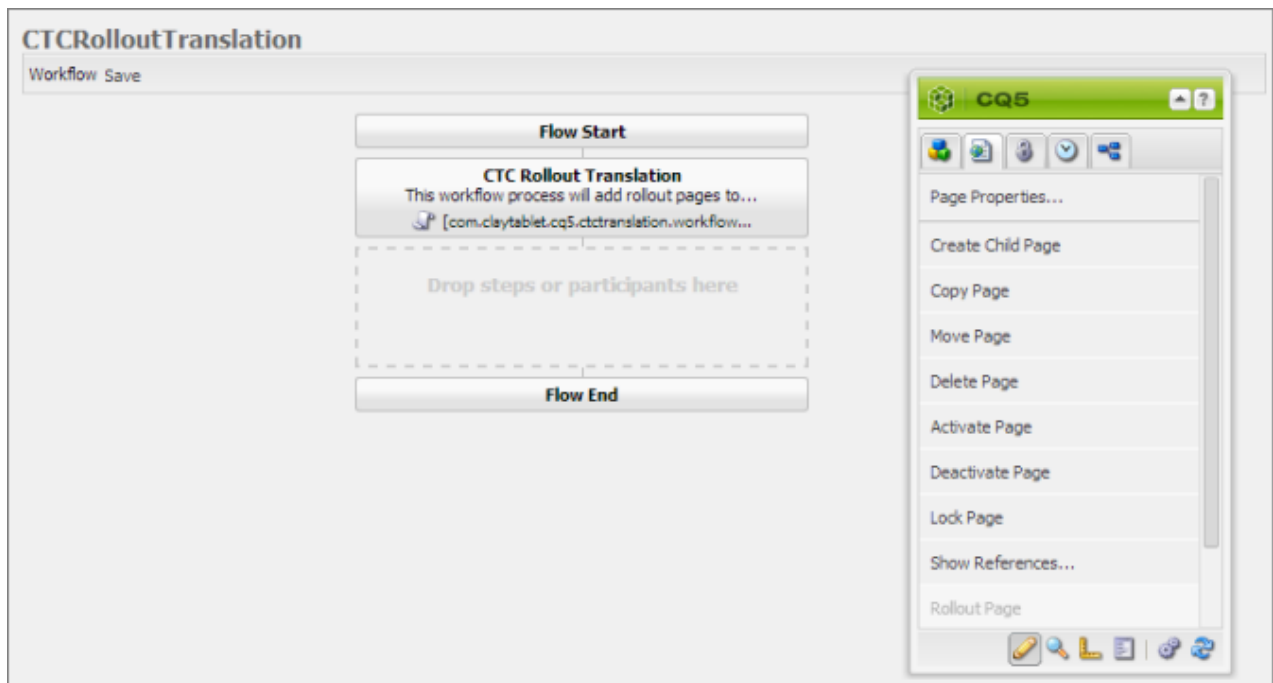
By default, this workflow includes the **CTC Rollout Translation** step, which is required to integrate Adobe Experience Manager with the Connector processes. This is a *process* type of workflow step, where Connector adds rollout pages to the Translation Queue.

Warning: Do not modify this step, except for the title. Otherwise the Connector integration with the Adobe Experience Manager workflow may not work properly.

7.3 Viewing the Restore Original Sync Workflow

You can view the `CTCRestoreOriginalSync` workflow. After users send out components for translation, they can use this workflow to relock them to restore their original inheritance.

1. Open the **AEM WCM** page, as described on page .

2. Locate the `CTCRestoreOriginalSync` workflow. Click to select it, and then right-click and select **Edit** from the context menu.

The workflow opens in a new browser tab.
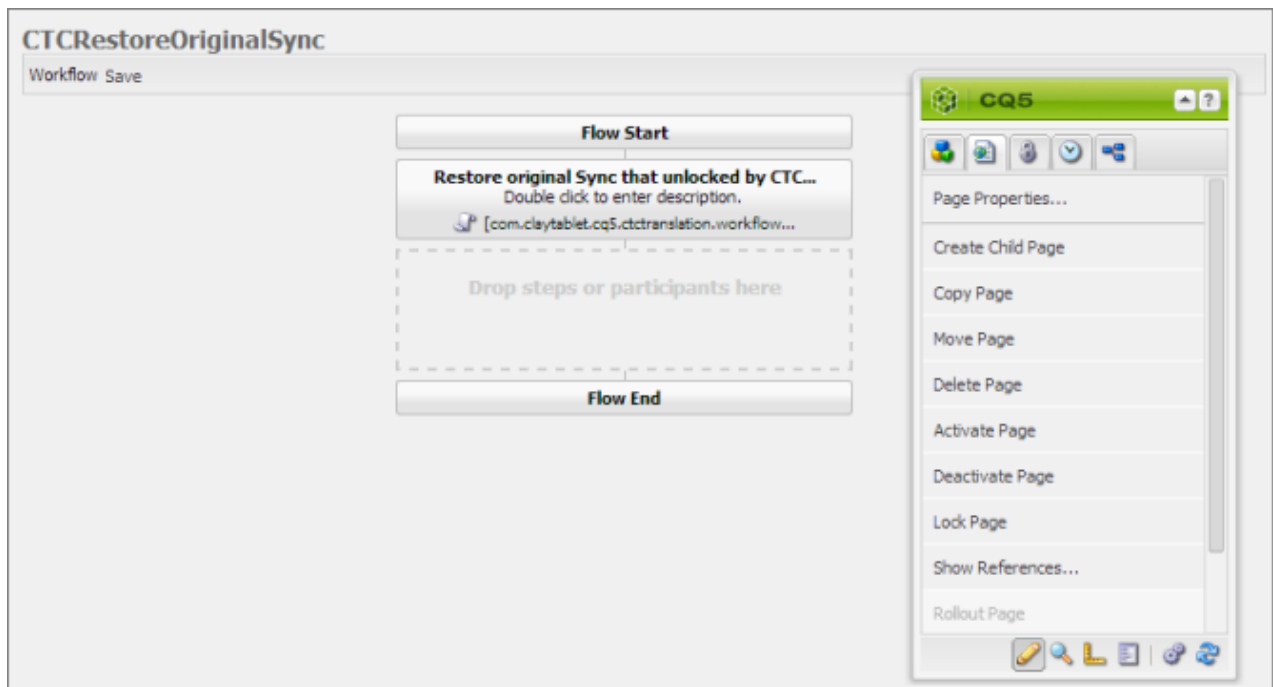
By default, this workflow includes the **Restore original Sync that unlocked by CTC translation** step, which is required to integrate Adobe Experience Manager with the Connector processes. This is a *process* type of workflow step, where Connector relocks components and restores their original inheritance.

Warning: Do not modify this step, except for the title. Otherwise the Connector integration with the Adobe Experience Manager workflow may not work properly.

8 Implementing an Event Listener to Catch Translation Events

The Connector fires events for translation-related actions. You can create an event handler to receive these events, and you can take action when these events occur.

Translation events

There are seven Connector translation events defined in the following class:

`com.claytablet.cq5.ctctranslation.Events.EventDetailType`

```
package com.claytablet.cq5.ctctranslation.Events;
public enum EventDetailType {
  QueueApproved,
  QueuePrepared,
  SentOut,
  Reached_Platform,
  StartedTranslation,
  ReceivedTranslationBack,
  CompletedTranslationProcess
}
```

Event topics

An *Event Topic* is `com/claytablet/TRANSLATION`, defined in the

`com.claytablet.cq5.ctctranslation.Events.TranslationEvent` class, which can be used as:

`com.claytablet.cq5.ctctranslation.Events.TranslationEvent.EVENT_TOPIC.`

Creating an event handler:

1. To retrieve a translation event, use:
   ```
   TranslationEvent translationEvent = TranslationEvent.fromEvent
   (Event event);
   ```

2. To retrieve a translation event type, use:

```
EventDetailType eventType = translationEvent.getEventDetailType
();
```

Event listener sample code

Note:. The following sample code is also included in the following package, which is in the following location in CRXDE Lite:
/apps/CTEventHanlder/src/impl/src/main/java/com/testguru/ctevents/hanlder/CTEventHanlder/impl/CTEventsHanlderImpl.java. You can install this package using the CRX Package Manager. For detailed instructions on using the CRX Package Manager, see "Installing the Lionbridge Connector" on page 22.

```
package com.testguru.ctevents.handler.CTEventHandler.impl;


import java.io.File;

import java.util.Iterator;

import org.apache.commons.io.FileUtils;

import org.apache.sling.event.EventUtil;

import org.osgi.service.component.ComponentContext;

import org.osgi.service.event.Event;

import org.osgi.service.event.EventConstants;

import org.osgi.service.event.EventHandler;

import com.claytablet.cq5.ctctranslation.Utils.IdGenerator;

import com.claytablet.cq5.ctctranslation.service.CTLogService;

import
com.claytablet.cq5.ctctranslation.service.ctcdata.PreparedItem;

import com.claytablet.cq5.ctctranslation.service.ctcdata.Queue;

import
com.claytablet.cq5.ctctranslation.service.ctcdata.TranslatedItem;

import
com.claytablet.cq5.ctctranslation.service.ctcdata.TranslationItem;

import com.claytablet.cq5.ctctranslation.Events.TranslationEvent;

import
com.claytablet.cq5.ctctranslation.Events.ApprovedQueueDetails;

import com.claytablet.cq5.ctctranslation.Events.EventDetailType;
```

```java
import
com.claytablet.cq5.ctctranslation.Events.PageTranslationInfo;
import
com.claytablet.cq5.ctctranslation.Events.PreparedQueueDetails;
import
com.claytablet.cq5.ctctranslation.Events.TranslationItemDetails;
import
com.claytablet.cq5.ctctranslation.Events.TranslatedItemDetails;


/**
*
* @scr.component enabled="true" immediate="true" policy="ignore"
* @scr.service interface="EventHandler"
* @scr.property name="event.topics"
valueRef="TranslationEvent.EVENT_TOPIC"
*/
public class CTEventsHandlerImpl implements EventHandler {

  /**
  * @scr.reference policy="static"
  */
  private CTLogService ctcLogService;

  public void activate(ComponentContext context) {

    ctcLogService.LogDebug("[CTEventsHandler] activated.");
  }
  public void deactivate(ComponentContext context) {
    ctcLogService.LogDebug("[CTEventsHandler] de-activated.");
  }

  public void handleEvent(Event event)
  {
```

```
ctcLogService.LogRolloutDebug("[CTEventsHandler] handleEvent
        called ...Start");
try
{

  ctcLogService.LogDebug("[CTEventsHandler] Get a event: " +
  event.getTopic
            ());
    if (EventUtil.isLocal(event) )
    {

      try
      {
        TranslationEvent translationEvent =
        TranslationEvent.fromEvent
                (event);
        if (translationEvent != null)
        {

          EventDetailType eventType =
          translationEvent.getEventDetailType();
          PageTranslationInfo pageTranslationInfo =
                  translationEvent.getPageTranslationInfo();
          if (pageTranslationInfo == null)
                  ctcLogService.LogError("[CTEventsHandler] got
                  PageTranslationInfo object as NULL.");
          else
          {
            ctcLogService.LogDebug("[CTEventsHandler] got
            TranslationJob
                    name: " +
                    pageTranslationInfo.getTranslationJob
                    ().getJobName());
```

```
ctcLogService.LogDebug("[CTEventsHandler]
TranslationJob

      submitted by: " +

      pageTranslationInfo.getTranslationJob
      ().getSubmitBy());
ctcLogService.LogDebug("[CTEventsHandler] got
SourcePagePath: "

      + pageTranslationInfo.getSourcePagePath());
ctcLogService.LogDebug("[CTEventsHandler] got

      SourcePageLanguage: " +

      pageTranslationInfo.getSourcePageLanguage());
ctcLogService.LogDebug("[CTEventsHandler] got
TargetPagePath: "+

      pageTranslationInfo.getTargetPagePath() );
ctcLogService.LogDebug("[CTEventsHandler] got

      TargetPageLanguage: "+

      pageTranslationInfo.getTargetPageLanguage()
      );

}
if (eventType == EventDetailType.QueueApproved)
{
  ctcLogService.LogDebug("[CTEventsHandler] is a
  QueueApproved

      event.");
  ApprovedQueueDetails approvedQueueDetails =

      translationEvent.getApprovedQueueDetails();
  if (approvedQueueDetails == null)

    ctcLogService.LogError("[CTEventsHandler] got

      ApprovedQueueDetails object as NULL.");
  else
  {

    Queue approvedQueue =
    approvedQueueDetails.getQueue();
```

```
      if (approvedQueue == null)
        ctcLogService.LogError("[CTEventsHandler] got
        Queue object
          as NULL.");
      else
        ctcLogService.LogDebug("[CTEventsHandler] got
        total words:
          " + approvedQueue.getCountedWords());
    }


  }
  else if (eventType == EventDetailType.QueuePrepared)
  {
    ctcLogService.LogDebug("[CTEventsHandler] is a
    QueuePrepared
          event.");
    PreparedQueueDetails preparedQueueDetails =
          translationEvent.getPreparedQueueDetails();
    if (preparedQueueDetails == null)
      ctcLogService.LogError("[CTEventsHandler] got
          preparedQueueDetails object as NULL.");
    else
    {
      PreparedItem preparedItem =
          preparedQueueDetails.getPreparedItem();
      if (preparedItem == null)
        ctcLogService.LogError("[CTEventsHandler] got
        PreparedItem
          object as NULL.");
      else
        ctcLogService.LogDebug("[CTEventsHandler] got
        total EST
          words: " + preparedItem.getEstWords());
```

```
          }
        }
        else if (eventType == EventDetailType.SentOut)
        {
          ctcLogService.LogDebug("[CTEventsHandler] is a
          SentOut event.");
          TranslationItemDetails translationItemDetails =
                translationEvent.getTranslationItemDetails();
          if (translationItemDetails == null)
            ctcLogService.LogError("[CTEventsHandler] got
                TranslationItemDetails object as NULL.");
          else
          {
            TranslationItem translationItem =
                translationItemDetails.getTranslationItem();
            if (translationItem == null)
              ctcLogService.LogError("[CTEventsHandler] got
                TranslationItem object as NULL.");
            else
              ctcLogService.LogDebug("[CTEventsHandler] got
              status
                percentage: " +
                translationItem.getItemPercentage());
          }
        }
        else if (eventType == EventDetailType.Reached_
        Platform)
        {
          ctcLogService.LogDebug("[CTEventsHandler] is a
          Reached_Platform
                event.");
          TranslationItemDetails translationItemDetails =
                translationEvent.getTranslationItemDetails();
```

```
if (translationItemDetails == null)
  ctcLogService.LogError("[CTEventsHandler] got
      TranslationItemDetails object as NULL.");
else
{
  TranslationItem translationItem =
      translationItemDetails.getTranslationItem();
  if (translationItem == null)
    ctcLogService.LogError("[CTEventsHandler] got
      TranslationItem object as NULL.");
  else
    ctcLogService.LogDebug("[CTEventsHandler] got
    status
      percentage: " +
      translationItem.getItemPercentage());
  }
}
else if (eventType ==
EventDetailType.StartedTranslation)
{
  ctcLogService.LogDebug("[CTEventsHandler] is a
      StartedTranslation event.");
  TranslationItemDetails translationItemDetails =
      translationEvent.getTranslationItemDetails();
  if (translationItemDetails == null)
    ctcLogService.LogError("[CTEventsHandler] got
      TranslationItemDetails object as NULL.");
  else
  {
    TranslationItem translationItem =
      translationItemDetails.getTranslationItem();
    if (translationItem == null)
```

```
      ctcLogService.LogError("[CTEventsHandler] got
      TranslationItem object as NULL.");
    else
      ctcLogService.LogDebug("[CTEventsHandler] got
      status
      percentage: " +
      translationItem.getItemPercentage());
  }
}
else if (eventType ==
EventDetailType.ReceivedTranslationBack)
{
  ctcLogService.LogDebug("[CTEventsHandler] is a
      ReceivedTranslationBack event.");
  TranslationItemDetails translationItemDetails =
      translationEvent.getTranslationItemDetails();
  if (translationItemDetails == null)
    ctcLogService.LogError("[CTEventsHandler] got
      TranslationItemDetails object as NULL.");
  else
  {
    TranslationItem translationItem =
      translationItemDetails.getTranslationItem();
    if (translationItem == null)
      ctcLogService.LogError("[CTEventsHandler] got
      TranslationItem object as NULL.");
    else
      ctcLogService.LogDebug("[CTEventsHandler] got
      status
      percentage: " +
      translationItem.getItemPercentage());
  }
```

```
TranslatedItemDetails translatedItemDetails =
    translationEvent.getTranslatedItemDetails();
if (translatedItemDetails == null)
  ctcLogService.LogError("[CTEventsHandler] got
    TranslatedItemDetails object as NULL.");
else
{
  TranslatedItem translatedItem =
    translatedItemDetails.getTranslatedItem();
  if (translatedItem == null)
    ctcLogService.LogError("[CTEventsHandler] got
    TranslatedItem object as NULL.");
  else
    ctcLogService.LogDebug("[CTEventsHandler] got
    totsl
    translated fields: " +
    translatedItem.getTranslatedPageContent
    ().getPropertyContents().size());
  }
}
else if (eventType ==
    EventDetailType.CompletedTranslationProcess)
{
  ctcLogService.LogDebug("[CTEventsHandler] is a
    CompletedTranslationProcess event.");
  TranslationItemDetails translationItemDetails =
    translationEvent.getTranslationItemDetails();
  if (translationItemDetails == null)
    ctcLogService.LogError("[CTEventsHandler] got
    TranslationItemDetails object as NULL.");
  else
  {
```

```
TranslationItem translationItem =
    translationItemDetails.getTranslationItem();
if (translationItem == null)
  ctcLogService.LogError("[CTEventsHandler] got
    TranslationItem object as NULL.");
else
  ctcLogService.LogDebug("[CTEventsHandler] got
    status
    percentage: " +
    translationItem.getItemPercentage());
}


TranslatedItemDetails translatedItemDetails =
    translationEvent.getTranslatedItemDetails();
if (translatedItemDetails == null)
  ctcLogService.LogError("[CTEventsHandler] got
    TranslatedItemDetails object as NULL.");
else
{
  TranslatedItem translatedItem =
    translatedItemDetails.getTranslatedItem();
  if (translatedItem == null)
    ctcLogService.LogError("[CTEventsHandler] got
    TranslatedItem object as NULL.");
  else
    ctcLogService.LogDebug("[CTEventsHandler] got
    totsl
    translated fields: " +
    translatedItem.getTranslatedPageContent
    ().getPropertyContents().size());
}
}
```

```
        }
      else
      {
        ctcLogService.LogDebug("[CTEventsHandler] Is not a CT
              TranslationEvent event. ignore.");
      }


    }
    catch (Exception te) {
      ctcLogService.LogRolloutError("[CTEventsHandler] Error:
      " +
              te.getMessage() );
    }
    finally
    {

  }
    }


  }
  catch (Exception finale) {}
  ctcLogService.LogRolloutDebug("[CTEventsHandler] handleEvent
  called
          ...Done!");
  }
}
```

9 Installing the Connector in a Clustered Environment

This section describes how to install the Connector for Adobe Experience Manager in a clustered environment.

To install the Connector in a clustered environment, you install it on a single instance in the cluster. This installation is the same as installing the Connector in a non-clustered environment, as described in "Installing the Lionbridge Connector" on page 22.

After you install the Connector package on a single node in the cluster, it is automatically installed on the other nodes in the cluster, using the same configuration.

You can access each node in the cluster separately by its URL, using the Adobe Experience Manager Dispatcher. For detailed instructions, see https://docs.adobe.com/docs/en/dispatcher.html.

Before you begin to install the Connector in a clustered environment, please review the system requirements, described on "System Requirements" on page 18, and verify that each host that will be a cluster node in the cluster meets the requirements.

To install the Connector in a clustered environment:

1. Prevent users from deliberately or accidentally sending items for translation during the upgrade process.

   Recommendation: Remove users from groups with permission to send new translation jobs.

2. "Setting Your System Date, Time, and Time Zone Correctly" on page 18. Do this on each host that will be a cluster node.

3. "Downloading the Delivery Package" on page 19. Do this once. Save the package to a location that is accessible to all hosts that will be cluster nodes.

4. "Creating or Updating a Connector Database on your Database Server Instance" on page 20. Ensure that the database is accessible to all hosts that will be cluster nodes.

5. "Creating the Connector Folders" on page 20. These are the optional folders where the Connector stores your licensing information and your translation data. If your environment will use these folders, then create one set of folders and sub-folders on each host that will be a cluster node.

   Recommendation: These folders should not be shared folders.

10 Automatically Updating Your Connector Configuration

You can configure the Connector to automatically load and update its configuration. This is useful in the following scenarios:

- upgrading your instance of the Connector

- moving your installation to a new environment

- copying your installation to a new environment

To export your configuration from the Connector:

Each Connector configuration page corresponds to an XML configuration file. The table below indicates which Connector configuration page corresponds to a particular configuration file.

1. To download all these configurations as a single `ZIP` file, click **Admin Tools > Configuration** in the Lionbridge Connector rail. For information on opening the Lionbridge Connector rail, see "Configuring the Connector" on page 33.

   The **Configuration** page opens.

2. At the bottom of the **Configuration** page, click **Export All Configurations**.

Alternatively, for pages marked below with an asterisk (*), you can download the individual configuration files from those pages. For detailed instructions, refer to the last column in the table.

Configuration Page	Corresponding Configuration File	For Details, See…
Configuration page: - configuration options * - translation options *	ctcconfig.xml	"Configuring Connector Global Settings" on page 38
Language Mapping page *	languagemapping.xml	"Configuring Connector Languages" on page 83
Component Mapping page *	fields4trans.xml	"Configuring which Components and Properties to Send Out for Translation" on page 89

Configuration Page	Corresponding Configuration File	For Details, See...
LSP and Keys page * **Note:** You cannot import license-key settings from 3.x versions of the Connector to 4.x versions, because they use different license-key formats.	lspkeys.xml	"Configuring Translation Providers and License Keys" on page 97
Advanced Settings page *	advancedSettings.xml	"Configuring Advanced Settings in the User Interface" on page 151
Team Profiles page	teamprofiles.xml	"Configuring Team Profiles" on page 110
Queue Scheduler	queueschedules.xml	"Scheduling Translation Jobs to Send Out Content from the Translation Queue" on page 115
Custom Asset Handlers	assethandlers.xml	"Creating a Custom Asset Handler" on page 128

To set up the Connector to automatically import configuration files from the default location:

▶ Place the files to import in the following location: `AEM_QuickStart_Folder\CTC_Configs\Import`. The Connector monitors this location and imports any new files.

To set up the Connector to automatically import configuration files from any location:

1. Create the `CTC_INIT_HOME` environment variable on the Adobe Experience Manager server.

   ▫ In Windows, you create an environment variable by clicking the **Environment Variables** button in the **Advanced** tab of the **System Properties** dialog box, which you can open from the **Control Panel**.

   ▫ In Linux, you can add the environment variable by adding the following export statement to one of the files described in the table below:

   ```
   export CTC_INIT_HOME=/root/adobe/ctcdata/init_config
   ```

File	Description
~/.bash_profile	This file runs when the local user profile logs in to a terminal window. If you start Adobe Experience Manager by typing the `start` command, then you can use this file so that `CTC_INIT_HOME` is always available when you run Adobe Experience Manager.
/etc/environment	This file is the global UNIX configuration file. After adding the export statement above and rebooting the machine, `CTC_INIT_HOME` will be available everywhere. **Note:** This file is intended specifically for system-wide environment variable settings. It is not a script file, and it consists of one assignment expression per line.
startup script: crx-quickstart/bin/start	This file is the startup script of your Adobe Experience Manager instance. Adding the export statement to this file initializes the `CTC_INIT_HOME` variable locally, within the Adobe Experience Manager process.

2. Set the value of this environment variable to a directory with read and write permissions that is accessible to the Adobe Experience Manager process or instance, for example:

   ▪ Windows: `C:\ctcdata\init_config\`

   ▪ Linux: `export CTC_INIT_HOME=/var/adobe/ctcdata/init_config`

3. Restart the Adobe Experience Manager server.

The Connector now monitors this directory and automatically loads any configuration files in this directory. It saves the configuration files to the following location on the Adobe Experience Manager server: `/etc/ctctranslation`.

To specify which configuration files to import:

▶ Copy the configuration files exported previously into the directory specified by the `CTC_INIT_HOME` environment variable.

The Connector automatically loads these configuration files and updates its configuration.

11 Troubleshooting Installation and Configuration Issues

Issue	Description
"Lionbridge Connector Does Not Load" on page 211	The Lionbridge Connector does not load, or only the Connector landing page loads, but the Connector does not run.
"License Keys not Displayed" on page 212	In the **LSP & Keys** page, in the **LSP and License Keys** section, the license keys are not displayed or available selection after clicking **Retrieve** next to the **License Key** field.
"Communication Errors When Sending Content for Translation" on page 228	You experience communication errors when sending content for translation.
"Error Displayed about LSPs when Submitting a Job" on page 231	When attempting to send out content for translation, the Connector displays errors about checking LSP keys.
"Search Agents Are Not Displayed" on page 232	■ The default search agents are not displayed in the **Search Agents** page. (Click **Admin Tools > Search Agents** in the Lionbridge Connector rail to open the **Search Agents** page.) ■ The default search agents are not available for selection from the **Search Using Agent** dropdown list in the **Pages** page of the **Bulk Translation** wizard.
"Inaccurate Translation Status" on page 232	Either: ■ A submitted job is stuck at 1% or 2%. ■ A returned translation job is stuck at 90%.
"The Connector Does Not Send Out Submitted Jobs or Return Translated Content" on page 234	The Connector does not process any jobs and one or all of the Connector chains is red.
"The Connector Does Not Send Out Submitted Jobs" on page 235	The Connector does not process any jobs and the Upload Service chain is red.
"The Translation Provider Does Not Receive Content in New or Custom Languages" on page 235	The Connector successfully sends content for translation in new or custom languages but it does not reach the translation provider.
"The Connector Does Not Process Returned Translations after Language Mapping Changes" on page 236	Changes to language mapping occurred while content in the changed language was out for translation. After the translated content returns, the Connector does not process it.

Issue	Description
"Job Submitted for Translation Is Missing Some Strings" on page 237	The Connector successfully sent the job to the LSP, but some of the source content is missing from the job and it was not sent.
"Cannot Select New Translation Provider When Sending Out Content for Translation" on page 237	After using an account license key to install a new translation provider (LSP), it is not available for selection when submitting a new job.
"New Target Language Is Not Available When Sending Out Content for Translation" on page 238	After configuring a new target language, it is not available for selection when submitting a new job.
"Adobe Experience Manager Service Authentication" on page 238	If you are using Adobe Experience Manager 6.3 or higher with versions 3.2.0 and higher of the Connector, the following problems may occur: ■ You cannot save all Connector configurations. ■ Translated content does not return to Adobe Experience Manager. ■ You cannot perform most Globalization Tool functionality with the default settings.
"Freeway Analysis Codes not Displayed when Sending Out Content for Translation" on page 242	The add-on for Lionbridge Freeway is installed, and Freeway analysis codes specified, but they are not displayed or available for selection when sending out content for translation.

11.1 Lionbridge Connector Does Not Load

One or both of the following issues may cause the Lionbridge Connector not to load, or may cause only the Connector landing page to load, but the Connector does not run.

Possible Issue	Explanation	Solution
Configuration files are loaded from the InitConfig Lionbridge Connector local directory, and the user accessing this directory does not have read/write permissions.	If you are trying to load configuration files from InitConfig Lionbridge Connector local directory, the user accessing this directory must have read/write permissions.	For detailed configuration instructions, see "Automatically Updating Your Connector Configuration" on page 207.

Possible Issue	Explanation	Solution
The configuration files are pointing to an incorrect database location.	Refer to the general log file for details. If there are database errors, such as all database statements are failing, or if there is a general communications link failure, the database may be incorrectly configured.	Check the database strings in the configuration file.

11.2 License Keys not Displayed

Issue

In the **LSP & Keys** page, in the **LSP and License Keys** section, the license keys are not displayed or available selection after clicking **Retrieve** next to the **License Key** field.

Explanation

Your firewall is blocking access to the Clay Tablet License Server.

- You must configure your ports so that the Connector can communicate with the server.
- You must import the SSL certificate into your browser's certificate store.

Solutions

If you have a firewall:

1. Configure your ports so that the Connector can communicate with the Clay Tablet License Server. The URL of this server is `https://api.clay-tablet.net/license/v1`. For more information, see "Configuring Network Settings for a Firewall" on page 32.

2. Download or export the SSL certificate from the Clay Tablet License Server (`https://api.clay-tablet.net/license/v1`). For detailed instructions, see:
   - "Exporting an SSL Certificate in Google Chrome" on page 213
   - "Downloading an SSL Certificate in Mozilla Firefox" on page 217

3. Import the downloaded SSL certificate into your browser's certificate store. For detailed instructions, see:
   - "Importing an SSL Certificate into Your Chrome Certificate Store" on page 221
   - "Importing an SSL Certificate into Your Firefox Certificate Store" on page 225

11.2.1 Exporting an SSL Certificate in Google Chrome

This section provides detailed information about exporting an SSL certificate in Google Chrome:

- from AWS S3, as instructed in "Communication Errors When Sending Content for Translation" on page 228

- from the Clay Tablet License Server, as instructed in "License Keys not Displayed" on page 212

To export an SSL Certificate in Chrome:

1. In the Chrome browser, go to one of the following URLs:

    - To resolve communication errors with the Clay Tablet License Server, use
      https://api.clay-tablet.net/license/v1.

    - To resolve communication errors with AWS S3, use https://ct_test_create_
      key.s3.amazonaws.com.

    The page opens.

Note: Ignore the **Access Denied** error message in the page that opens.

2. Click the padlock in the address bar.
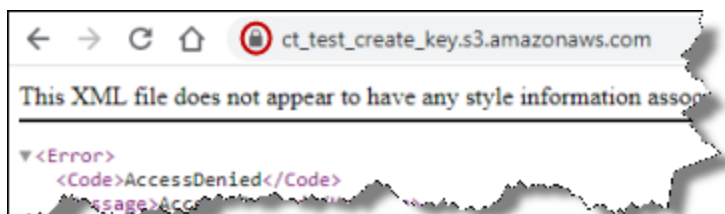
The **Connection is secure** dialog box opens.
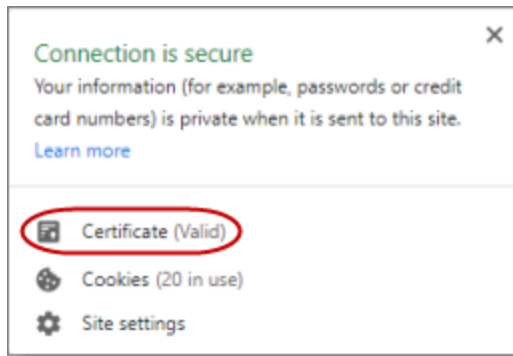
3. Click **Certificate**.

The **Certificate** dialog box opens, displaying the **General** tab.
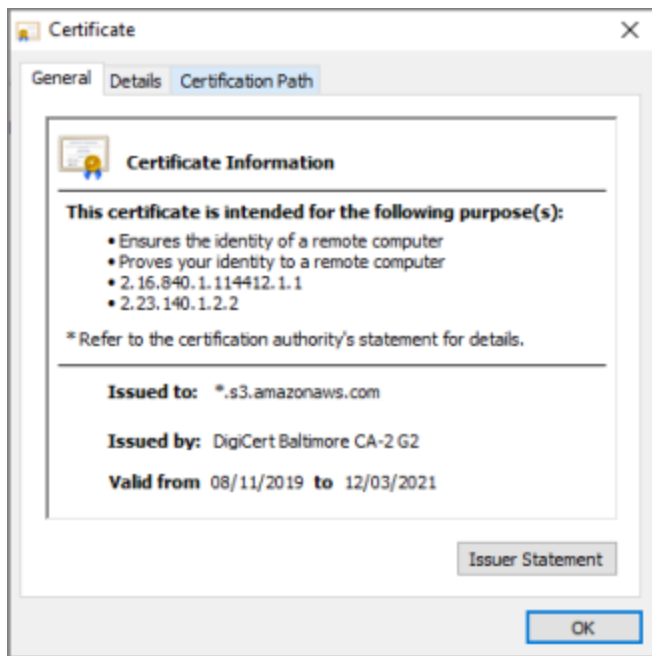
4. Click the **Details** tab to view it.
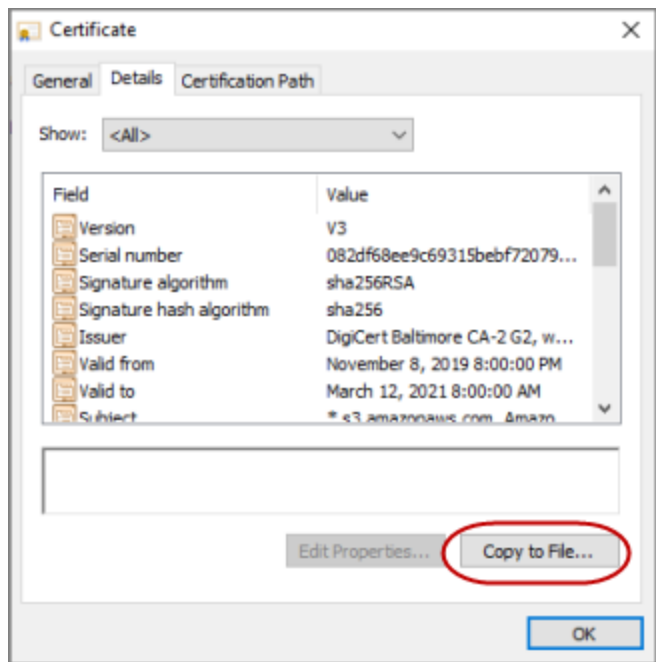
5. Click **Copy to File**.

    The **Certificate Export Wizard** opens.

6. Click **Next**.

The **Export File Format** page of the wizard opens.
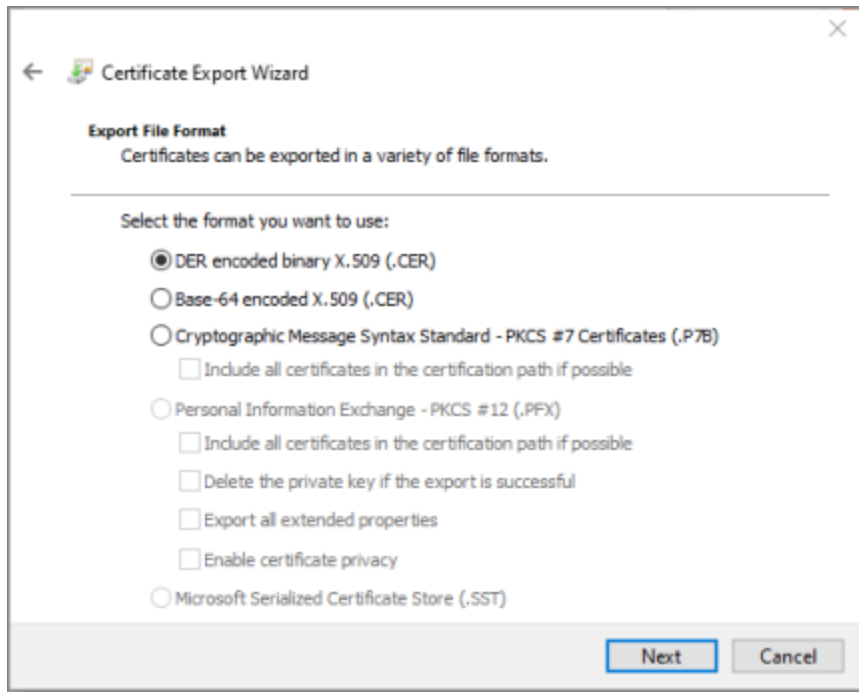
7. Accept the default format of `DER encoded binary X.509,` and click **Next**.

    The **File to Export** page of the wizard opens.
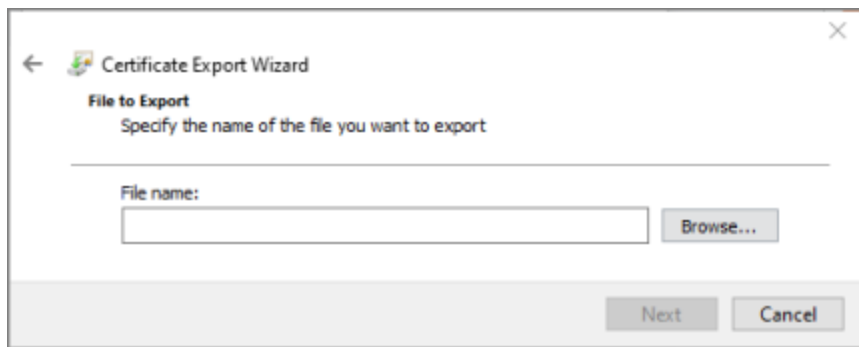
8. Do one of the following:

    ▤ In the **File name** text box, enter the path and name of the file in which you want to save the certificate. The file has a `.cer` extension. For example, enter `C:\Users\jsmith\Documents\SSL certificates\AWS S3.cer.`

    ▤ Click **Browse**, and in the **Save As** dialog box:

    a. Navigate to the folder where you want to save the file.

      b. Assign a filename with a `.cer` extension.

      c. Click **Save**.

9. When you are done, click **Next**.

   The **Completing the Certificate Export Wizard** page opens, displaying the filename, path and format.

10. Click **Finish** to close the wizard.

    The **Certificate Export Wizard** message box states that the export was successful.

11. Click **OK** to close the **Certificate** dialog box.

12. Next, you do one of the following:

    ▦ To resolve communication errors with the Clay Tablet License Server, you import the exported SSL certificate into your Chrome certificate store. For detailed instructions, see "Importing an SSL Certificate into Your Chrome Certificate Store" on page 221.

    ▦ To resolve communication errors with AWS S3, you import the exported SSL certificate into Your Java Trusted Keystore. Do one of the following:

        ▬ If Java (JDK) is installed on the server where Adobe Experience Manager is hosted, follow these instructions: "Importing an SSL Certificate into Your Java Trusted Keystore with Java (JDK)" on page 229.

        ▬ If JRE is installed on the server where Adobe Experience Manager is hosted, follow these instructions: "Importing an SSL Certificate into Your Java Trusted Keystore with JRE" on page 230.

11.2.2 Downloading an SSL Certificate in Mozilla Firefox

This section provides detailed information about downloading an SSL certificate in Mozilla Firefox:

■ from AWS S3, as instructed in "Communication Errors When Sending Content for Translation" on page 228

■ from the Clay Tablet License Server, as instructed in "License Keys not Displayed" on page 212

To download an SSL Certificate from Firefox:

1. In the Firefox browser, go to one of the following URLs:

   ▦ To resolve communication errors with the Clay Tablet License Server, use <https://api.clay-tablet.net/license/v1>.

⬚ To resolve communication errors with AWS S3, use `https://ct_test_create_key.s3.amazonaws.com`.
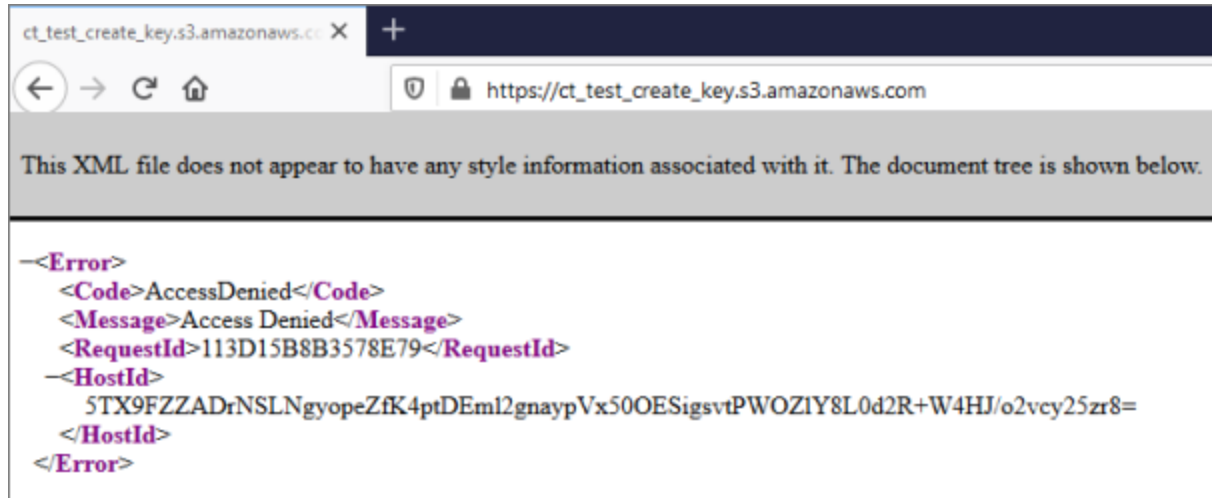
The page opens.

2. Click the padlock in the address bar.
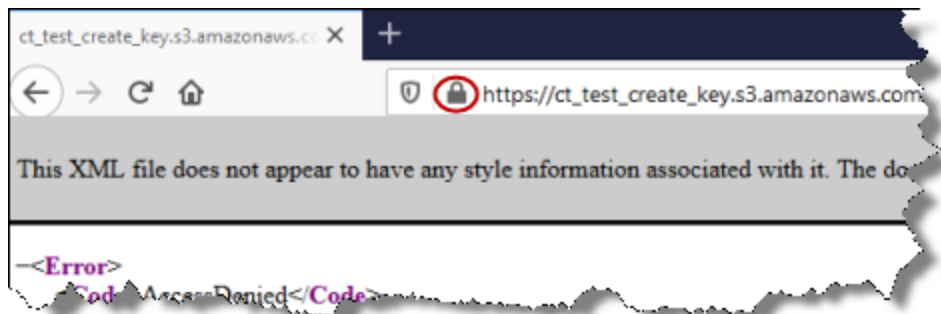
3. Click the arrow beside **Connection Secure**.
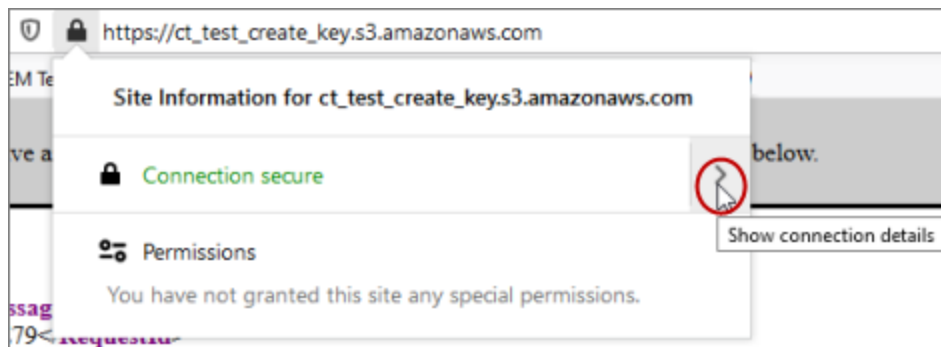
4. Click **More Information**.

    The **Page Info** dialog box opens.
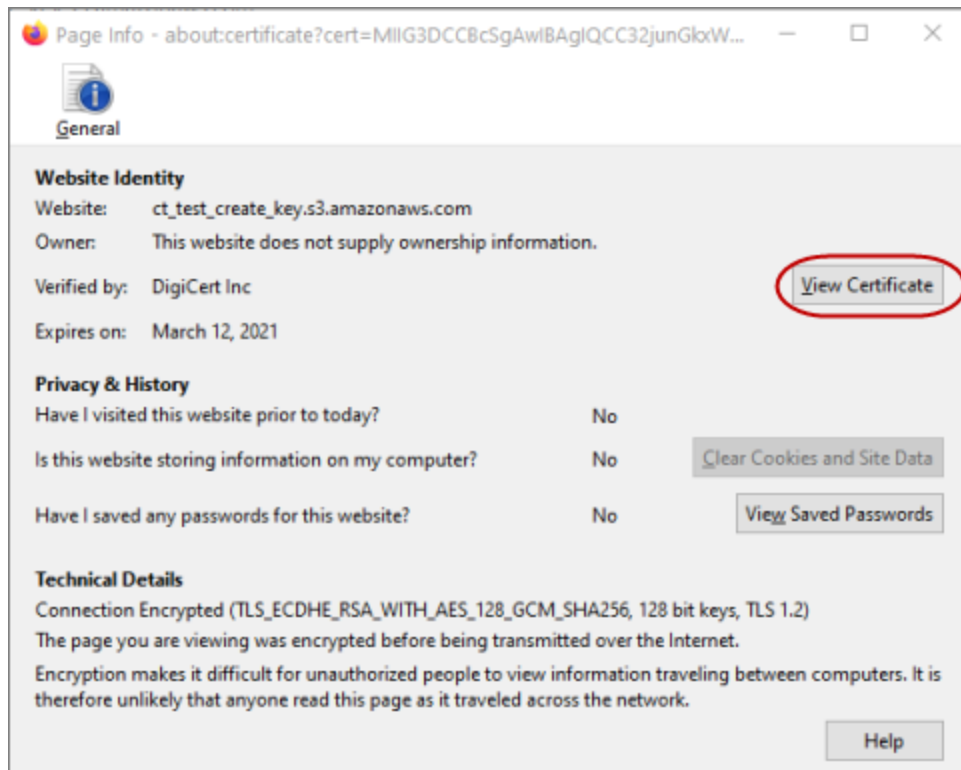
5. Click **View Certificate**.

The **Certificate** page opens.
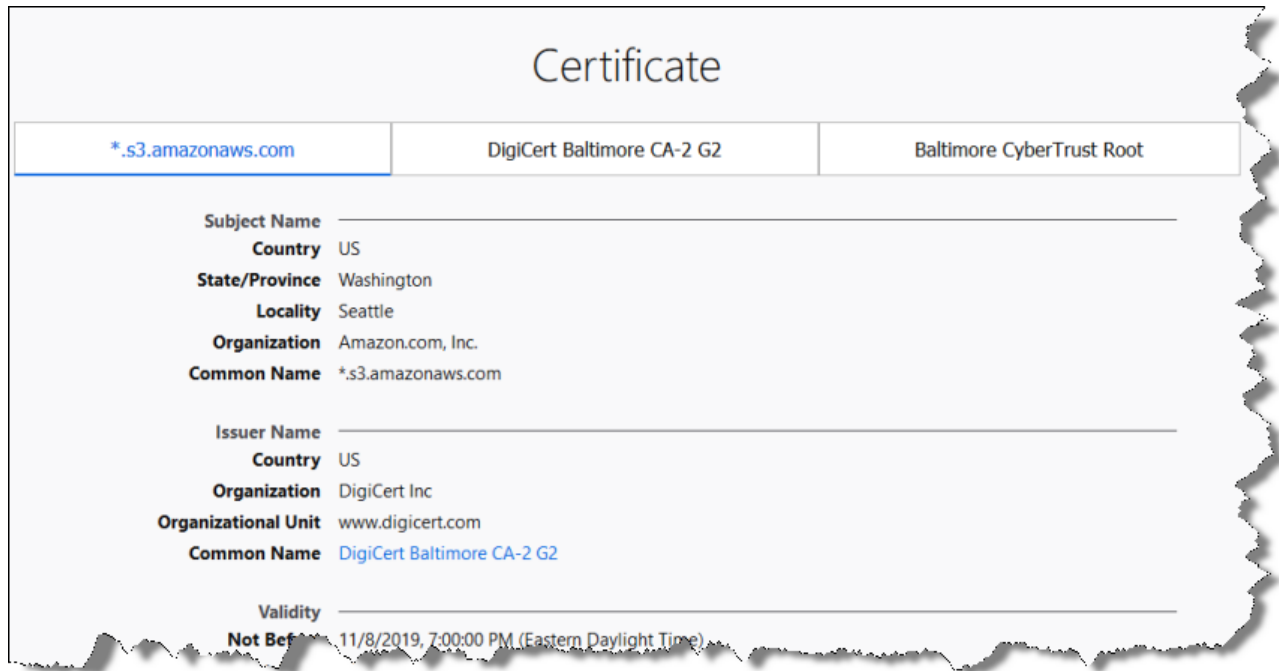
6. Scroll down to the **Miscellaneous** section.

7. In the **Download** row, click the **PEM (cert)** link.
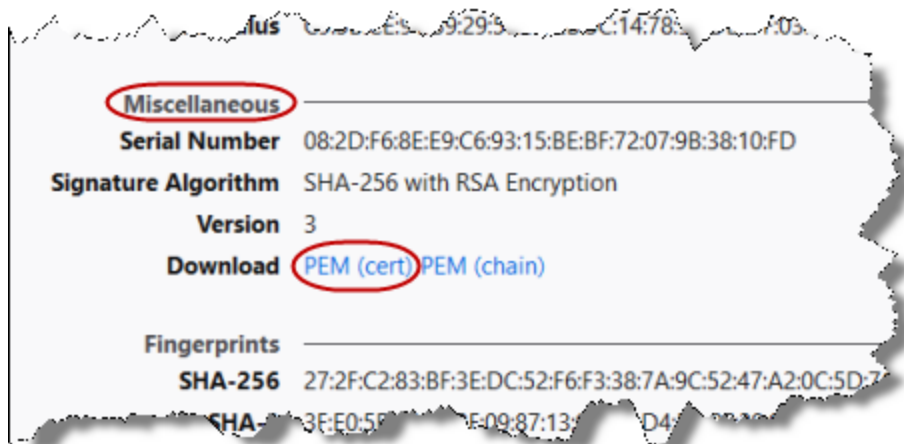
8. In the dialog box that opens, click **OK** to save the certificate file to a known location.
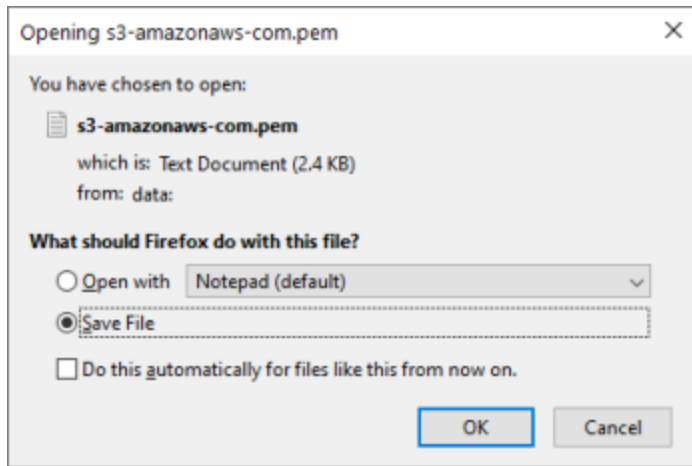
9. Navigate to the location for saving the file, and then click **Save**.

10. Next, you do one of the following:

   ▦ To resolve communication errors with the Clay Tablet License Server, you import the downloaded SSL certificate into your Firefox certificate store. For detailed instructions, see "Importing an SSL Certificate into Your Firefox Certificate Store" on page 225.

   ▦ To resolve communication errors with AWS S3, you import the exported SSL certificate into Your Java Trusted Keystore. Do one of the following:

      ▪ If Java (JDK) is installed on the server where Adobe Experience Manager is hosted, follow these instructions: "Importing an SSL Certificate into Your Java Trusted Keystore with Java (JDK)" on page 229.

      ▪ If JRE is installed on the server where Adobe Experience Manager is hosted, follow these instructions: "Importing an SSL Certificate into Your Java Trusted Keystore with JRE" on page 230.

11.2.3 Importing an SSL Certificate into Your Chrome Certificate Store

You import an exported SSL certificate into your Chrome certificate store to display the license keys for the Clay Tablet License Server so that they are available for selection.

To import an SSL Certificate into your Chrome certificate store:

1. In the Chrome browser, click the **Customize and control Google Chrome** icon in the top right corner, and then click **Settings**.
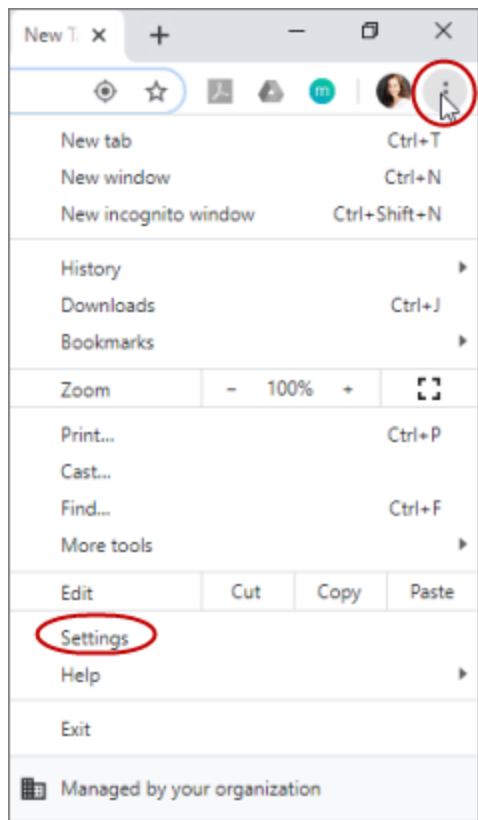
The **Settings** page opens.

2. In the menu on the left, click **Privacy and Security**.

3. Scroll down to the bottom of the section.

4. In the **Manage certificates** sub-section, click the icon.
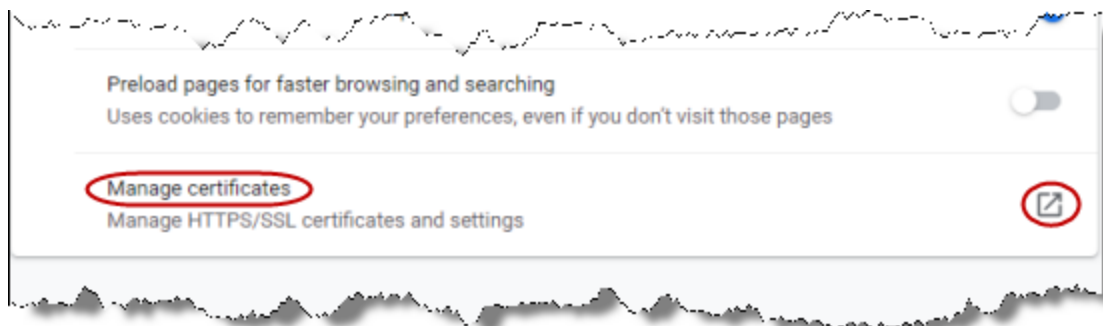
The **Certificates** dialog box opens.
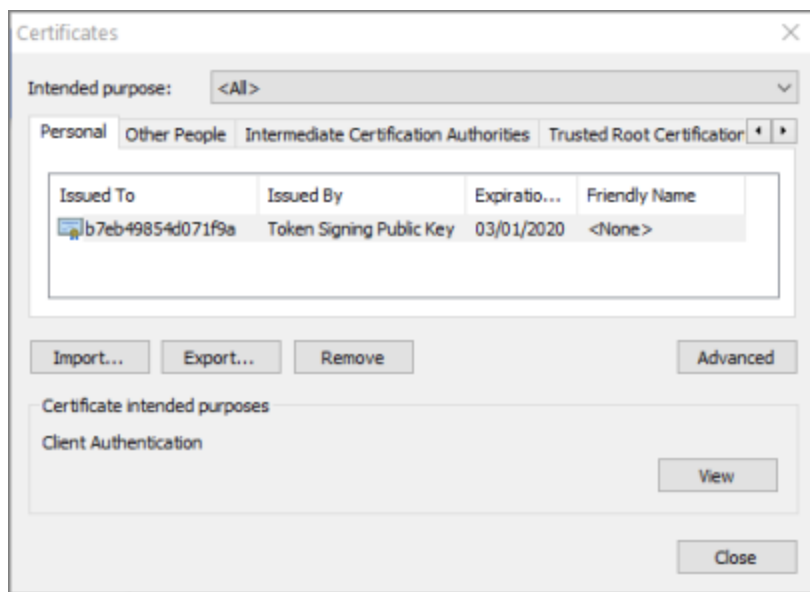
5. Click **Import**.

The **Certificate Import Wizard** opens.

6. Click **Next**.

The **File to Import** page of the wizard opens.
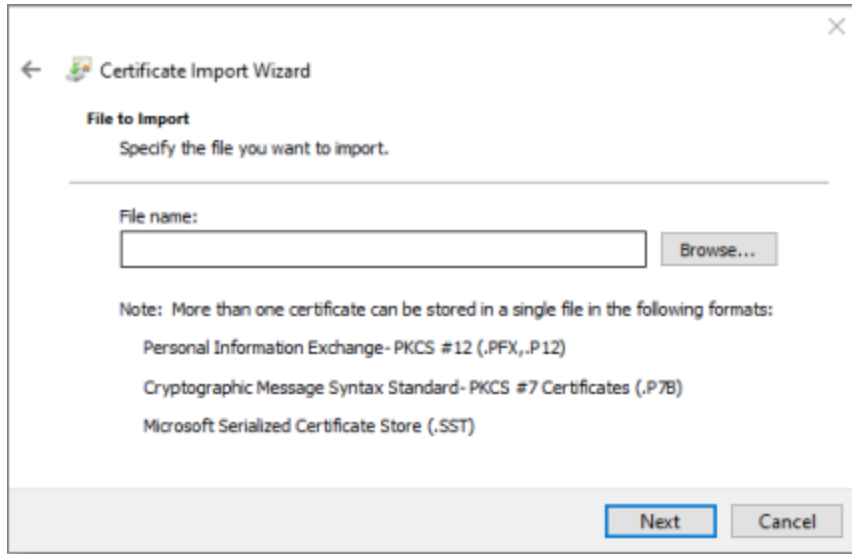
7. Click **Browse**, and navigate to and select the SSL certificate you previously exported. Then click **Open**.

8. Click **Next**.

9. In the **Certificate Store** page of the wizard, browse to the certificate store where you want to save the certificate. Then click **Next**.
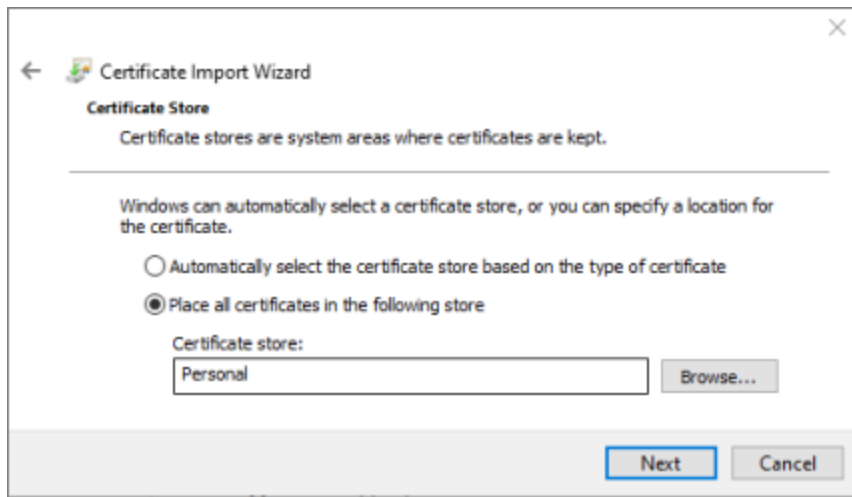
10. In the final page of the wizard, review your settings and click **Finish**.
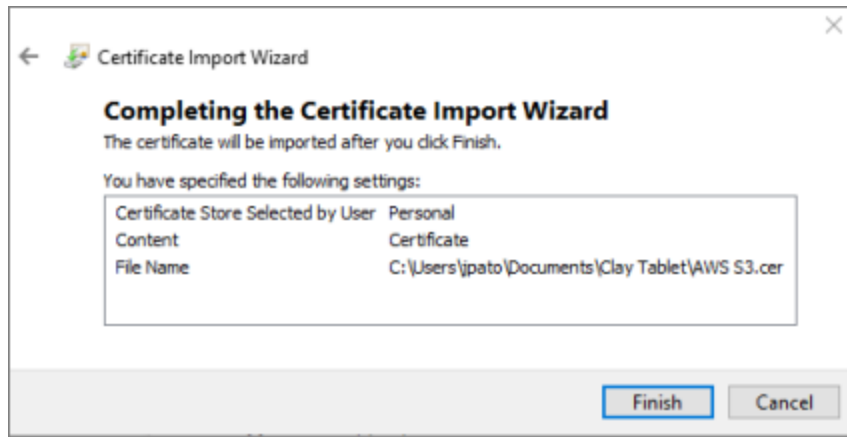
The certificate is imported into your Chrome certificate store.

11.2.4 Importing an SSL Certificate into Your Firefox Certificate Store

You import a downloaded SSL certificate into your Firefox certificate store to display the license keys for the Clay Tablet License Server so that they are available for selection.

To import an SSL Certificate into your Firefox certificate store:

1. In the Firefox browser, click the **Open menu** icon in the top-right corner, and then click **Options**.
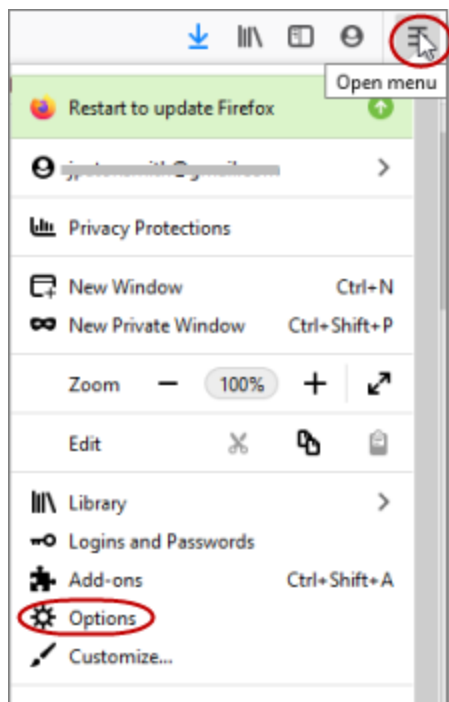
The **Preferences** page opens.

2. In the menu on the left, click **Privacy & Security**.

3. Scroll down to the **Security** section and the **Certificates** sub-section.

Security

Deceptive Content and Dangerous Software Protection

☑ Block dangerous and deceptive content   Learn more

   ☑ Block dangerous downloads

   ☑ Warn you about unwanted and uncommon software

Certificates

When a server requests your personal certificate

◯ Select one automatically

◉ Ask you every time

☑ Query OCSP responder servers to confirm the current validity of certificates

View Certificates...

Security Devices...

4. Click **View Certificates**.

The **Certificate Manager** opens.
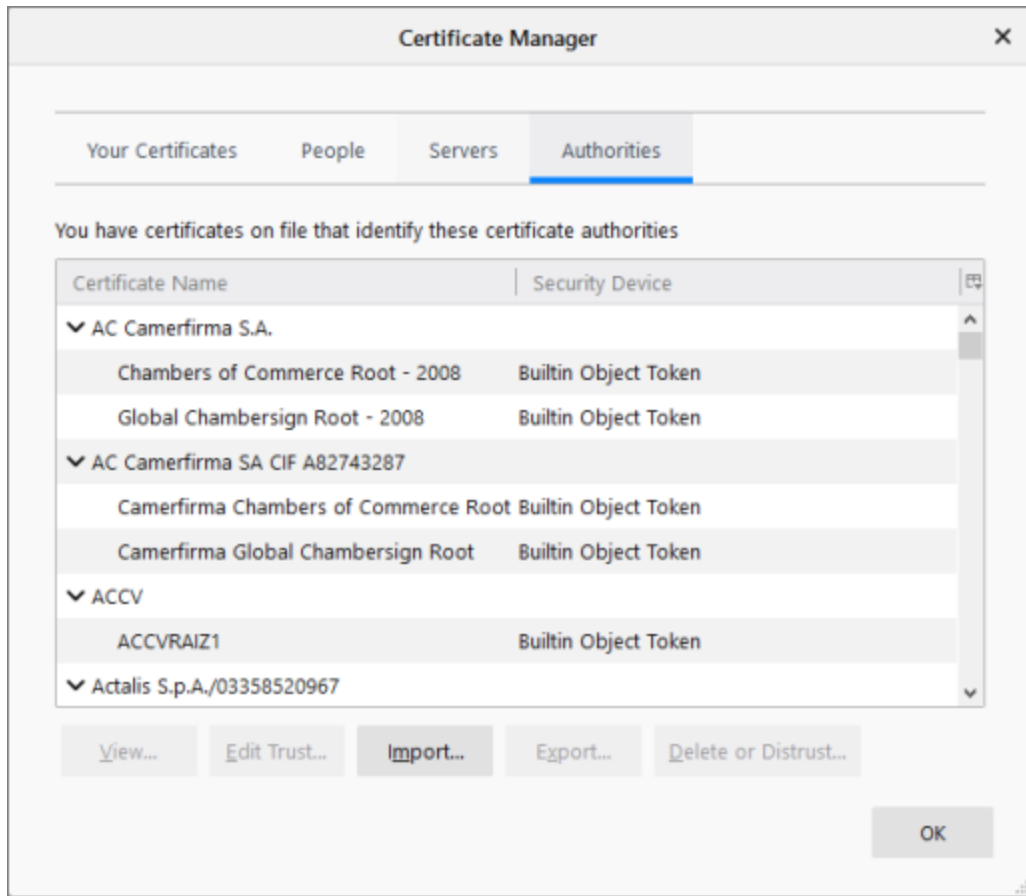
5. Click **Import**.

6. In the dialog box that opens, navigate to and select the SSL certificate you previously exported. Then click **Open**.

The certificate is imported into your Firefox certificate store, and a message box states that the import was successful.

11.3 Communication Errors When Sending Content for Translation

Issue

Communication errors occur when sending content for translation.

Explanation

Your firewall is blocking access to AWS S3 and SQS.

You must import the SSL certificates from AWS S3 and SQS into your Java trusted keystore. This enables HTTPS support, which means support for the SSL/TLS protocols.

Solution

The following general steps are required:

1. Downloading or exporting the AWS SSL certificates from your browser's certificate store. For detailed instructions, see:

   ▦

   ▦

2. Importing the downloaded/exported certificates into your Java trusted keystore. The instructions are different depending on whether Java or the JRE is installed on the server where Adobe Experience Manager is hosted. For detailed instructions, see:

   ▦

   ▦

Note: You must update these certificates whenever AWS renews them. This is likely once a year.

11.3.1 Importing an SSL Certificate into Your Java Trusted Keystore with Java (JDK)

You import the downloaded/exported SSL certificate into your Java trusted keystore to resolve communication issues with AWS S3 and SQS. There are different instructions depending on whether Java (JDK) or JRE is installed on the server where Adobe Experience Manager is hosted.

To import an SSL certificate into your Java trusted keystore with JRE:

1. Run the `keytool -import -alias ALIAS -file public.cert -storetype TYPE -keystore server.truststore` command. For example:

   ```
   keytool -import -alias teiid -file public.cert -storetype JKS -
   keystore server.truststore
   ```

2. If the specified truststore already exists, enter the existing password for that truststore, otherwise enter a new password.

3. When you are prompted to trust the certificate, enter `yes`.

The certificate in *`public.cert`* has been added to the new truststore named *`server.truststore.`*

11.3.2 Importing an SSL Certificate into Your Java Trusted Keystore with JRE

You import the downloaded/exported SSL certificate into your Java trusted keystore to resolve communication issues with AWS S3 and SQS. There are different instructions depending on whether Java (JDK) or JRE is installed on the server where Adobe Experience Manager is hosted.

To import an SSL certificate into your Java trusted keystore with JRE:

1. Run the Java keytool command to import the certificate into the keystore.

   a. Open a command prompt and change to the following directory: *`<location>`*`\bin\jre\6.0\bin`.

   where *`<location>`* is the file directory where Adobe Experience Manager is installed.

   Note: On 64-bit computers, add the certificates to the `bin64` folder.

   b. Run the following command line. Although for formatting purposes the command is displayed with line breaks, you should enter the entire command on one line.

   ```
   keytool -import -file "C:\<location>\bin\ssl\applixca.pem"
   -keystore "C:\<location>\bin\jre\6.0\lib\security\cacerts"
   -storepass "changeit"Copy
   ```

   For 64-bit installations, target the 64-bit folder when dealing with the certificates. For example, this sample command targets the 64-bit jre:

   ```
   cd C:\Program Files (x86)\AEM\TM1_64\bin64\jre\6.0\binCopy
   ```

   The following command is an example used on 64-bit systems. Although for formatting purposes the command is displayed with line breaks, you should enter the entire command on one line.

   ```
   keytool -import -file "C:\Program Files (x86)\AEM\TM1_
   64\bin64\
   ssl\applixca.pem" -keystore "C:\Program Files (x86)\AEM\TM1_
   64\bin64\
   jre\6.0\lib\security\cacerts" -storepass "changeit"Copy
   ```

   Note: If you do not correctly target the 64-bit locations for certificates when running a 64-bit installation, a warning message is displayed, indicating that you cannot contact the servers.

   c. When prompted to trust or add the certificate, enter `yes`.

The following message is displayed: `Certificate was added to keystore.`

2. You may need to restart the server where Adobe Experience Manager is hosted for the change take effect.

11.4 Error Displayed about LSPs when Submitting a Job

Issue

When attempting to send out content for translation, the Connector displays errors about checking LSP keys.

Explanation

The URLs of the Clay Tablet License Server on AWS are whitelisted using the entire address, including the key names from the URL.

Solution

If you have a firewall:

1. Click **Admin Tools > LSP and Keys** in the Lionbridge Connector rail to open the **LSP & Keys** page.

2. In the **AWS URLs** section, which displays a list of URLs used by the Clay Tablet Platform on AWS, instead of whitelisting the entire address, exclude the key names from the URL. For example, enter `ctt-platform-prod-us-east-1/*`. For more information, see "Editing a License Key" on page 104.

11.5 Search Agents Are Not Displayed

Possible Issue	Explanation	Solution
The default search agents are not displayed in the **Search Agents** page. (Click **Admin Tools > Search Agents** in the Lionbridge Connector rail to open the **Search Agents** page.)	The configuration files are pointing to an incorrect database location. Refer to the general log file for details. If there are database errors, such as all database statements are failing, or if there is a general communications link failure, the database may be incorrectly configured.	Check the database strings in the configuration file.
The default search agents are not available for selection from the **Search Using Agent** dropdown list in the **Pages** page of the **Bulk Translation** wizard.		

11.6 Inaccurate Translation Status

The displayed translation status is inaccurate.
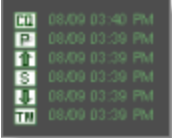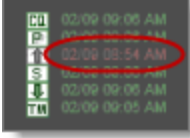
Possible Issue	Explanation	Solution
Either: ■ A job was submitted and the translation provider has confirmed receipt, but in the **Job Details** tab of the **Translation Status** page, some but not all pages are at `10%/In Translation`. ■ The translation provider has confirmed that all files were successfully delivered, but in the **Translation Status** page, some but not all pages are at `100% /Completed`. An example is displayed in the screen capture below.	Either: ■ The key used for the translation job was duplicated in another environment. ■ The environment from which the job was submitted has been cloned. **Do not duplicate these keys or install them on multiple Adobe Experience Manager Author Server instances, because this is a violation of the License Agreement.** Using the same keys on multiple Adobe Experience Manager Author Server instances will cause the Connector to behave unexpectedly, which can result in lost translation content, orphaned projects, and inaccurate translation status reports. Lionbridge Connector Support will support technical issues caused by duplicating or incorrectly installing keys only on a time and materials basis.	1. Remove any duplicate keys or cloned environments. For detailed setup instructions, see "Configuring Translation Providers and License Keys" on page 97. ▶ If some but not all pages are at `10%/In Translation`, cancel the original translation job and resubmit it. ▶ If some but not all pages are at `100% /Completed`, ask the translation provider to redeliver the translation job.

Possible Issue	Explanation	Solution
	The Lionbridge Connector database has been shared with another environment. The Connector requires a unique, non-shared, database for storing translations returned to the Connector. Sharing a database can result in another environment processing the returned translations into that environment.	1. Change the database user name and password. 2. In the **JDBC SQL Connection** section of the **Configuration** page, update the **Login Name** and **Login Password**. For detailed instructions, see "JDBC SQL Connection" on page 42. 3. Ask the translation provider to redeliver the translation job.

11.7   The Connector Does Not Send Out Submitted Jobs or Return Translated Content
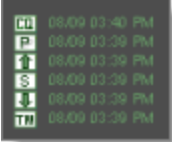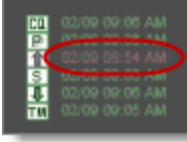
The Connector does not process any jobs and one or all of the Connector chains is red.

Generally, the chain should be green:	However, at least one element in the chain is red:

Possible Issue	Explanation	Solution
One or more of the required Connector services is not running.	For the Connector to function correctly, all Connector components must be installed and active.	Verify that all Connector components are active. For detailed instructions, see "Verifying that the Bundle and All Connector Components Are Active" on page 28.

11.8 The Connector Does Not Send Out Submitted Jobs

The Connector does not seem to process any jobs and the Upload Service is inactive (red).

Generally, the chain should be green:	However, the Upload Service in the chain is red:

Possible Issue	Explanation	Solution
Multiple jobs are stuck in `Preparing` and/or `Sending` status.	When there many failed attempts to send out jobs, the log files are spammed with job processing details. This may cause the Upload Service to become inactive (red).	Open the **Translation Status** page (`/content/ctctranslation/status.html`), and delete all the jobs that have been stuck in `Preparing` and/or `Sending` status for an extended period of time.

11.9 The Translation Provider Does Not Receive Content in New or Custom Languages

The Connector successfully sends content for translation in new or custom languages but it does not reach the translation provider.

Possible Issue	Explanation	Solution
The Clay Tablet Platform does not have the updated language mapping.	Your company and your translation provider may use different language codes in their technology/workflows. The Clay Tablet Platform can map language codes in Adobe Experience Manager to those expected by the translation provider.	Contact Lionbridge Connector Support to request a review of the Connector language mapping for the translation provider to ensure that the new language is correctly mapped for the target platform. For details, see "How to Contact Lionbridge Connector Support" on page 11.
The translation provider requires that source-target languages pairs are configured before any new translation requests.	The translation platforms of most translation provider require that source-target language pairs are configured.	Contact the translation provider and verify that the all source-target language pairs are configured.

11.10 The Connector Does Not Process Returned Translations after Language Mapping Changes

Possible Issue	Explanation	Solution
Changes to language mapping occurred while content in the changed language was out for translation. After the translated content returns, the Connector does not process it.	The changes to language mapping changed the language reference path in CRX. The Connector uses the page path to return translated content back to Adobe Experience Manager. If that page path is changed while content is out for translation, then the Connector cannot return the translated content to Adobe Experience Manager. For details, see "Configuring Connector Languages" on page 83.	Do not change the name of a language or delete a language if there is translation content in the Translation Queue, or if there are translation jobs in progress. If this occurs accidentally, then resend the job with the new language name, and notify your translation provider that this replaces the previous job.

11.11 Job Submitted for Translation Is Missing Some Strings

The Connector successfully sent the job to the LSP, but some of the source content is missing from the job and it was not sent.

Possible Issue	Explanation	Solution
Either component mapping was not done, or it was not updated for components that were recently added or used in new content.	The content of an Adobe Experience Manager page is created from a collection of page components. A component has different properties, which are types of fields. You must configure which components and properties the Connector can send out for translation.	Update the component mapping and resend the job for translation. For detailed instructions, see "Configuring which Components and Properties to Send Out for Translation" on page 89. **Recommendation:** If you are submitting new nodes in your content tree for translation, validate component mapping in a pre-production environment to ensure that only the required components are mapped.
All components were successfully sent for translation in the pre-production environment, but they are missing in the production environment.	Component mapping is managed on a per-Adobe Experience Manager-instance basis. You must import any changes in component mapping from the pre-production environment into the production environment before submitting jobs from there.	Either: ■ Manually make the same component mapping changes in the production environment. ■ Migrate your component mapping from the pre-production environment to the production environment. For detailed instructions, see "Automatically Updating Your Connector Configuration" on page 207.

11.12 Cannot Select New Translation Provider When Sending Out Content for Translation

After using an account license key to install a new translation provider (LSP), it is not available for selection when sending out a new job for translation.

Possible Issue	Explanation	Solution
Your team profile was not updated to support sending content to the new translation provider (LSP).	The Connector uses profiles to define the set of users who can send out content for translation to a specific translation provider (LSP). **Note:** Profiles also define the source-target pairs that users are allowed to send out for translation.	Ask your Adobe Experience Manager administrator to update the appropriate team profile to include the new translation provider. For detailed instructions, see "Configuring Team Profiles" on page 110.

11.13 New Target Language Is Not Available When Sending Out Content for Translation

Possible Issue	Explanation	Solution
After configuring a new target language, it is not available for selection when submitting a new job.	Your team profile was not updated to support sending content for translation to the new target language. The Connector uses profiles to define the set of users who can send out content for translation with specific source-target language pairs. **Note:** Profiles also define who can send out content for translation to a specific translation provider (LSP).	Ask your Adobe Experience Manager administrator to update the appropriate team profile to include the source-target language pairs. For detailed instructions, see "Configuring Team Profiles" on page 110.

11.14 Adobe Experience Manager Service Authentication

Possible issues

If you are using Adobe Experience Manager 6.3 or higher with version 3.2.0 or higher of the Connector, the following problems may occur:

- You cannot save all Connector configurations.

- Translated content does not return to Adobe Experience Manager.

- You cannot perform most Globalization Tool functionality with the default settings.

Explanation

These problems occur because in Adobe Experience Manager 6.3 and higher, Adobe has deprecated support for administrative login methods for services.

In response, the starting with version 3.2.0, Connector adds a new system user, `claytablet-service`, which the `claytablet` bundle uses for operations.

The Connector adds the following new configurations to CRXDE Lite, which are described in detail below:

- `/apps/ctctranslation/config/org.apache.sling.serviceusermapping.impl.ServiceUserMapperImpl.amended-claytablet`

- `/apps/ctctranslation/config/com.day.cq.security.ACLSetup`

- `/home/users/system/claytablet-service`

Note: Under normal circumstances, you should not need to edit any of these configurations.

Detailed explanations

/apps/ctctranslation/config/org.apache.sling.serviceusermapping.impl.ServiceUserMapperImpl.amended-claytablet.xml

This is an OSGi configuration that adds a mapping between the `claytablet` bundle and the `claytablet-service` system user for the Connector.

To locate this configuration in the system console:

1. In your Web browser, navigate to `/system/console/configMgr`.

2. In the **Adobe Experience Manager Web Console Configuration** page, search for `Service Amendment`.
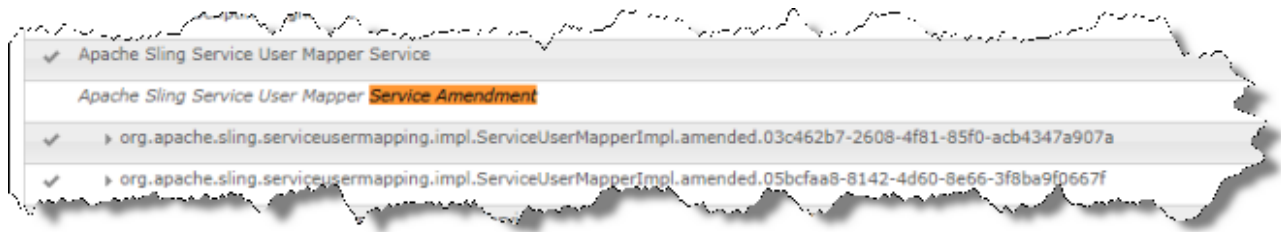
3. Next, search for `claytablet`.
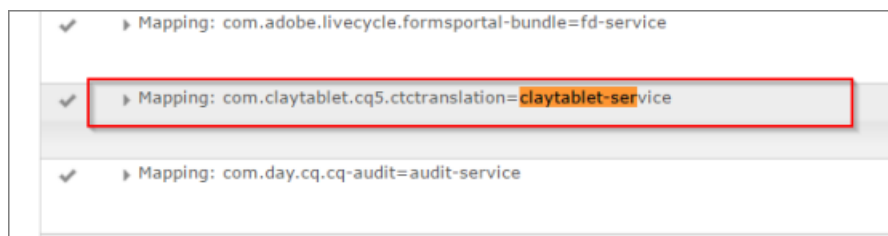
4. Double-click this entry to view the value in the **Service Mappings** field:
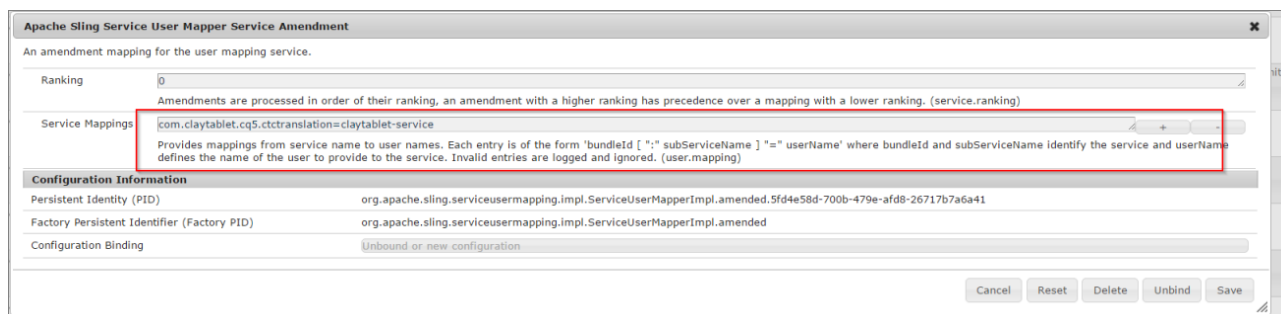
/apps/ctctranslation/config/com.day.cq.security.ACLSetup.xml

This OSGi configuration grants the `all` permission to the `claytablet-service` system user for `/`. This system user has all permissions on every path in the repository.

Note: This is the same as `loginAdminstrative()` in pre-3.2.0 versions of the Connector.

To locate this configuration in the system console:

1. In your Web browser, navigate to `/system/console/configMgr`.

In the **Adobe Experience Manager Web Console Configuration** page, search for `Day CQ ACL`.

2. Click this entry to view the details.

/home/users/system/claytablet-service

The new `claytablet-service` system user has permission to everything, because of the ACLSetup. If necessary, you can modify the permission settings. However, the Connector requires full permission to the following directories:

- `/content`
- `/apps`
- `/etc`
- `/var`

To locate the `claytablet-service` system user and view its permissions:

1. In your Web browser, navigate to `/useradmin`.

2. In the **AEM Security** page, locate the `claytablet-service` user in the left pane.
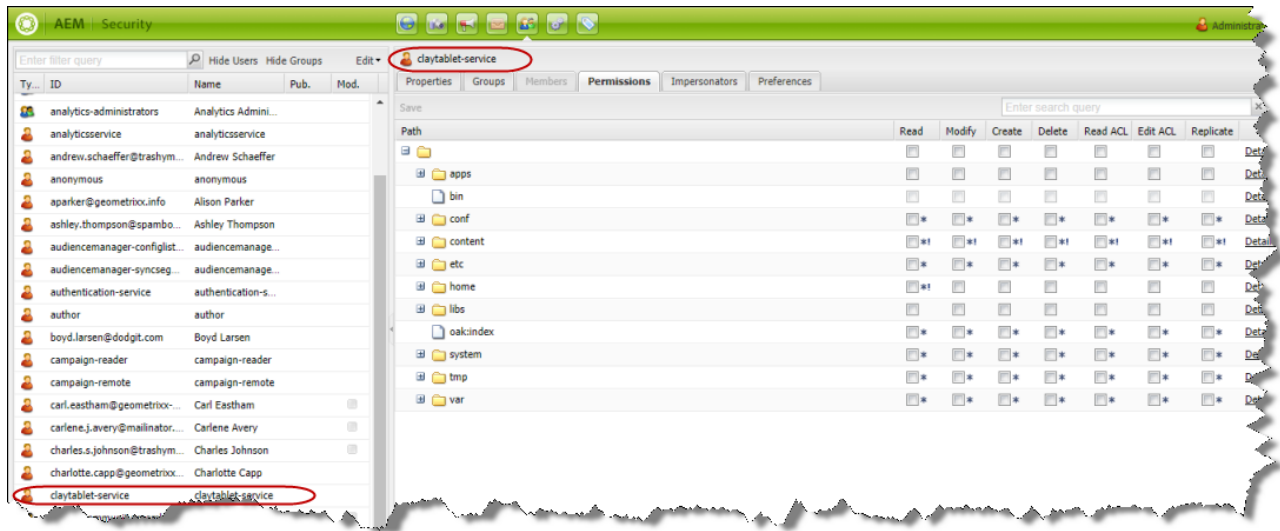
> **Tip:** To simplify the permission settings for the `claytable-service` user, you can add `claytable-service` to the Adobe Experience Manager `administrators` user group. The reason this works is that before the API changes in Adobe Experience Manager 6.3, the Connector used the `administrator` permission of an `admin` session from Adobe Experience Manager API to perform all the actions.

For more information, refer to:
https://cwiki.apache.org/confluence/display/SLING/Service+Authentication.

11.15 Freeway Analysis Codes not Displayed when Sending Out Content for Translation

Issue

The add-on for Lionbridge Freeway is installed, and Freeway analysis codes specified, but they are not displayed or available for selection when sending out content for translation.

Explanation

The URLs where Lionbridge Freeway provides the authentication service and the analysis code service are not correctly configured. If you have a firewall, you must configure your ports so that the Connector can communicate with these services.

Solution

1. In the **Freeway Config** section of the **Configuration** page, enter the following settings:

Configuration Option	Description
Freeway Auth URL	The URL where Lionbridge Freeway provides the authentication service. This is `https://fwapi.lionbridge.com/obvibundles/freewayauth.asmx`.
Freeway Service URL	The URL where Lionbridge Freeway provides the analysis code service. This is `https://fwapi.lionbridge.com/obvibundles/service.asmx`.

For detailed instructions, see "Freeway Config" on page 44.

2. If you have a firewall, you must configure your ports so that the Connector can communicate with these URLs. For detailed instructions, see "Configuring Network Settings for a Firewall" on page 32.

12 Testing the Connector

After you complete the configuration, your Lionbridge Connector for Adobe Experience Manager installation is ready for testing. We recommend sending only a few pages for translation in one language as an initial test. For detailed instructions, refer to the *Lionbridge Connector for Adobe Experience Manager User Guide*. Once successful, you can send as many languages as required.

Please coordinate with your translation provider for this test process.

If you have any concerns or questions, please contact Lionbridge Connector Support. For details, see "How to Contact Lionbridge Connector Support" on page 11.

From a testing perspective, do not treat the Connector as merely standalone software. It integrates into Adobe Experience Manager and your overall translation workflow. You must test the end-to-end process, from content creation to publishing, to ensure that the Connector is working as expected and configured to support your business needs.

In addition to following the guidelines below, you should also include any internal test or use cases that would normally be applied to any software that is deployed to Adobe Experience Manager. You must robustly test the Connector and the translation process against the (non-production) MT (machine translation) service. This saves time and project costs, because trying to solve issues during the production phase is costly and delays your translation timelines.

Recommendations: Complete your testing in a pre-production environment before deploying the Connector to your production environment. If you must perform testing in your production environment, you should create test content that can be deleted after completing the tests. The connector database translation memory must also be cleared in your production environment. For detailed instructions, contact Lionbridge Connector Support, as described in "How to Contact Lionbridge Connector Support" on page 11. Consider any changes in functionality, configuration, or customization between pre-production and production environments in this final test pass.

Testing the connector

1. Verify that the Connector is configured to send all required content types for all required languages.

2. Ensure that the Connector sends only translatable content for translation.

3. Configure email notifications set and ensure that they are generated at the appropriate step in the translation workflow.

Integration with Adobe Experience Manager

1. Ensure that the content authors how to interact with the Connector and send content to translation. For detailed instructions, refer them to the *Lionbridge Connector for Adobe Experience Manager User Guide*.

2. Select a method of sending content to translation that aligns with how content authors work in Adobe Experience Manager.

3. Ensure that the Connector users have the correct rights to access the Connector within Adobe Experience Manager.

Testing the translation workflow

1. Ensure that the Connector translation workflow integrates with your overall strategy of managing source and translated content.

2. Validate how the translated content will be reviewed during the translation process.

3. Verify that the translation process integrates correctly with the publishing process.

13 Appendix: Language Codes

For detailed instructions on setting up the correct Connector language codes for every language your company uses for translation, see "Configuring Connector Languages" on page 83.

The Connector has the following language codes:

Type	Language Identifier	Language Code
String	Afrikaans	"af-ZA"
String	Albanian	"sq-AL"
String	Amharic	"am-ET"
String	Arabic_Algeria	"ar-DZ"
String	Arabic_Bahrain	"ar-BH"
String	Arabic_Egypt	"ar-EG"
String	Arabic_Iraq	"ar-IQ"
String	Arabic_Jordan	"ar-JO"
String	Arabic_Kuwait	"ar-KW"
String	Arabic_Lebanon	"ar-LB"
String	Arabic_Libya	"ar-LY"
String	Arabic_MiddleEast	"ar-XR"
String	Arabic_Morocco	"ar-MA"
String	Arabic_Oman	"ar-OM"
String	Arabic_Qatar	"ar-QA"
String	Arabic_Saudi_Arabia	"ar-SA"
String	Arabic_Syria	"ar-SY"
String	Arabic_Tunisia	"ar-TM"
String	Arabic_UAE	"ar-AE"
String	Arabic_Yemen	"ar-YE"
String	Armenian	"hy-AM"

Type	Language Identifier	Language Code
String	Assamese	"as-IN"
String	Basque	"eu-ES"
String	Belarusian	"be-BY"
String	Bengali_Bangladesh	"bn-BD"
String	Bengali_India	"bn-IN"
String	Bosnian_Bosnia_Herzegovina	"bs-BA"
String	Bulgarian	"bg-BG"
String	Burmese	"my-MM"
String	Catalan	"ca-ES"
String	Chinese_Hong_Kong	"zh-HK"
String	Chinese_Macao	"zh-MO"
String	Chinese_PRC	"zh-CN"
String	Chinese_Singapore	"zh-SG"
String	Chinese_Taiwan	"zh-TW"
String	Croatian	"hr-HR"
String	Croatian_Bosnia_Herzegovina	"hr-BA"
String	Czech	"cs-CZ"
String	Danish	"da-DK"
String	Divehi	"dv-MV"
String	Dutch	"nl-NL"
String	Dutch_Belgium	"nl-BE"
String	English_Australia	"en-AU"
String	English_Belize	"en-BZ"
String	English_Canada	"en-CA"

Type	Language Identifier	Language Code
String	English_HongKong	"en-HK"
String	English_India	"en-IN"
String	English_Indonesia	"en-ID"
String	English_Ireland	"en-IE"
String	English_Jamaica	"en-JM"
String	English_Malaysia	"en-MY"
String	English_New_Zealand	"en-NZ"
String	English_Philippines	"en-PH"
String	English_Singapore	"en-SG"
String	English_South_Africa	"en-ZA"
String	English_Trinidad	"en-TT"
String	English_UK	"en-GB"
String	English_US	"en-US"
String	English_Zimbabwe	"en-ZW"
String	Estonian	"et-EE"
String	Faroese	"fo-FO"
String	Farsi	"fa-IR"
String	Filipino	"fil-PH"
String	Finnish	"fi-FI"
String	French	"fr-FR"
String	French_Belgium	"fr-BE"
String	French_Cameroon	"fr-CM"
String	French_Canada	"fr-CA"
String	French_Cote_d_Ivoire	"fr-CI"

Type	Language Identifier	Language Code
String	French_Democratic_Rep_Congo	"fr-CD"
String	French_Haiti	"fr-HT"
String	French_Luxembourg	"fr-LU"
String	French_Mali	"fr-ML"
String	French_Monaco	"fr-MC"
String	French_Morocco	"fr-MA"
String	French_Reunion	"fr-RE"
String	French_Senegal	"fr-SN"
String	French_Switzerland	"fr-CH"
String	Frisian_Netherlands	"fy-NK"
String	Fulfulde_Nigeria	"ff-NG"
String	FYRO_Macedonian	"mk-MK"
String	Gaelic_Ireland	"gd-IE"
String	Gaelic_Scotland	"gd-GB"
String	Gallegan	"gl-ES"
String	Georgian	"ka-GE"
String	German	"de-DE"
String	German_Austria	"de-AT"
String	German_Liechtenstein	"de-LI"
String	German_Luxembourg	"de-LU"
String	German_Switzerland	"de-CH"
String	Greek	"el-GR"
String	Guarani	"gn-PY"
String	Gujarati	"gu-IN"

Type	Language Identifier	Language Code
String	Hausa	"ha-NE"
String	Hawaiian	"haw-US"
String	Hebrew	"he-IL"
String	Hindi	"hi-IN"
String	Hungarian	"hu-HU"
String	Icelandic	"is-IS"
String	Igbo	"ig-NG"
String	Indonesian	"id-ID"
String	Inuktitut	"iu-CA"
String	Italian	"it-IT"
String	Italian_Switzerland	"it-CH"
String	Japanese	"ja-JP"
String	Kannada	"kn-IN"
String	Kanuri	"kr-TD"
String	Kashmiri	"ks-IN"
String	Kazakh	"kk-KZ"
String	Khmer	"km-KH"
String	Konkani	"kok-IN"
String	Korean	"ko-KR"
String	Kyrgyz	"ky-KZ"
String	Lao	"lo-LA"
String	Latin	"la-XL"
String	Latvian	"lv-LV"
String	Lithuanian	"lt-LT"

Type	Language Identifier	Language Code
String	Malay	"ms-MY"
String	Malay_Brunei_Darussalam	"ms-BN"
String	Malayalam	"ml-IN"
String	Maltese	"mt-MT"
String	Maori	"mi-NZ"
String	Marathi	"mr-IN"
String	Mongolian	"mn-MN"
String	Nepali	"ne-NP"
String	Nepali_India	"ne-IN"
String	Norwegian	"nb-NO"
String	Norwegian_Nynorsk	"nn-NO"
String	Oriya	"or-IN"
String	Oromo	"om-ET"
String	Panjabi	"pa-PK"
String	Polish	"pl-PL"
String	Portuguese	"pt-PT"
String	Portuguese_Brazil	"pt-BR"
String	Punjabi_Pakistan	"pa-PK"
String	Pushto	"ps-AF"
String	Quechua_Ecuador	"qu-EC"
String	Quechua_Peru	"qu-PE"
String	Rhaeto_Romance	"rm-IT"
String	Romanian	"ro-RO"
String	Romanian_Moldova	"ro-MD"

Type	Language Identifier	Language Code
String	Russian	"ru-RU"
String	Russian_Moldava	"ru-MD"
String	Sami	"se-NO"
String	Sanskrit	"sa-IN"
String	Serbian_Cyrillic	"sr-RS"
String	Serbian_Latin	"sr-SP"
String	Sindhi_India	"sd-IN"
String	Sindhi_Pakistan	"sd-PK"
String	Sinhala	"si-LK"
String	Slovak	"sk-SK"
String	Slovenian	"sl-SI"
String	Somali	"so-ET"
String	Sorbian	"wen-DE"
String	Spanish	"es-ES"
String	Spanish_Argentina	"es-AR"
String	Spanish_Bolivia	"es-BO"
String	Spanish_Chile	"es-CL"
String	Spanish_Colombia	"es-CO"
String	Spanish_Costa_Rica	"es-CR"
String	Spanish_Dominican_Republic	"es-DO"
String	Spanish_Ecuador	"es-EC"
String	Spanish_El_Salvador	"es-SV"
String	Spanish_Honduras	"es-HN"
String	Spanish_LatinAmerica	"es-XL"

Type	Language Identifier	Language Code
String	Spanish_Mexico	"es-MX"
String	Spanish_Nicaragua	"es-NI"
String	Spanish_Panama	"es-PA"
String	Spanish_Paraguay	"es-PY"
String	Spanish_Peru	"es-PE"
String	Spanish_Puerto_Rico	"es-PR"
String	Spanish_Uruguay	"es-UY"
String	Spanish_US	"es-US"
String	Spanish_Venezuela	"es-VE"
String	Swahili	"sw-TZ"
String	Swedish	"sv-SE"
String	Swedish_Finland	"sv-FI"
String	Syriac	"syr-SY"
String	Tajik	"tg-TJ"
String	Tamil	"ta-IN"
String	Tatar	"tt-RU"
String	Telugu	"te-IN"
String	Thai	"th-TH"
String	Tibetan	"bo-CN"
String	Tigrinya_Eritrea	"ti-ER"
String	Tigrinya_Ethiopia	"ti-ET"
String	Tsonga	"ts-ZA"
String	Tswana	"tn-BW"
String	Turkish	"tr-TR"

Type	Language Identifier	Language Code
String	Turkmen	"tk-TM"
String	Uighur	"ug-CN"
String	Ukrainian	"uk-UA"
String	Urdu	"ur-PK"
String	Urdu_India	"ur-IN"
String	Uzbek	"uz-UZ"
String	Venda	"ve-ZA"
String	Vietnamese	"vi-VN"
String	Welsh	"cy-GB"
String	Xhosa	"xh-ZA"
String	Yi	"ii-CN"
String	Yiddish	"yi-MD"
String	Yoruba	"yo-NG"
String	Zulu	"zu-ZA"

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