



**Lionbridge Connector for Hybris**

# **Installation and Configuration Guide**

**Version 2.3.0**

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# 1 Welcome to the Lionbridge Connector for Hybris

Welcome to the Lionbridge Connector for Hybris ("Connector"). This is Lionbridge's connector between Hybris and the Clay Tablet Platform.

## 1.1 Terminology

<b>Amazon AWS</b>	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 <a href="http://aws.amazon.com">http://aws.amazon.com</a> .
<b>Amazon S3</b>	Amazon Simple Storage Service. For details, see: <a href="http://aws.amazon.com/s3">http://aws.amazon.com/s3</a> . The Connector and the Clay Tablet Platform use Amazon S3 to provide temporary storage services for the content sent to and from translation.
<b>Amazon SQS</b>	Amazon Simple Queue Service. For details, see: <a href="http://aws.amazon.com/sqs/">http://aws.amazon.com/sqs/</a> . The Connector uses Amazon SQS to provide Message Queue Services.
<b>Asset</b>	A content item that you manage using Hybris, for example, supported Hybris business objects.
<b>Clay Tablet (CTT)</b>	Clay Tablet Technologies, a Lionbridge company, and the corporate entity that publishes the Connector and the Clay Tablet Platform.
<b>Clay Tablet Platform</b>	The hosted (IaaS) connectivity platform that receives and routes content from content providers to translation providers and back during implementation. Clay Tablet Technologies, a Lionbridge company, configures the Platform based on the number and nature of systems involved in your system architecture.
<b>Freeway</b>	The name of the Lionbridge translation portal for submitting content to and retrieving content from the Lionbridge translation provider.

<b>FTP Server</b>	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.
<b>IaaS</b>	Infrastructure as a Service. The Clay Tablet Platform is an IaaS, because it is a hosted platform.
<b>Keys</b>	<p>The Connector uses keys to establish a secure, discrete connection between the Connector instance and the Platform.</p> <p><b>Very important:</b> Do not copy the CMS address keys to multiple Hybris instances, because this is a violation of the License Agreement. Using the same CMS address keys on multiple Hybris instances will cause the Lionbridge App or 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.</p>
<b>Lionbridge</b>	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.
<b>Lionbridge Connector for Hybris ("Connector")</b>	The connector software that Clay Tablet Technologies, a Lionbridge company, has developed and provides, which plugs into your Hybris 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.
<b>MT</b>	Machine translation. The translation provider can be a machine translation service, such as Google Translate.
<b>Producer</b>	CMS or another system that sends content or documents out for translation. In this case, this is Hybris.
<b>Provider</b>	A provider of translation services. The delivery of assets to the provider may be via an FTP server or a TMS connector.

<b>Support Asset</b>	Supporting documents and their metadata. Support assets are not translated by the translation provider, but they provide helpful context for the translator.
<b>TMS</b>	Translation management system that the translation provider uses.

## 1.2 About the Clay Tablet Translation 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.

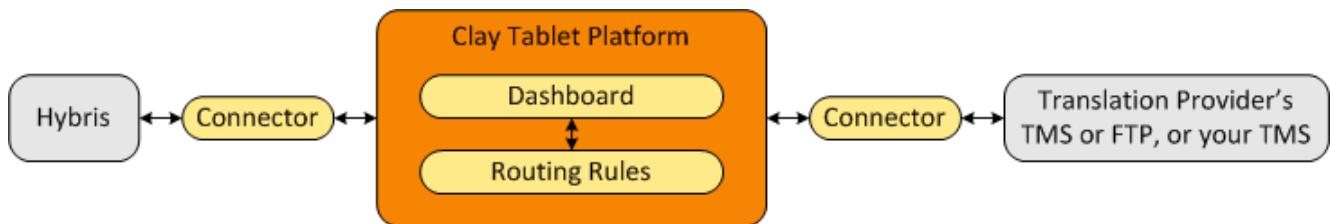
Clay Tablet Platform is the hosted (IaaS) connectivity platform that receives and routes content from content management systems to translation providers and back, including to Lionbridge via Freeway or onDemand. It is hosted on Amazon Web Services (AWS). During implementation, the Lionbridge Connector 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 Hybris

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

The Connector is installed on your system as an add-in to Hybris. Its functionality is displayed to the users as part of Hybris.



Your translation systems architecture might look like the configuration above. It may have additional content producers or translation providers, but the core concepts remain the same.

During implementation, the Lionbridge Connectors team 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 Hybris. It describes the delivery package contents, system requirements, installation instructions, and configuration procedures.

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

### Who should use this guide

This guide is intended for Hybris administrators and system integrators.

### What you should already know

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

### How to find out more about the Lionbridge Connector for Hybris

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

### Documentation conventions

This guide uses the following conventions:

Convention	Description
<b>Bold</b>	Highlights screen elements such as buttons, menu items, and fields.
<code>Courier</code>	Highlights input, file names, and paths.
<i>Italics</i>	Highlights terms for emphasis, variables, or document titles.

Convention	Description
>	Indicates a menu choice. For example, "Select <b>Translation &gt; Translate Asset.</b> "

## 1.5 How to Contact Lionbridge Connector Support

Email @: [connectors@lionbridge.com](mailto:connectors@lionbridge.com)

Telephone: +1-416-363-0888

You can submit a support ticket either:

- by email
- from the Lionbridge Connector Zendesk page, using your web browser

### To submit a support ticket:

1. Do one of the following:

- Email [connectors@lionbridge.com](mailto: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. If you do not have sign-in credentials, see "[To view and update your support ticket in Zendesk:](#)" below.

**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.

### **Information to include in the 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:**

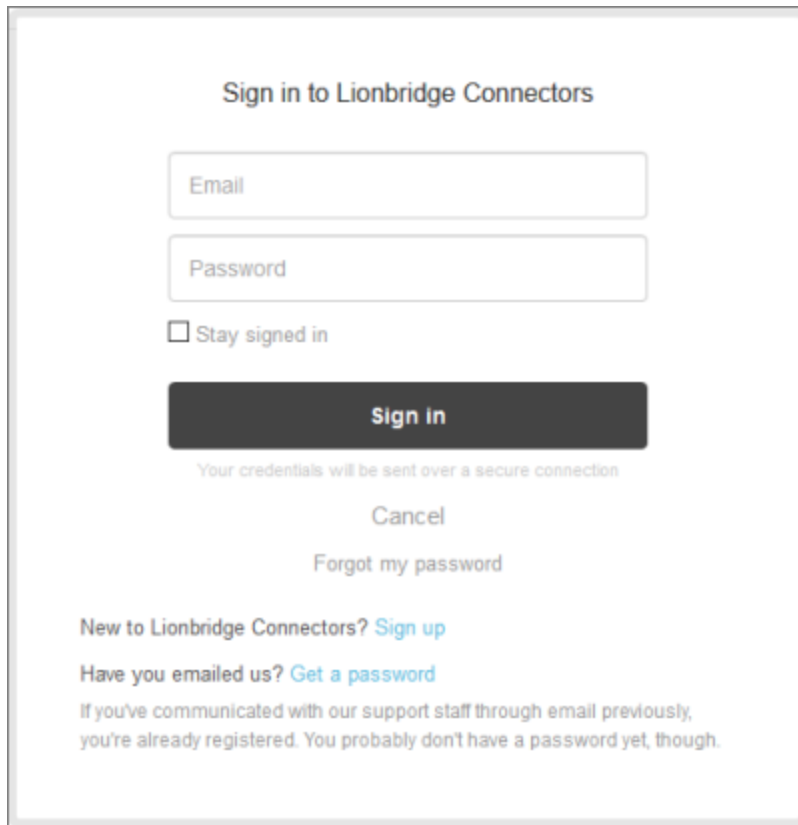
- CMS log files for the date the issue occurred
- Connector or App log files for the date the issue occurred
- screen capture of the issue

### **To view and update 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. In the top-right corner, click **Sign in**, and enter your credentials.



The screenshot shows a sign-in form titled "Sign in to Lionbridge Connectors". It includes an "Email" input field, a "Password" input field, and a checkbox labeled "Stay signed in". Below the fields is a prominent black "Sign in" button. Underneath the button, a small note states "Your credentials will be sent over a secure connection". Further down are links for "Cancel" and "Forgot my password". At the bottom, there are two links: "New to Lionbridge Connectors? Sign up" and "Have you emailed us? Get a password". A final note explains that users who have previously communicated with support staff are already registered but may not have a password yet.

**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.

## 2 Before You Install

Before you begin to install the Lionbridge Connector ("Connector") for Hybris, 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 12.
2. Ensure that in your Hybris environment, the Hybris suite user has sufficient access rights to control job execution in Hybris via `CronJobs`. For detailed instructions, refer to the appropriate version of the Hybris documentation at <https://wiki.hybris.com>.
3. Optional step. If you have a firewall, you must configure your ports so that the Connector can communicate with the Clay Tablet Platform. For details, see ["Configuring Network Settings for a Firewall"](#) on page 12.

### 2.1 System Requirements

The Lionbridge Connector for Hybris ("Connector") supports Hybris versions 6.1 and higher. The Connector has several pre-installation requirements, described in ["Before You Install"](#) on page 11.

The Connector requires Java 8.

The Connector has no additional hardware or software requirements beyond those of Hybris. For detailed requirements, refer to the appropriate version of the Hybris documentation at <https://wiki.hybris.com>.

<b>Memory</b>	16 GB minimum is recommended by Hybris. This is recommended for the Connector to function as expected.
<b>Disk Space</b>	<ul style="list-style-type: none"> <li>■ 5 GB is recommended by Hybris.</li> <li>■ The Connector installation requires an additional 170 MB of disk space.</li> <li>■ Space for storing log files.</li> </ul>

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

The Lionbridge 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 Lionbridge 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 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	<a href="https://api.clay-tablet.net/license/v1">https://api.clay-tablet.net/license/v1</a>
HTTPS	Port 443	For secure access to Amazon's AWS S3 service	<a href="https://s3.amazonaws.com/">*.s3.amazonaws.com/*</a>
HTTPS	Port 443	For secure access to Amazon's AWS SQS service	<a href="https://queue.amazonaws.com/">https://queue.amazonaws.com/*</a>
HTTPS	Port 443	For secure access to Amazon's AWS SQS service	<a href="https://sqs.us-east-1.amazonaws.com/">https://sqs.us-east-1.amazonaws.com/*</a>

**To send content for translation to Lionbridge Freeway, also configure:**

<b>Protocol</b>	<b>Port Number</b>	<b>Description</b>	<b>Location to Configure</b>
HTTPS	Port 443	For secure access to Lionbridge Freeway	<a href="https://fwapi.lionbridge.com/obvibundles/freewayauth.asmx">https://fwapi.lionbridge.com/obvibundles/freewayauth.asmx</a>
HTTPS	Port 443	For secure access to Lionbridge Freeway	<a href="https://fwapi.lionbridge.com/obvibundles/service.asmx">https://fwapi.lionbridge.com/obvibundles/service.asmx</a>

### 3 Installing the Lionbridge Connector

This section describes how to install the Connector installation package into your Hybris system.

Before you install the Connector, verify that you have reviewed the system requirements and performed the pre-installation tasks described in ["Before You Install"](#) on page 11.

#### To install the Connector into Hybris:

1. Download the Lionbridge Connector ("Connector") delivery package, from the link that Lionbridge sends you.
2. Unzip the delivery package into any working folder on your server.
3. If the `${HYBRIS_BINDIR}/custom` folder does not already exist, then create it, for example:

■ In Windows: `C:\hybris\bin\custom`.

■ In Unix: `$HYBRIS_HOME/bin/custom`.

4. Copy all the Connector packages in the delivery package to the `custom` folder, for example:

■ In Windows:

<code>C:\hybris\bin\custom\ctbackoffice</code>	all Hybris versions
<code>C:\hybris\bin\custom\ctbasecockpit</code>	Hybris versions 6.1 to 6.6 only
<code>C:\hybris\bin\custom\ctcockpit</code>	Hybris versions 6.1 to 6.6 only
<code>C:\hybris\bin\custom\ctcore</code>	all Hybris versions
<code>C:\hybris\bin\custom\ctwcms</code>	Hybris versions 6.1 to 6.6 only

■ In Unix:

<code>\$HYBRIS_HOME/bin/custom/ctbackoffice</code>	all Hybris versions
<code>\$HYBRIS_HOME/bin/custom/ctbasecockpit</code>	Hybris versions 6.1 to 6.6 only
<code>\$HYBRIS_HOME/bin/custom/ctcockpit</code>	Hybris versions 6.1 to 6.6 only

<code>\$HYBRIS_HOME/bin/custom/ctcore</code>	all Hybris versions
<code>\$HYBRIS_HOME/bin/custom/ctwcms</code>	Hybris versions 6.1 to 6.6 only

**Note:** The `ctbasecockpit`, `ctcockpit`, and `ctwcms` folders support the corresponding Hybris cockpits, which are not included in Hybris versions 6.7 and higher. Version 6.7 includes only the Backoffice Cockpit.

5. If the Hybris server is running, then stop it.

■ In Windows:

- a. Open the **Command Prompt** window in which the server is running.
- b. Press `Ctrl` and `C`.

■ In Unix: In the Terminal, press `Ctrl` and `C`.

6. In the `${HYBRIS_CONFIGDIR}/localextensions.xml` file, add the following entries for the new extensions:

■ In Hybris versions 6.1 to 6.6:

```
<extension name="ctbackoffice"/>
<extension name="ctbasecockpit"/>
<extension name="ctcockpit"/>
<extension name="ctcore"/>
<extension name="ctwcms"/>
```

■ In Hybris versions 6.7 and higher:

```
<extension name="ctbackoffice"/>
<extension name="ctcore"/>
```

For example, add this entry to the following file:

■ In Windows: `C:\hybris\config\localextensions.xml`.

■ In Unix: `$HYBRIS_HOME/config/localextensions.xml`.

7. If you are installing the Connector in Hybris version 6.1 or 6.2, complete the following sub-steps:

a. Edit `hybris/bin/custom/ctbackoffice/resources/ctbackoffice-backoffice-config.xml`.

b. Locate the section that starts with the following XML comment:

```
!-- Enable-multi-select Attribute (6.3+).
```

- c. Comment out or remove the configuration enabling the Connector to send content for translation from the Backoffice. This section is on lines 55-154.
- d. Comment out both sub-sections that start with `<context component="collection-browser"/>`. These sub-sections are on lines 159-177.

**Note:** This feature is enabled by default in Hybris versions 6.3 and higher.

8. In Hybris versions 6.6 and higher, in `ctbackoffice\resources\ctbackoffice-backoffice-config.xml`, at line 55, note the configuration file for your supported version of Hybris.

**Note:** This step is not required in Hybris versions 6.1 to 6.5.

9. In Hybris versions 6.6 and higher, edit the configuration file you identified in the previous step as follows:

**Note:** This step is not required in Hybris versions 6.1 to 6.5.

- Uncomment the following:

```
<context type="Item" component="listviewactions">
  <y:actions>
    <y:group qualifier="common">
      <y:label>actiongroup.common</y:label>
      <y:action action-
        id="com.lionbridge.hybris.connector.ctbackoffice.actions.
        sendtotranslation" property="selectedObjects" />
    </y:group>
  </y:actions>
</context>
```

- Comment out the following:

```
<context component="listviewactions">
  <y:actions>
    <y:group qualifier="common">
      <y:label>actiongroup.common</y:label>
      <y:action action-
```



```

        id="com.lionbridge.hybris.connector.ctbackoffice.actions.
        sendtotranslation" property="selectedObjects" />
    </y:group>
</y:actions>
</context>

```

10. Navigate to the `${HYBRIS_BINDIR}/platform` directory, for example:

- In Windows: `C:\hybris\bin\platform`.
- In Unix: `$HYBRIS_HOME/bin/platform`.

11. Do one of the following:

- In Windows:
  - a. Press the `Shift` button and right-click, and select **Open command window here** from the context menu.  
The Command Prompt window opens.
  - b. Type `setantenv.bat` and press `Enter`.

- In Unix: In the Terminal, type `./setantenv.sh` and press `Enter`.

12. After setting ant home, type `ant clean all` and press `Enter`.

This takes a few minutes to run. When it is finished, `BUILD SUCCESSFUL` is displayed in the Terminal, along with the build time.

13. Do one of the following to start the Hybris server, so that you can deploy the Connector:

- In Windows: In the **Command Prompt** window, type `hybrisserver.bat` and press `Enter`.
- In Unix: In the Terminal, type `hybrisserver.sh` and press `Enter`.

This takes a few minutes to run.

14. Update the Hybris suite.

- a. Open the Hybris **Administration Console** in a browser, at `http://localhost:9001`.
- b. Mouseover the **Platform** tab.
- c. Click the **Update** menu item.

The **Update** page opens.

**Note:** If you are updating from a previous version of the Connector, scroll down, and clear the **Create essential data** and **Localize types** check boxes.

- d. Click the **Update** button to start updating Hybris with the Connector.



This takes a few minutes to run.

15. When it is done, scroll down to the bottom of the page.

The console displays `FINISHED`, along with the updating time.

For more information about updating the Hybris suite, see:

<https://wiki.hybris.com/display/release5/Initializing+and+Updating+the+hybris+Commerce+Suite>.

### 3.1 Upgrading the Connector Database

This section describes how to upgrade the Connector database. This step is required when updating your Connector installation from version 2.1.x-2.1.2 to version 2.1.3 or higher. It is required to support changes to how classification content mapping is saved in the Connector database.

**To upgrade the Connector database:**

1. Open the Hybris **Administration Console** in a browser, at `http://localhost:9001`.
2. Mouseover the **Platform** tab.
3. Click the **Update** menu item.  
The **Update** page opens.
4. Ensure that in the **General settings** section, all the check boxes are selected.

5. Ensure that in the **Project data settings** section, the check box for the **ctcore** extension item (not shown) is selected.

The screenshot displays the 'Update' page in the Hybris Administration Console. The page is titled 'Update' and features several buttons: 'Lock', 'Update', 'Dump configuration', and 'SQL Scripts'. The 'Update' button is highlighted with a red circle. Below the buttons, there are configuration fields for 'Database pool', 'Database URL', 'Database table prefix', 'Database name', and 'Database user account'. The 'Project data settings' section is highlighted with a red circle and includes a 'Toggle all' checkbox and a list of extension items: 'core', 'scripting', and 'mediaweb'. The 'ctcore' extension item is not visible in the screenshot. The 'General settings' section is also highlighted with a red circle and includes options for 'Update running system', 'Clear the hMC configuration from the database', 'Create essential data', and 'Localize types'. The 'Page description' on the right explains the update process and provides notes on using the 'SQL Scripts' page and the 'Lock' button.

6. At the bottom of the page, click the **Update** button to start updating the Connector database.

## 4 Configuring the Lionbridge Connector

After you install the Connector, you configure your Connector installation in Hybris Backoffice.

### To configure the Connector:

1. In your Web browser, navigate to `/backoffice/` on your Hybris instance.
2. Log in to the Hybris Backoffice.
3. In the **Administration** menu, select **ConnectorConfig**.
4. In the secondary **ConnectorConfig** menu that opens, select **System Configuration**.
5. Configure the settings in the following sections:

Section	Detailed Configuration Instructions
Lionbridge License	" <a href="#">Setting Up Your Connector License</a> " on page 22
Add LSP	" <a href="#">Adding your Translation Provider (LSP)</a> " on page 23
Connector Configurations–Translation Settings	" <a href="#">Configuring Translation Settings</a> " on page 26
Connector Configurations–Language Mapping	" <a href="#">Mapping Language Codes</a> " on page 28
Connector Configurations–Network Settings	" <a href="#">Configuring Proxy Server Implementations</a> " on page 30

6. In the **ConnectorConfig** menu, select **Content Mapping** to open the Content Mapping page.
  - In the **Item Type Attributes** tab, you configure the localized `Item Type` attributes of Hybris business objects and sub-types to send out for translation. For detailed instructions, see "[Configuring Hybris Business Objects, Sub-Types, and Localized Attributes](#)" on page 32.
  - Optional. In the **Classification Attributes** tab, you can configure the product classification attributes of Hybris objects that are *Products* for the Connector to

send for translation. All classification attributes belong to a category. When you add a product to a category, Hybris attaches those attributes to it. For detailed configuration instructions, see ["Configuring Product Classification Attributes for Translation"](#) on page 38.

- Optional. In Hybris versions 6.1 or 6.2, you can configure the multi-select feature to support sending multiple products and pages for translation concurrently from the Hybris Backoffice. For detailed instructions, see ["Configuring the Multi-Select Feature in Hybris"](#) on page 41.

**Note:** This step is not relevant for Hybris versions 6.3 or higher.

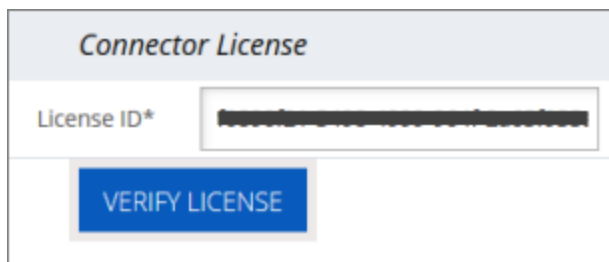
**Important:** You must configure your browser to allow pop-up windows on the Hybris server.

## 4.1 Setting Up Your Connector License

You set up your Connector license in the **Connector License** section of the **System Configuration** page.

### To set up your Connector license:

- Open the **System Configuration** page. For detailed instructions, see ["Configuring the Lionbridge Connector"](#) on page 21.
- In the **Connector License** section of the **System Configuration** page, in the **License ID** field, enter your Connector license key, which you obtain from Lionbridge.



The screenshot shows a web form titled "Connector License". It contains a text input field labeled "License ID\*" with a long, complex alphanumeric string entered. Below the input field is a prominent blue button with the text "VERIFY LICENSE" in white capital letters.

- Click **Verify License**.

A message box opens, stating that the license was successfully verified.

**Note:** The Connector always initiates calls to the Clay Tablet Platform. However, the CMS address keys enable establishing a secure, discrete connection between the Connector instance and the Platform. The Connector uses the CMS address key to

move the files your company exports from Hybris to the Clay Tablet Platform. The Platform then forwards your exported files to your translation provider. The CMS address keys also support the return of files from translation. If you have multiple Hybris installations, there must be one key for each environment.

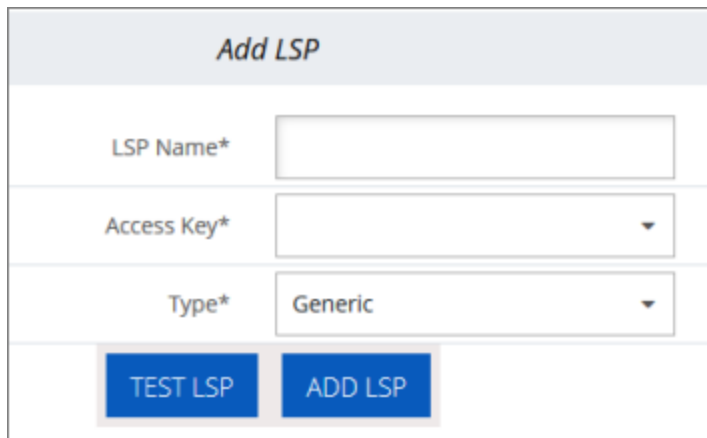
**Very important:** Do not copy the CMS address keys to multiple hybris instances, because this is a violation of the License Agreement. Using the same CMS address keys on multiple hybris instances will cause the Lionbridge App or Connector to behave unexpectedly, which can result in lost translation 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.

## 4.2 Adding your Translation Provider (LSP)

You set up your translation provider (LSP) in the **Add LSP** section of the **System Configuration** page.

### To add your translation provider:

1. Open the **System Configuration** page. For detailed instructions, see "[Configuring the Lionbridge Connector](#)" on page 21.
2. In the **Add LSP** section of the **System Configuration** page, enter the following information:



Add LSP	
LSP Name*	<input type="text"/>
Access Key*	<input type="text"/>
Type*	Generic
<input type="button" value="TEST LSP"/> <input type="button" value="ADD LSP"/>	

- **LSP Name:** Your company's name for the translation provider (LSP). This is what your users will select when sending out content for translation to this provider.

- **Access Key:** Clay Tablet provides access keys for you to map to your LSPs (translation providers). Select a key to access a specific translation provider. The list of available keys is populated after you verify your license, as described in ["Setting Up Your Connector License"](#) on page 22.
- **Type:** Select your translation provider. If your translation provider is not displayed, then select `Generic`. The type of translation provider determines whether additional configuration is required. This is one of the following:
  - `Lionbridge Freeway`: Select this for the Lionbridge Freeway translation provider. This option requires additional information. If you select this, the section of the page expands to display additional fields:

The screenshot shows a web form titled "Add LSP". It contains the following fields and controls:

- LSP Name\***: A text input field.
- Access Key\***: A dropdown menu.
- Type\***: A dropdown menu with "Freeway" selected.
- Server\***: A text input field.
- User\***: A text input field containing "admin".
- Password\***: A text input field with masked characters (dots).
- Auth URL**: A text input field.
- Service URL**: A text input field.
- Buttons**: "TEST LSP" and "ADD LSP" buttons.

Field	Description
Server	The hostname of the Lionbridge Freeway server, for example, <code>example.lionbridge.com</code> .
User	The username for logging into the Lionbridge Freeway server.
Password	The password for logging into the Lionbridge Freeway server.



Field	Description
Auth URL	Optional. The URI where the Connector receives an authentication token for Lionbridge Freeway. This is <code>https://fwapi.lionbridge.com/obvibundles/freewayauth.asmx</code> .
Service URL	Optional. The URI where the Connector can request a list of Lionbridge Freeway analysis codes. This is <code>https://fwapi.lionbridge.com/obvibundles/service.asmx</code> .

- **Lionbridge onDemand:** Select this for the Lionbridge On Demand translation provider. This option requires additional information. If you select this, the section of the page expands to display additional fields:

Field	Description
API Key ID	Your API access key ID, which is your unique identifier. You generate this from the <b>API Information</b> tab in the <b>Account Information</b> page of the Lionbridge onDemand portal.
API Key	Your longer API access key, which is your unique identifier. You generate this from the <b>API Information</b> tab in the <b>Account Information</b> page of the Lionbridge onDemand portal.

Field	Description
Endpoint	The URL of the Lionbridge API, which you receive from liondemand.com, for example: <code>https://my-company.liondemand.com/api</code> .

- Generic: Select this if the translation provider is not Lionbridge onDemand or Lionbridge Freeway. No additional fields are displayed.

- Click **Test LSP** to test the settings for your translation provider.
- Click **Add LSP**.

The list at the bottom of the section now displays the translation provider (LSP) you just added.

Name	Access Key	Type
dev demo	hybris-dev-demo-producer	Generic
mktests	mk-qa-hybris-producer2	Generic
MKtestFW	mk-qa-hybris-producer	Freeway

## 4.3 Configuring Translation Settings

In the **Translation Settings** section of the **System Configuration** page, you configure the following settings:

- the maximum number of items in a translation file
- how frequently to download and import translations
- whether you can receive revisions of translated content

### Configuring the maximum number of items in a job

An *item* is an asset that is being translated into a specific target language.

For example, if you are translating 100 assets from one source language into three target languages, then there are 300 items. If you use the default value of 100, then only the first 100 items will be included in the job.

By default, the maximum number of items that the Connector sends out for translation in a single translation file is 100. You can change this number in the **Maximum number of items per translation file** setting to 150, 200, or 250.

### Configuring how frequently to download and import translations

The `ctPerformableCronJob` automatically downloads and imports translations from the Clay Tablet Platform into Hybris. By default, this CronJob runs once every minute.

This CronJob consumes resources such as memory space, network bandwidth, and database connections. Therefore, by design, the CronJob is active only when required, which is when the Connector submits a translation job and expects translated content to return from the Clay Tablet Platform. When the CronJob is active, it polls the Clay Tablet Platform to update the job status and retrieve any translated content.

At the start of each interval, the CronJob checks whether it is required to remain active. If it is not required, it de-activates internally. It automatically re-activates when there is a job to retrieve.

You can change this interval in the **Cron Job Interval (Minutes)** setting so that the CronJob runs every 5 or 10 minutes.

**Note:** If the Clay Tablet Platform is waiting for a message about translated content for a submitted job, and a network outage prevents this message from being delivered, the CronJob keeps polling the Clay Tablet Platform until the job is manually stopped.

**Tip:** You can temporarily prevent this job from running and consuming resources, for example, if you are not currently sending out content items for translation. For detailed instructions, refer to the appropriate version of the Hybris documentation at <https://wiki.hybris.com>.

### To change one or both of these settings:

1. Open the **System Configuration** page. For detailed instructions, see "[Configuring the Lionbridge Connector](#)" on page 21.

2. Locate the **Translation Settings** section of the **System Configuration** page.

Translation Settings	
Maximum number of items per Translation File*	100
Cron Job Interval (Minutes)*	5
Enable multiple deliveries	<input type="checkbox"/>
<b>SAVE TRANSLATION SETTINGS</b>	

**Tip:** Depending on your screen size and resolution, you may need to scroll down to view this section.

3. In the **Maximum number of items per translation file** list, select one of the following numbers: 100, 150, 200, or 250.
4. In the **Cron Job Interval (Minutes)** list, select one of the following intervals, in minutes: 1, 5, or 10.
5. Optional. If you want to enable receiving revisions of translated content, select the **Enable multiple deliveries** check box.
6. Click **Save Translation Settings**.

**Note:** Saving these settings creates and registers the `ctPerformableCronJob` with the interval you specified.

## 4.4 Mapping Language Codes

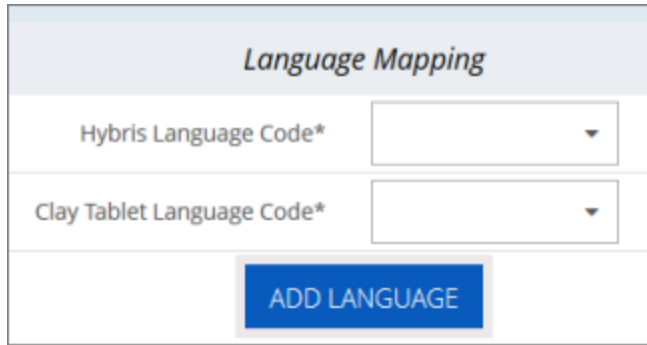
You map Hybris language codes to Clay Tablet language codes in the **Language Mapping** section of the **System Configuration** page.

You must map the Hybris language codes to the Clay Tablet language codes for the source and target languages that you will use for translation. Otherwise, then Connector will not send out content for translation.

For a list of Clay Tablet language codes, see "[Appendix: Language Codes](#)" on page 44.

**To map language codes:**

1. Open the **System Configuration** page. For detailed instructions, see "[Configuring the Lionbridge Connector](#)" on page 21.
2. Locate the **Language Mapping** section of the **System Configuration** page.



The screenshot shows a section titled "Language Mapping". It contains two dropdown menus. The first is labeled "Hybris Language Code\*" and the second is labeled "Clay Tablet Language Code\*". Below these two dropdowns is a blue button with the text "ADD LANGUAGE" in white capital letters.

**Tip:** Depending on your screen size and resolution, you may need to scroll down to view this section.

3. Perform the following steps for each language to map:
  - a. In the **Hybris Language Code** list, select the Hybris language code to map.

**Tip:** Languages that are already mapped are displayed in gray with a gray background. Languages that are not currently mapped are displayed in black with a white background.
  - b. In the **Clay Tablet Language Code** list, select the corresponding Clay Tablet language code to map.
  - c. Click **Add Language**.

The list at the bottom of the section now displays the mapping you just added.

**Language Mapping**

Hybris Language Code\*

Clay Tablet Language Code\*

Hybris Language Code	Clay Tablet Language Code	
de	de-DE	
pt	pt-BR	
ja	ja	
en	en-US	
es_CO	es-CO	
it	it-IT	
fr	fr-FR	
es	es-ES	

**Tip:** To delete a language mapping, click the corresponding Delete button .

## 4.5 Configuring Proxy Server Implementations

You can configure proxy server implementations of the Connector in the **Network Settings** section of the **System Configuration** page.

### To configure a proxy server:

1. Open the **System Configuration** page. For detailed instructions, see "[Configuring the Lionbridge Connector](#)" on page 21.

2. Locate the **Network Settings** section of the **System Configuration** page.

*Network Settings*

Use Proxy Server\* No

SAVE NETWORK SETTINGS

**Tip:** Depending on your screen size and resolution, you may need to scroll down to view this section.

3. In the **Use Proxy Server** dropdown list, select **Yes**.

The section expands.

*Network Settings*

Use Proxy Server\* Yes

Host\* 1.1.1.1

Port\* 333

User

Password

NTLM Domain

TEST PROXY SETTINGS SAVE NETWORK SETTINGS

4. Edit the following information:

Field	Description
Host	Required. The IP address or domain name for the proxy server.
Port	Required. The port number for the proxy server.

Field	Description
User	Optional. The username for authentication to the proxy server.
Password	Optional. The password for authentication to the proxy server.
NTLMDomain	Optional. The domain for authentication to the proxy server.

5. Click **Test Proxy Settings**.
6. If the test is successful, click **Save Network Settings**.

## 4.6 Configuring Attributes for Translation

There are two ways to configure Hybris business objects, sub-types, and localized attributes, including keywords, for translation:

- For *all* Hybris objects and sub-types in those objects, you can configure which localized `Item Type` attributes the Connector will send for translation, as described in "[Configuring Hybris Business Objects, Sub-Types, and Localized Attributes](#)" on page 32.
- For Hybris objects that are *Products*, you can configure the product classification attributes that the Connector will send for translation. All classification attributes belong to a category. When you add a product to a category, Hybris attaches those attributes to it. For more information about this Hybris feature, refer to the Hybris classification documentation at: <https://help.hybris.com/6.4.0/hcd/8b7aa49c86691014ae51c3b0d38cd87b.html>. For Connector configuration instructions, see "[Configuring Product Classification Attributes for Translation](#)" on page 38.

### 4.6.1 Configuring Hybris Business Objects, Sub-Types, and Localized Attributes

In the **Content Mapping** page, you can configure which Hybris business objects (objects) and localized attributes and sub-types in those objects the Connector will send for translation. The **Mapped Content** section, on the right side of that page, displays all configured Hybris objects, localized attributes, and sub-types, including localized attributes of sub-types.



**Important:** You can configure only *localized* attributes for the Connector. If there are attributes you want to send out for translation that are not localized by default, you must configure them to be localized. For detailed instructions, refer to "Localized Attributes" in the *Internationalization and Localization Overview* in the Hybris documentation, available at:

<https://help.hybris.com/6.3.0/hcd/8bfc204086691014a345f64b08505839.html>.

**Note:** In exceptional cases, configuring certain Hybris business objects and localized attributes, as described below, may not be sufficient to support the Connector sending them out for translation, and custom code may be required.

**Tip:** To translate content slot components, such as `CMSParagraphComponent`, you must map them.

**To configure a localized attribute of a Hybris business object or sub-type so that the Connector can send it out for translation:**

1. In your Web browser, navigate to `/backoffice/` on your Hybris instance.
2. Log in to the Hybris Backoffice Cockpit.
3. In the **Administration** menu, select **ConnectorConfig**.

The **Item Type Attributes** tab of the **Content Mapping** page opens.

Type Content Mapping	
Name:	<input type="text"/>
Identifier:	Product
Include relations	<input checked="" type="checkbox"/>
<input type="button" value="SEARCH"/>	
<< < 1 / 8 >> >> [ 1 - 6 / 48 ]	
Name	Identifier
Product	Product
Product Price Class	ProductPriceGroup
Product Tax Class	ProductTaxGroup
Product Discount Class	ProductDiscountGroup
Product Order Limit	ProductOrderLimit
Variant Product	VariantProduct
<< < 1 / 8 >> >> [ 1 - 6 / 48 ]	

Mapped Content	
Name	Identifier
Media	Media
Media Container	MediaContainer
Media Format	MediaFormat
Product	Product

- The **Type Content Mapping** section, on the left side of the tab, displays all the available Hybris objects and sub-types.
- The **Mapped Content** section, on the right side of the tab, displays all Hybris objects and sub-types, and their corresponding attributes, that have already been mapped.

The section footers display the total number of items in each list, and the total number of items displayed on this sub-page of the list.

- If there are more than seven items in the **Type Content Mapping** section, they are displayed in multiple sub-pages.
- If there are more than twelve items in the **Mapped Content** section, they are displayed in multiple sub-pages.

**Tip:** Use the sub-page navigation arrows to navigate between sub-pages. To navigate among sub-pages, at the bottom of the list, click an arrow or enter the number of the sub-page to display.

4. In the **Type Content Mapping** section of the page, use the **Name** and/or **Identifier** fields at the top of the section to search for the Hybris object or sub-type you want to be available for translation. By default, the **Include relations** check box is selected, so that `Relation` type attributes and types that contain only `Relation` type attributes to one level of recursion are also displayed. If you want to exclude these attributes and types from the search results, clear this check box. Then click **Search**.

**Note:** You can configure the number of recursion levels for the `Relation` type attributes and types that contain only `Relation` type attributes that are displayed in search results. For detailed instructions, see page 38.

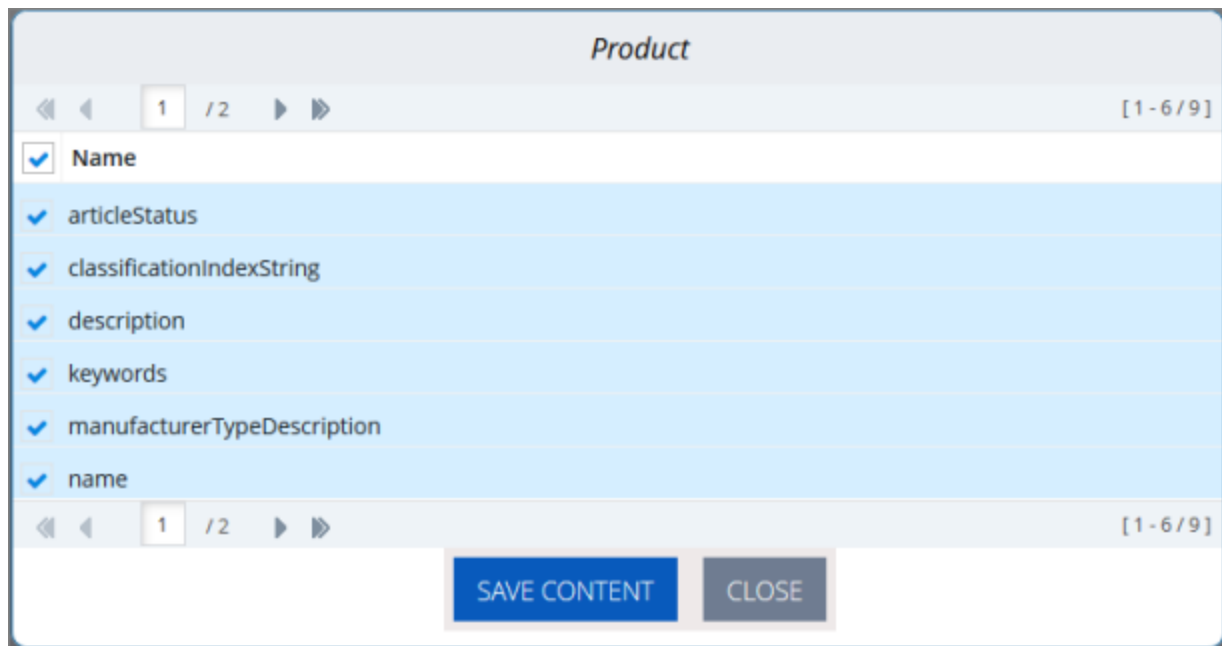
The list below the **Search** button updates with the search results. For example, if you searched for objects with the name `Product`, the list displays all matching results, which are objects or sub-types with `Product` in their name.

The screenshot shows a configuration window titled "Type Content Mapping". At the top, there are two tabs: "ITEM TYPE ATTRIBUTES" (selected) and "CLASSIFICATION ATTRIBUTES". Below the tabs, there are input fields for "Name:" (containing "Product") and "Identifier:". There is also a checkbox for "Include relations" which is checked. A blue "SEARCH" button is located below the input fields. Below the search button is a table with the following data:

Name	Identifier
Product	Product
Variant Product	VariantProduct
Generic Variant Product	GenericVariantProduct
Apparel Product	ApparelProduct
Configured product	AbstractConfiguratorSetting
Product Carousel	ProductCarouselComponent
Product List Component	ProductListComponent

5. In the search results, click the row for the Hybris business object or sub-type to map.

A dialog box opens, displaying the object's or sub-type's localized attributes. The title of the dialog box is the object or sub-type.



6. Configure the localized attributes for translation.
  - a. Select the check boxes for the localized attributes to configure for translation.

**Tip:** To select all check boxes, click the check box in the **Name** column header.
  - b. Click **Save Content**.

A message box states that the selected localized attributes were successfully saved.
  - c. Click **OK** to close the message box.

**Note:** Use the above steps to add additional localized attributes to a previously configured Hybris business object or sub-type.

### To edit or delete configured Hybris business objects or sub-types:

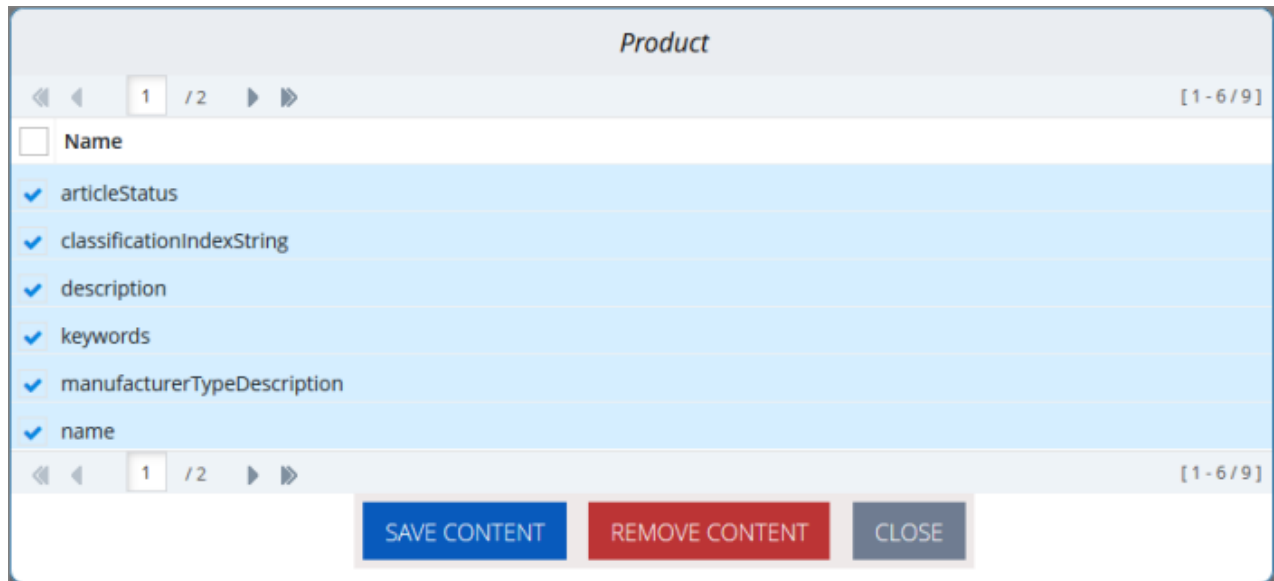
1. In your Web browser, navigate to `/backoffice/` on your Hybris instance.
2. Log in to the Hybris Backoffice Cockpit.
3. In the **Administration** menu, select **ConnectorConfig**.

The **Content Mapping** page opens. The **Mapped Content** section on the right side of the page displays all the previously configured Hybris business objects and sub-types.

4. Locate the configured Hybris business object to edit or delete, and click the corresponding row.

**Tip:** Use the sub-page navigation arrows to navigate between sub-pages. To navigate among sub-pages, at the bottom of the list, click an arrow or enter the number of the sub-page to display.

A dialog box opens. The title of the dialog box is the object or sub-type.



**Tip:** Use the sub-page navigation arrows to navigate between sub-pages. To navigate among sub-pages, at the bottom of the list, click an arrow or enter the number of the sub-page to display.

5. Do one of the following:
  - To edit the localized attributes to configure for translation, select or clear the appropriate check boxes, and then click **Save Content**.  
A message box states that the configuration was saved.
  - To remove the object or sub-type from configuration for translation, click **Remove Content**.  
A message box states that the item was deleted.

### 4.6.1.1 Configuring the Number of Recursion Levels for Relation Type Attributes

You can configure the number of recursion levels for the `Relation` type attributes and types that contain only `Relation` type attributes that are displayed in search results in the **Item Type Attributes** tab of the **Content Mapping** page. For more information about this tab, see page 32.

By default, when the **Include relations** check box is selected, one level of recursion of the `Relation` type attributes is displayed in search results. However, you can change the number of levels of recursion of the `Relation` type attributes that is displayed in the search results.

**Warning:** Changing the default value of 1 to a larger number may produce large process-consuming tasks that can affect system performance.

#### To change the number of levels of recursion of the `Relation` type attributes:

1. Open `{HYBRIS_HOME}/hybris/bin/custom/ctcore/project.properties` for editing.
2. Locate the `contentextraction.requestsSourcesExtractionRecursivenessMaxDepth` parameter.
3. Change the value of this parameter to any integer.

**Note:** The default value of this parameter is 1.

4. Save your change.

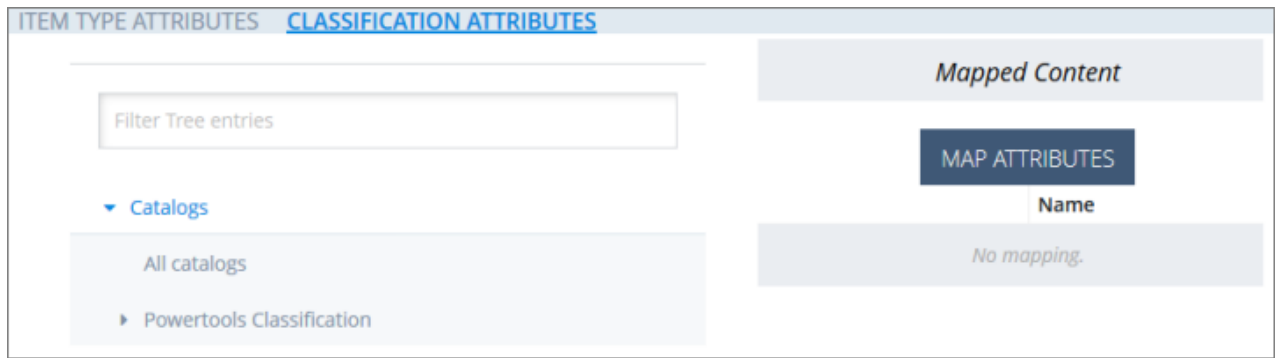
### 4.6.2 Configuring Product Classification Attributes for Translation

For Hybris object that are *Products*, you can configure the product classification attributes that the Connector will send for translation. All classification attributes belong to a category. When you add a product to a category, Hybris attaches those attributes to it. For more information about this Hybris feature, refer to the Hybris classification documentation at:

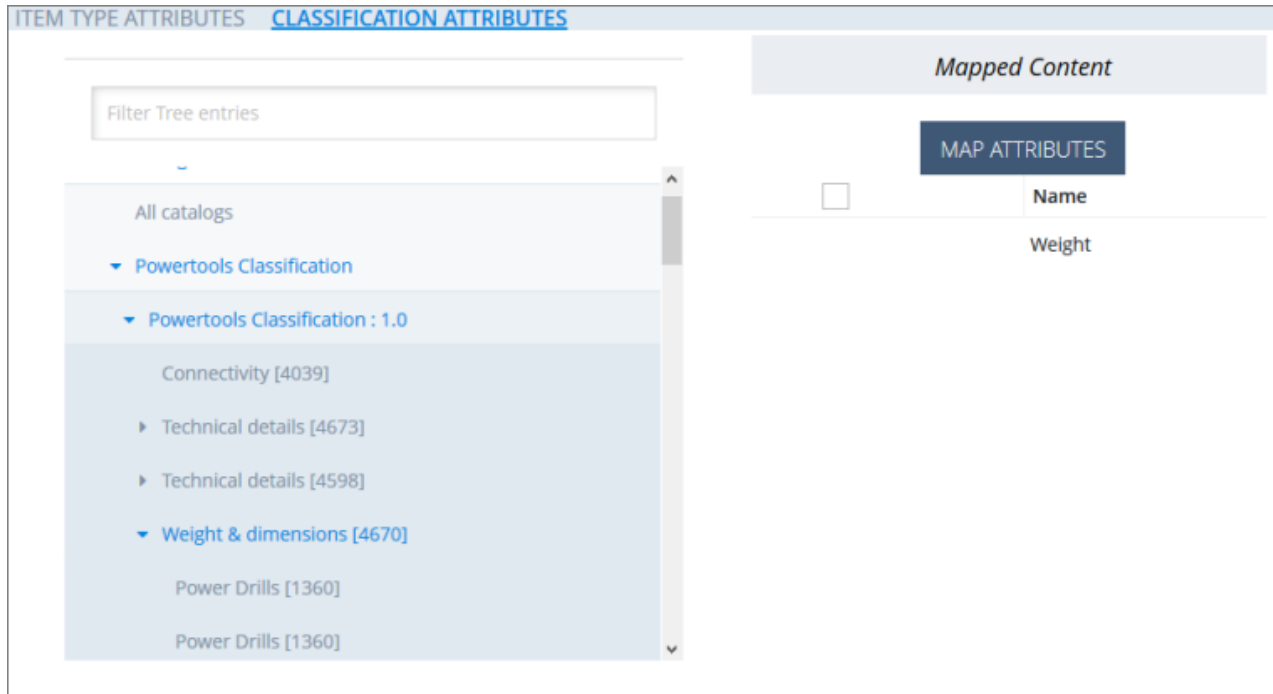
<https://help.hybris.com/6.4.0/hcd/8b7aa49c86691014ae51c3b0d38cd87b.html>.

**To configure product classification attributes for translation:**

1. In your Web browser, navigate to `/backoffice/` on your Hybris instance.
2. Log in to the Hybris Backoffice Cockpit.
3. In the **Administration** menu, select **ConnectorConfig**.  
The **Item Type Attributes** tab of the **Content Mapping** page opens.
4. Click the **Classification Attributes** link in the top of the page to open the corresponding tab.



- In the **Filter Tree** in the left pane, navigate in the catalogs and classification to select a classifying category. For example, navigate to: `Powertools Classification classification system > Powertools Classification: 1.0 classification system version > Weight & Dimensions classifying category`.



**Note:** In Backoffice, you can choose which classification to enable. For details, refer to the Hybris documentation, available at: <https://help.hybris.com>.

The **Mapped Content** pane on the right displays a list of classification attributes.

- To map the classification attributes, so that the Connector can send them out for translation, select the corresponding check box, or to select all classification attributes of the classifying category, select the check box in the column header. For example, select the `Weight` check box.
- Click **Map Attributes**.  
A message box confirms that the configuration was saved.
- Click **OK** to close the message box.
- Repeat steps 5 through 8 for all the classification attributes to configure for translation.



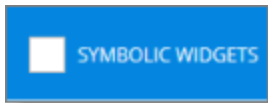
## 4.7 Configuring the Multi-Select Feature in Hybris

In Hybris versions 6.1 and 6.2, if you want to select multiple products and website pages ("pages") for translation concurrently in the Hybris Backoffice, you must enable the multi-select feature by configuring the `multiSelect` setting, as described below:

**Note:** This feature is enabled by default in Hybris versions 6.3 and higher.

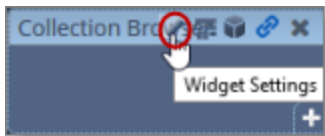
### To enable the multi-select feature in Hybris versions 6.1 and 6.2:

1. Log into the Hybris Backoffice Administration Cockpit ("Backoffice").
2. Press the `F4` key.  
The Application Orchestrator opens.
3. In the toolbar at the top, select the **Symbolic Widgets** check box.



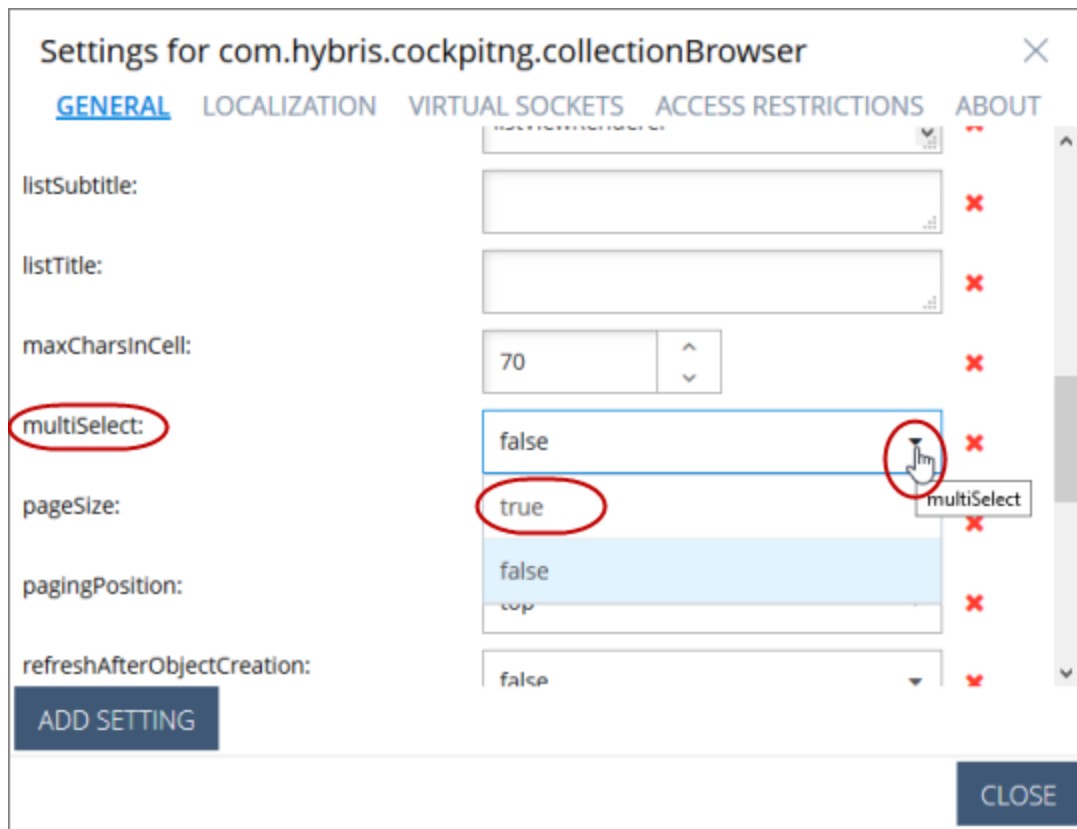
The page updates.

4. Scroll down to locate the **Collection Browser**.
5. Click the Widget Settings icon of the **Collection Browser**.



The **Settings** dialog box opens.

6. Scroll down to the **multiSelect** option, and in the corresponding dropdown list, select **true**.



7. In the bottom-right corner, click **Close** the dialog box.
8. Press the **F4** key to close the Application Orchestrator.

## 5 Pre-Production Testing

After you complete the configuration, your Lionbridge Connector for Hybris 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 Hybris 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 8.

## 6 Appendix: Language Codes

For detailed instructions on mapping Hybris languages to Clay Tablet languages, see ["Mapping Language Codes"](#) on page 28.

The Lionbridge Connector has the following language codes:

Language Identifier	Language Code
Afrikaans	"af-ZA"
Albanian	"sq-AL"
Amharic	"am-ET"
Arabic_Algeria	"ar-DZ"
Arabic_Bahrain	"ar-BH"
Arabic_Egypt	"ar-EG"
Arabic_Iraq	"ar-IQ"
Arabic_Jordan	"ar-JO"
Arabic_Kuwait	"ar-KW"
Arabic_Lebanon	"ar-LB"
Arabic_Libya	"ar-LY"
Arabic_MiddleEast	"ar-XR"
Arabic_Morocco	"ar-MA"
Arabic_Oman	"ar-OM"
Arabic_Qatar	"ar-QA"
Arabic_Saudi_Arabia	"ar-SA"
Arabic_Syria	"ar-SY"
Arabic_Tunisia	"ar-TM"

<b>Language Identifier</b>	<b>Language Code</b>
Arabic_UAE	"ar-AE"
Arabic_Yemen	"ar-YE"
Armenian	"hy-AM"
Assamese	"as-IN"
Basque	"eu-ES"
Belarusian	"be-BY"
Bengali_Bangladesh	"bn-BD"
Bengali_India	"bn-IN"
Bosnian_Bosnia_Herzegovina	"bs-BA"
Bulgarian	"bg-BG"
Burmese	"my-MM"
Catalan	"ca-ES"
Chinese_Hong_Kong	"zh-HK"
Chinese_Macao	"zh-MO"
Chinese_PRC	"zh-CN"
Chinese_Singapore	"zh-SG"
Chinese_Taiwan	"zh-TW"
Croatian	"hr-HR"
Croatian_Bosnia_Herzegovina	"hr-BA"
Czech	"cs-CZ"
Danish	"da-DK"

<b>Language Identifier</b>	<b>Language Code</b>
Divehi	"dv-MV"
Dutch	"nl-NL"
Dutch_Belgium	"nl-BE"
English_Australia	"en-AU"
English_Belize	"en-BZ"
English_Canada	"en-CA"
English_HongKong	"en-HK"
English_India	"en-IN"
English_Indonesia	"en-ID"
English_Ireland	"en-IE"
English_Jamaica	"en-JM"
English_Malaysia	"en-MY"
English_New_Zealand	"en-NZ"
English_Philippines	"en-PH"
English_Singapore	"en-SG"
English_South_Africa	"en-ZA"
English_Trinidad	"en-TT"
English_UK	"en-GB"
English_US	"en-US"
English_Zimbabwe	"en-ZW"
Estonian	"et-EE"

<b>Language Identifier</b>	<b>Language Code</b>
Faroese	"fo-FO"
Farsi	"fa-IR"
Filipino	"fil-PH"
Finnish	"fi-FI"
French	"fr-FR"
French_Belgium	"fr-BE"
French_Cameroon	"fr-CM"
French_Canada	"fr-CA"
French_Cote_d_Ivoire	"fr-CI"
French_Democratic_Rep_Congo	"fr-CD"
French_Haiti	"fr-HT"
French_Luxembourg	"fr-LU"
French_Mali	"fr-ML"
French_Monaco	"fr-MC"
French_Morocco	"fr-MA"
French_Reunion	"fr-RE"
French_Senegal	"fr-SN"
French_Switzerland	"fr-CH"
Frisian_Netherlands	"fy-NK"
Fulfulde_Nigeria	"ff-NG"
FYRO_Macedonian	"mk-MK"

<b>Language Identifier</b>	<b>Language Code</b>
Gaelic_Ireland	"gd-IE"
Gaelic_Scotland	"gd-GB"
Gallegan	"gl-ES"
Georgian	"ka-GE"
German	"de-DE"
German_Austria	"de-AT"
German_Liechtenstein	"de-LI"
German_Luxembourg	"de-LU"
German_Switzerland	"de-CH"
Greek	"el-GR"
Guarani	"gn-PY"
Gujarati	"gu-IN"
Hausa	"ha-NE"
Hawaiian	"haw-US"
Hebrew	"he-IL"
Hindi	"hi-IN"
Hungarian	"hu-HU"
Icelandic	"is-IS"
Igbo	"ig-NG"
Indonesian	"id-ID"
Inuktitut	"iu-CA"



<b>Language Identifier</b>	<b>Language Code</b>
Italian	"it-IT"
Italian_Switzerland	"it-CH"
Japanese	"ja-JP"
Kannada	"kn-IN"
Kanuri	"kr-TD"
Kashmiri	"ks-IN"
Kazakh	"kk-KZ"
Khmer	"km-KH"
Konkani	"kok-IN"
Korean	"ko-KR"
Kyrgyz	"ky-KZ"
Lao	"lo-LA"
Latin	"la-XL"
Latvian	"lv-LV"
Lithuanian	"lt-LT"
Malay	"ms-MY"
Malay_Brunei_Darussalam	"ms-BN"
Malayalam	"ml-IN"
Maltese	"mt-MT"
Maori	"mi-NZ"
Marathi	"mr-IN"

<b>Language Identifier</b>	<b>Language Code</b>
Mongolian	"mn-MN"
Nepali	"ne-NP"
Nepali_India	"ne-IN"
Norwegian	"nb-NO"
Norwegian_Nynorsk	"nn-NO"
Oriya	"or-IN"
Oromo	"om-ET"
Panjabi	"pa-PK"
Polish	"pl-PL"
Portuguese	"pt-PT"
Portuguese_Brazil	"pt-BR"
Punjabi_Pakistan	"pa-PK"
Pushto	"ps-AF"
Quechua_Ecuador	"qu-EC"
Quechua_Peru	"qu-PE"
Rhaeto_Romance	"rm-IT"
Romanian	"ro-RO"
Romanian_Moldova	"ro-MD"
Russian	"ru-RU"
Russian_Moldava	"ru-MD"
Sami	"se-NO"

<b>Language Identifier</b>	<b>Language Code</b>
Sanskrit	"sa-IN"
Serbian_Cyrillic	"sr-RS"
Serbian_Latin	"sr-SP"
Sindhi_India	"sd-IN"
Sindhi_Pakistan	"sd-PK"
Sinhala	"si-LK"
Slovak	"sk-SK"
Slovenian	"sl-SI"
Somali	"so-ET"
Sorbian	"wen-DE"
Spanish	"es-ES"
Spanish_Argentina	"es-AR"
Spanish_Bolivia	"es-BO"
Spanish_Chile	"es-CL"
Spanish_Colombia	"es-CO"
Spanish_Costa_Rica	"es-CR"
Spanish_Dominican_Republic	"es-DO"
Spanish_Ecuador	"es-EC"
Spanish_EL_Salvador	"es-SV"
Spanish_Honduras	"es-HN"
Spanish_LatinAmerica	"es-XL"

<b>Language Identifier</b>	<b>Language Code</b>
Spanish_Mexico	"es-MX"
Spanish_Nicaragua	"es-NI"
Spanish_Panama	"es-PA"
Spanish_Paraguay	"es-PY"
Spanish_Peru	"es-PE"
Spanish_Puerto_Rico	"es-PR"
Spanish_Uruguay	"es-UY"
Spanish_US	"es-US"
Spanish_Venezuela	"es-VE"
Swahili	"sw-TZ"
Swedish	"sv-SE"
Swedish_Finland	"sv-FI"
Syriac	"syr-SY"
Tajik	"tg-TJ"
Tamil	"ta-IN"
Tatar	"tt-RU"
Telugu	"te-IN"
Thai	"th-TH"
Tibetan	"bo-CN"
Tigrinya_Eritrea	"ti-ER"
Tigrinya_Ethiopia	"ti-ET"

<b>Language Identifier</b>	<b>Language Code</b>
Tsonga	"ts-ZA"
Tswana	"tn-BW"
Turkish	"tr-TR"
Turkmen	"tk-TM"
Uighur	"ug-CN"
Ukrainian	"uk-UA"
Urdu	"ur-PK"
Urdu_India	"ur-IN"
Uzbek	"uz-UZ"
Venda	"ve-ZA"
Vietnamese	"vi-VN"
Welsh	"cy-GB"
Xhosa	"xh-ZA"
Yi	"ii-CN"
Yiddish	"yi-MD"
Yoruba	"yo-NG"
Zulu	"zu-ZA"