

360Learning - Cornerstone

Integration setup and testing guide

This technical guide is part of our Technical Documentation.

Version 2.2

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1. Integration overview

This integration is based on the CSOD data export via a TSV file delivered to the CSOD FTP server (Reporting 2.0) and the CSOD APIs for the LMS portion of the integration.

The scope of this integration is in two parts user management (what we call HRIS integration) and content synchronization (what we call LMS integration):

HRIS integration includes:

- Creating, updating users that have an “Active” status
- Deleting users that have an “Inactive” status
- Assigning users their direct manager
- (Optional) Assigning users to “groups” in 360Learning based on the user metadata you can include in the file.
- (Optional) Filtering out users to ensure only relevant users are synchronized.

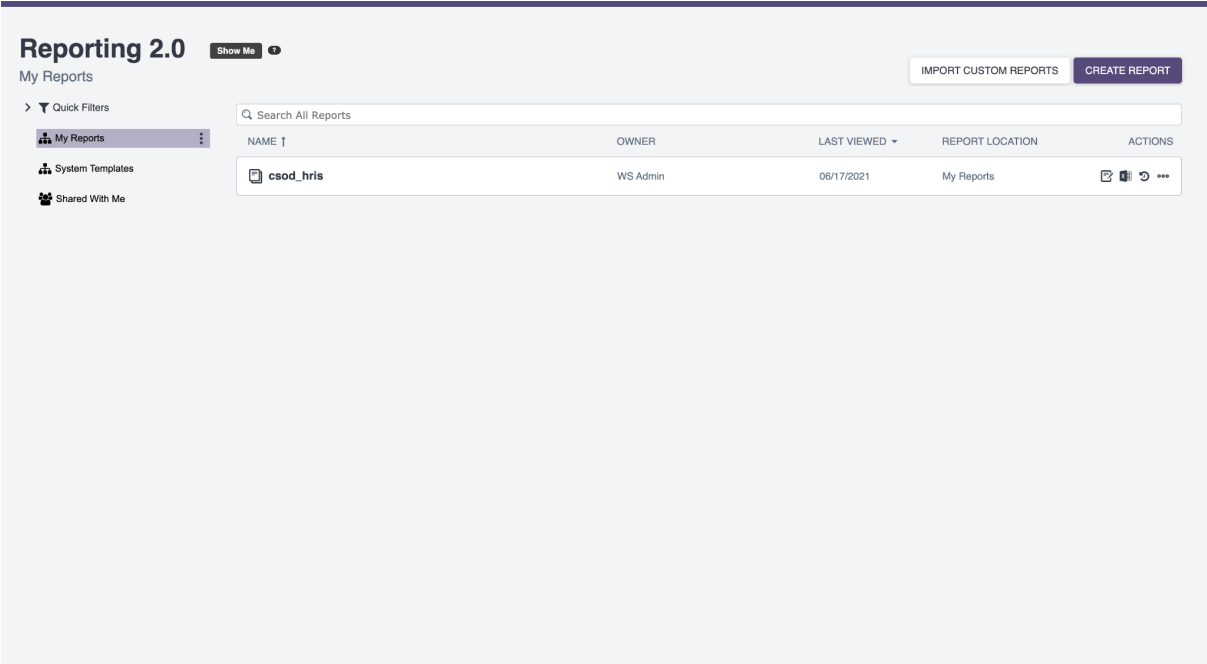
LMS integration includes:

- All Program Sessions in 360Learning that have started will be exported as Materials in CSOD
- All users that are assigned to a Program Session in 360Learning will be assigned to the relevant Material in CSOD using Learning Assignment API
 - Time spent, score and progress are sent as Custom Fields on the user's Transcript in CSOD.
- Once a user finishes a Program Session (or the Program Session ends) an Express Class is created to mark that work as completed.

2. HRIS Integration

Export File format

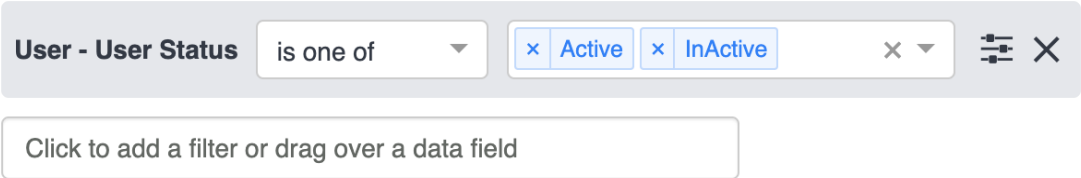
To use this feature, please start by creating a reporting in Reporting 2.0 on your Cornerstone OnDemand interface and create a New Report.



Filters:

At a minimum please filter to only include users with "Active" and "InActive" status.

Filters



You can, of course, add more filters if you want to limit the number of users that will be synchronized into 360Learning.

Properties:

Please reproduce the following settings:

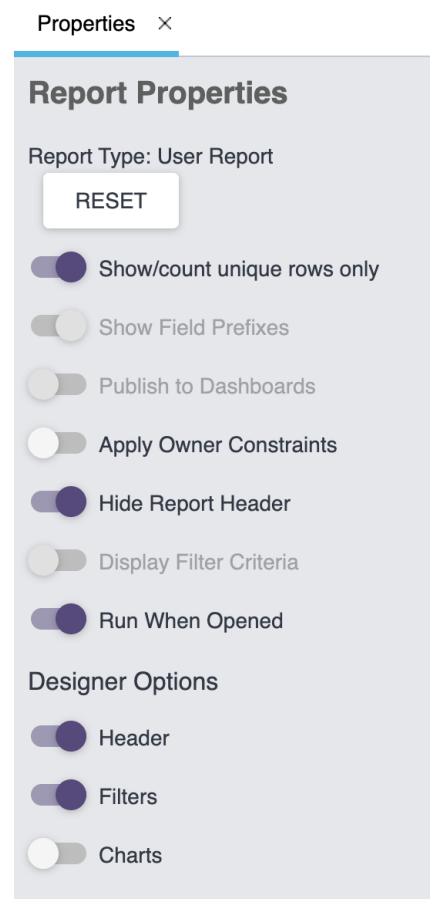


Table Columns:



Certain fields and field titles are mandatory to the accepted file. They are used in the mandatory part of the integration, as such they have a mandatory "Header" title that must be edited for each field by clicking on the setting for each field.

Column Header Properties

User Email

Column Header label

Apply Aggregation

User - User Email  

[user_email]

- email - This will be the user's email address in 360Learning
 - Please use the User - User Email field
- uniqueuserId - This will be stored in the user's externalId in 360Learning and used if the email changes in Cornerstone
- lastName - User's last name.
- firstName - User's first name.
- organization - User's organization in 360Learning.
- title - User's title in 360Learning
- language - User's display language in 360Learning
- managerId - used to determine which user should be assigned as manager based on its Cornerstone employee ID
- status - Active/Inactive will allow to determine if the user needs to be created/updated or deleted.

Field in CSOD	Name	Field in 360Learning
User - User Email	email	Email*
User - User ID	uniqueuserId	externalId (not visible in the interface).*
User - Last Name	lastName	Last Name
User - First Name	firstName	First Name
User - Division	organization	Organization
User - Position	title	Job
User - Display Language	language	user's interface language
User - Manager - User ID	managerId	user's manager
User - User Status	status	user's status to be created/updated/deleted *

Fields that can be used for Groups or Filters are completely customizable and can be configured to your specific needs.

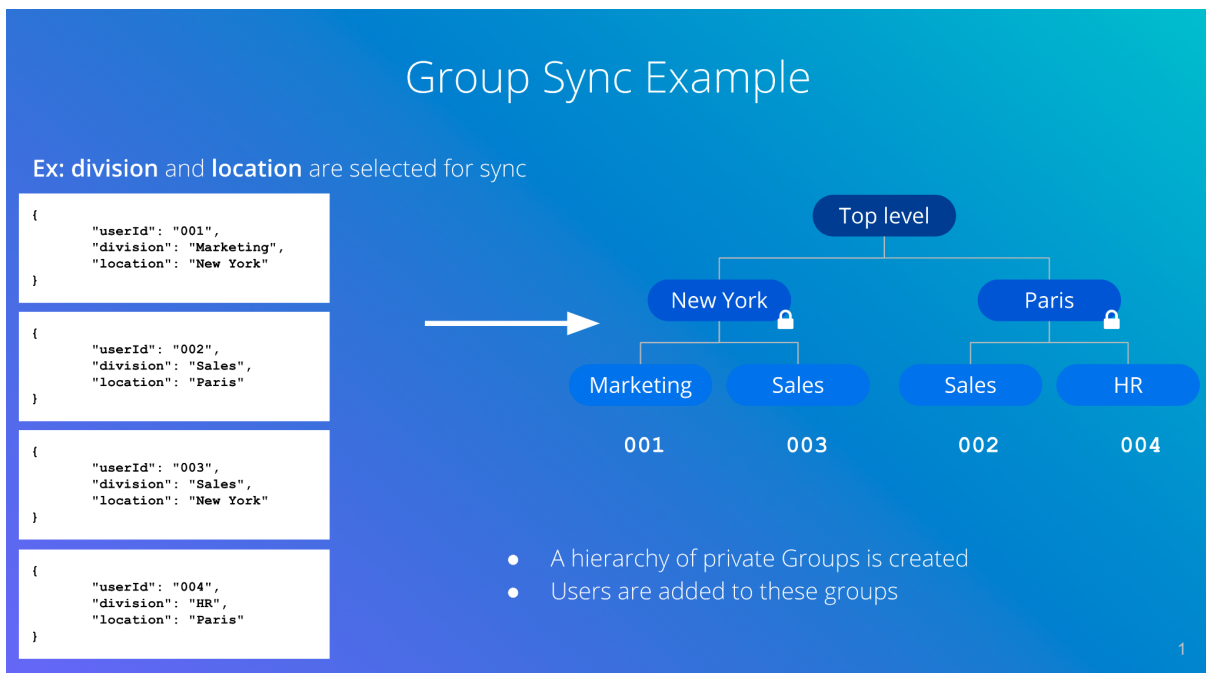
FTP configuration

Please provide your Solution Architect with the credentials (host, user, password, certificate) to the CSOD FTP server so that our system may start obtaining the files daily.

Please note that file import occurs once a day at around midnight GMT (00:00 GMT)

Optional features

Adding Users to Groups in 360Learning



Setting up the hierarchy

With your Solution Architect, a workshop will be organized to determine the best group hierarchy to reflect your organization's structure. The main condition to be able to use this feature is that each level should be linked to a single User field in the file you provide.

Level I: user_field A

Level II: user_field B

Level III: user_field C

In the example we used:

Level I: location

Level II: department

The main prerequisite is that each field must be a metadata obtainable when querying for the list of users when we do the provisioning. We recommend you use fields linked to the Organizational Units you may have set up in your platform.

How it will work

The integration will only handle group memberships for groups that are part of this "tree", any manually created groups outside will remain 100% manually managed.

The integration will move users between lower level groups (departments in our example). Then upon creation/update we will place users as learners in their appropriate "bottom level" group (department in our example).

Using public/private group settings, you will then be able to control who appears where in the hierarchy.

If at any stage of user creation the group cannot be found, the user's metadata has no match, or any other issue, the user will be created in the group with which the integration is set.

If at any stage of user update the group cannot be found, the user's metadata has no match, or any other issue, the user will remain in the group(s) it already is.

3. LMS Integration

Administrator setup

Create a specific administrator account in the Cornerstone platform.
Set the language for this administrator as English.

Cornerstone API setup

In order for the connector to properly work a number of Cornerstone APIs are called from 360Learning. Here is a complete list of these APIs, the event that would create a call, and the purpose of the calls:

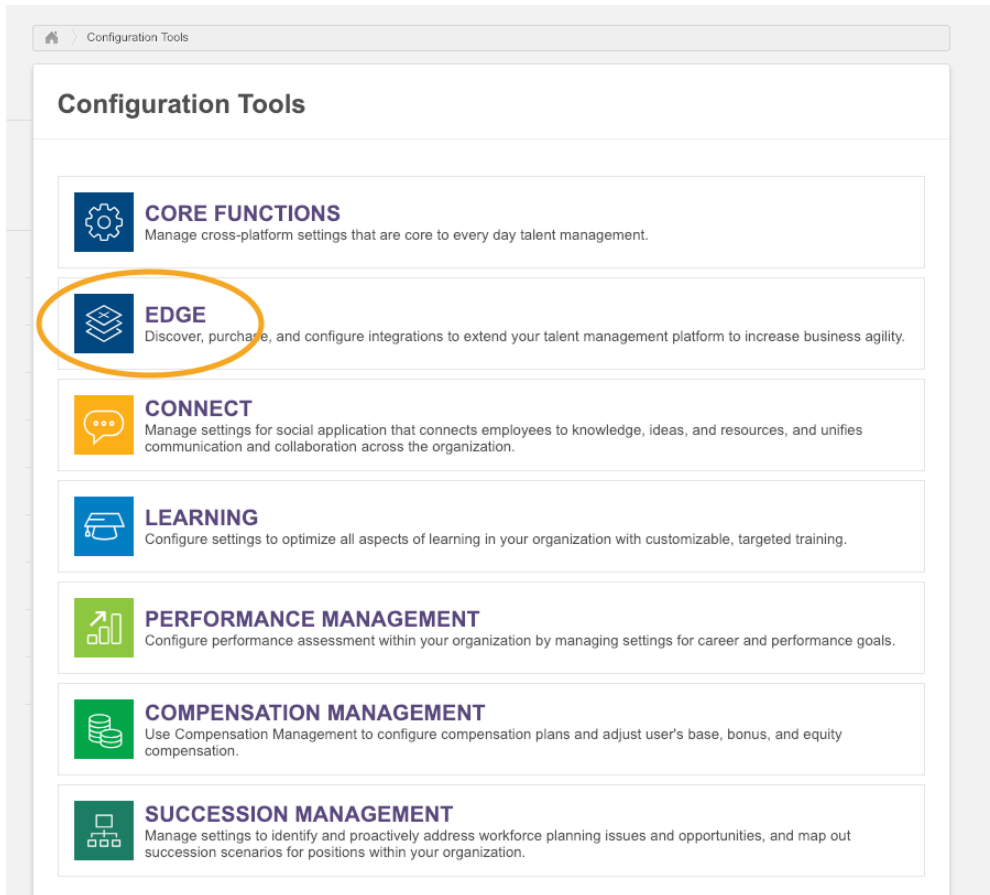
1. **services/api/oauth2/token**
 - a. This is used to obtain the token for all future calls
2. **services/api/LO/Create**
 - a. This is used to create a Material based on a newly created programSession in 360Learning
 - b. This is called every time a new session **starts** in 360Learning. If you create a session that does not start immediately, it will only appear in CSOD once it starts.
3. **services/api/Catalog/GlobalSearch.**
 - a. This is used to ensure that the users' CSOD ID is correct
 - b. It is called every time a user is assigned to either an ongoing session or a new session that starts immediately.
4. **services/x/lms-learning-assignment/v1/learning-assignment/standard**
 - a. This is used to replicate the users being assigned to a programSession in 360Learning by assigning them to the corresponding Material in CSOD
 - b. It is called every time new assignments are done.
5. **services/api/customField**
 - a. This is called to update the Last Activity, Progress, Score and Time Spent by users on a given session.
 - b. This is called in "real-time" to provide accurate updates every time users interact with programSessions in 360Learning.
6. **services/api/x/users/v2/employees**
 - a. This is called during the users' assignment to a Material to match the users' CSOD ID with their cornerstone id.
7. **/services/api/LOTranscript/TranscriptSearch**
 - a. This is called as a safety net to register users that have marked a session as completed by mistake. They would be reassigned afterwards
 - b. It is called once a day per open session. We retrieve the transcripts in batches of 1000 (max parameter from CSOD).
8. **/services/x/lms-express-class/v1/ExpressClass**

- a. This is called to send the completion status on a Material

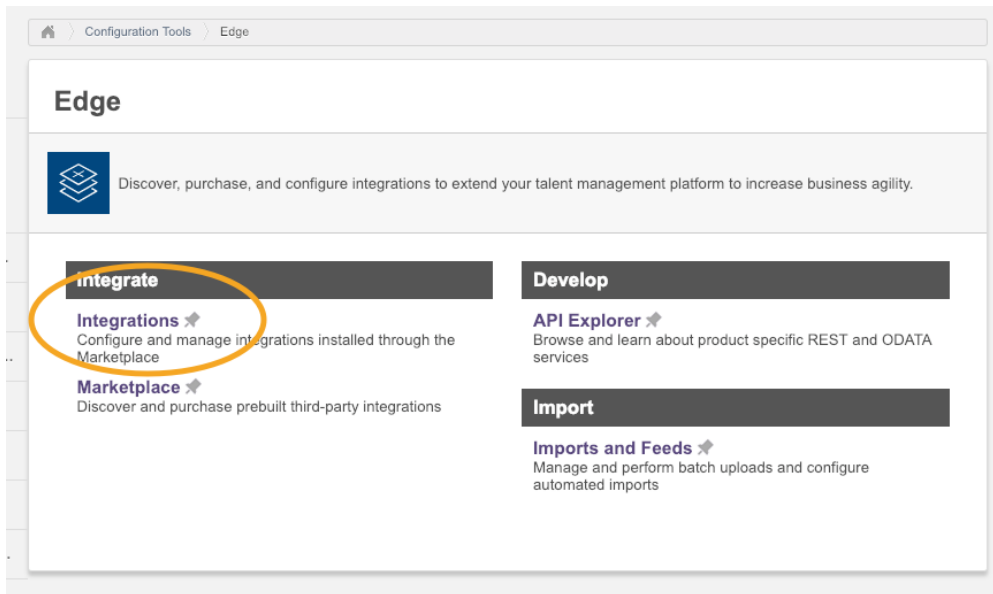
You can find more details on these permissions in the [Cornerstone API documentation](#).

The following operations must be done in the Cornerstone platform using the admin account created in the previous section.

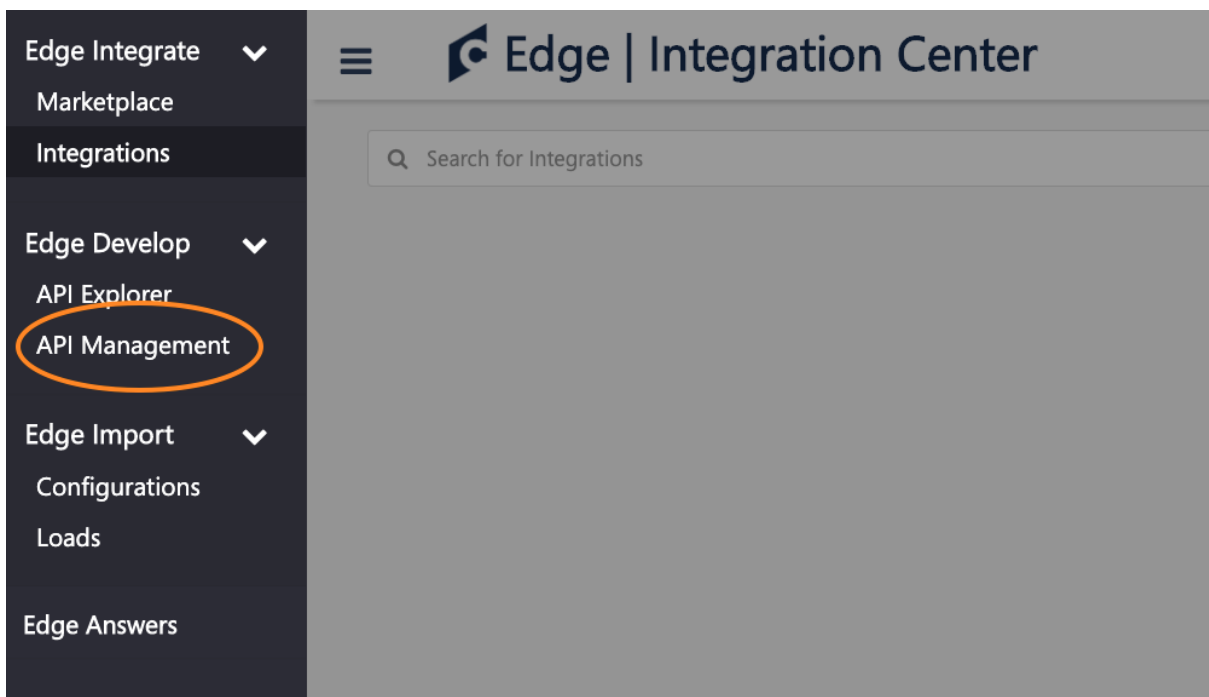
1. In the **Admin/Tools** section, select the **EDGE** section.



2. Select the **Integrations** section.



3. Select **API Management** in the left panel.



4. In the Manage OAuth 2.0 Applications

- Register New Application

▸ Setup Instructions

+ Register New Application

5. Enter

- the Application Name
- the User ID: **must be the same as the admin you created**
- **Important, here is the list of required scopes based on the previous list of API calls:**
 - globalsearch:read
 - employee:read
 - learningassignment:create
 - learningassignment:read
 - training:create
 - transcript:read
 - expressclass:create

≡ Edge | API Management WS Admin

[← Back](#) Register New Application

▸ Setup Instructions

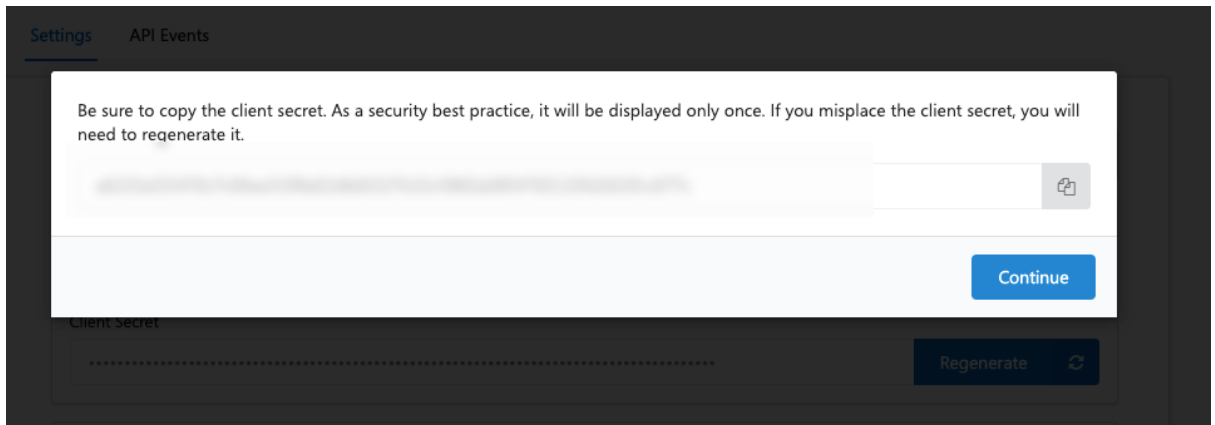
Application Name * 360Learning API

User ID * wsadmin

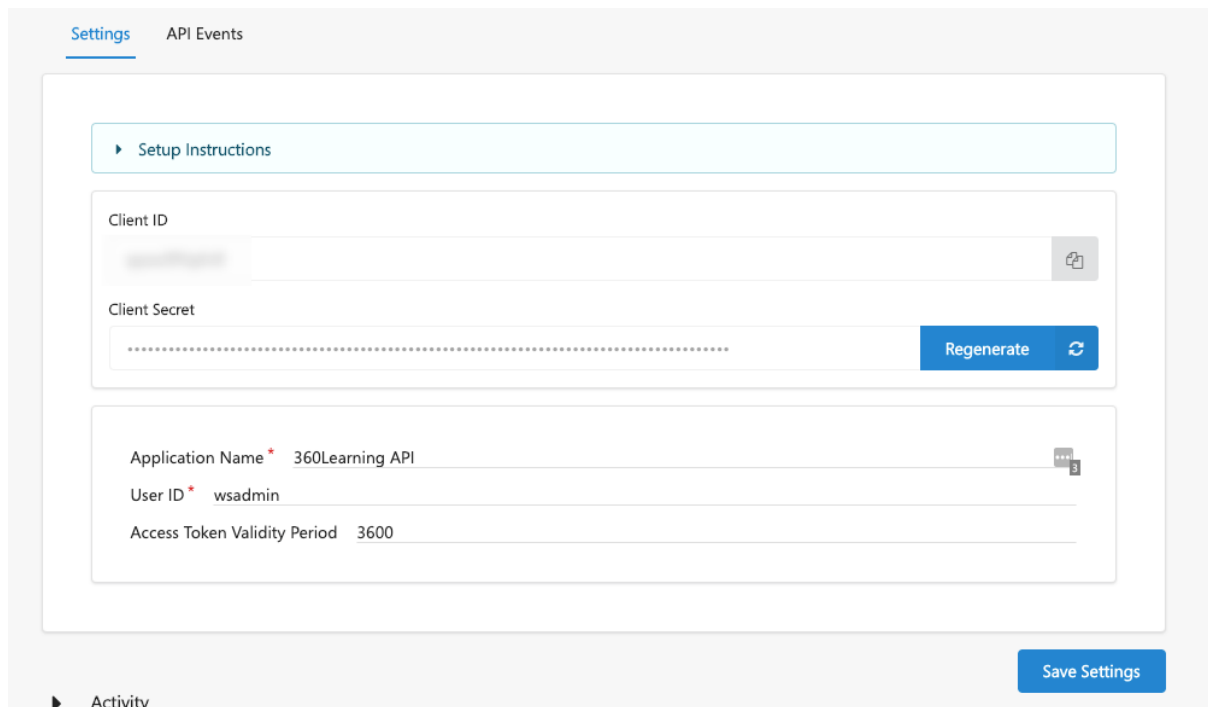
Access Token Validity Period 3600

[Register Application](#)

- Register Application
- Copy the client secret



Your screen should look like this



- Copy the **Client ID**
- Click **Save Settings**

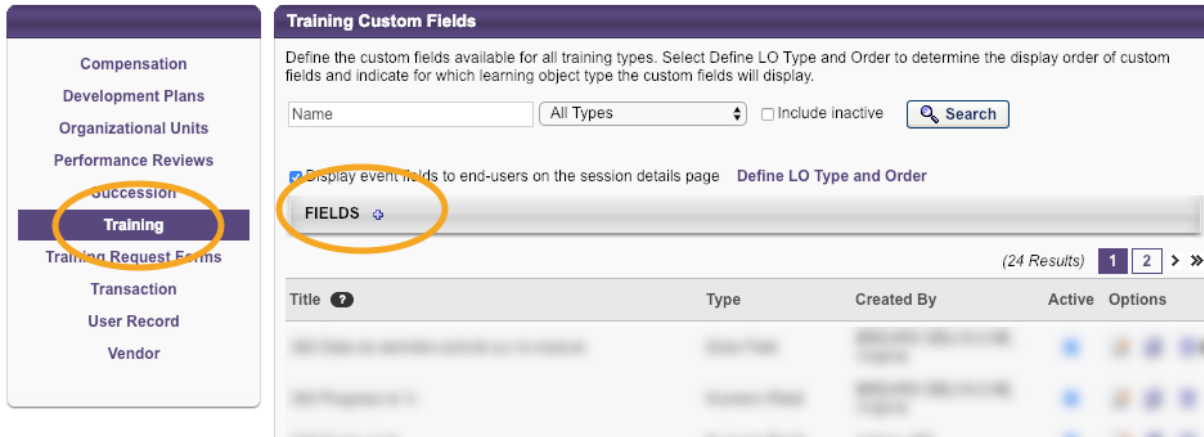
These Client ID and Client Secret will be used in the 360Learning setup chapter.

Cornerstone Custom fields setup

In the **Admin/Custom Field Administration** section.

1. Go to the **Training** section.

Custom Field Administration ?



2. Click on the “+” button to create a new Custom Field

Create each Custom Field as below

Define Field

Define the field name, field type, field availability and additional field properties below. If availability is not defined the custom field is not visible to anyone.

Name: 360 Progress in % ?

Email Tag: 360.PROGRESS

Type: Numeric Field

Available Languages: All Languages

Active:

FIELD DETAILS FOR EACH TRAINING TYPE Check/Uncheck All

Active Training Type	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Response Required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Editable On Transcript By Admin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visible to End User on Transcript	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Editable on Transcript By End User	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

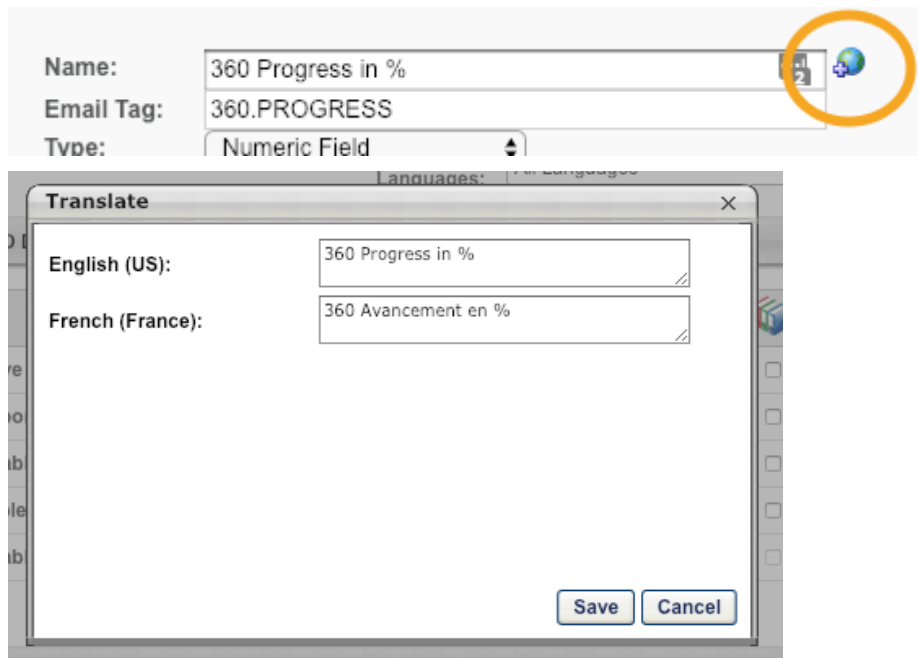
AVAILABILITY

Select OU Criteria ?

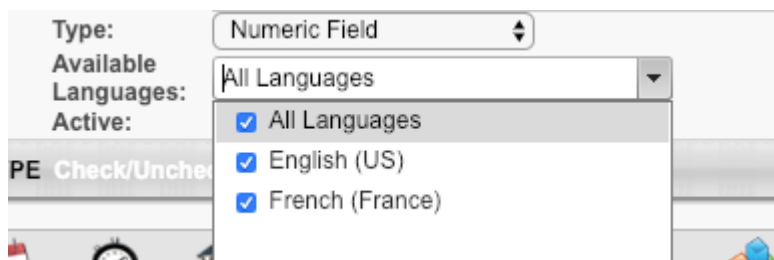
All users in Corporation: ?

Parameters

- **Name:** The display name of the Field as it will appear in your reports.
You can set up a localization for each language by clicking on the globe button as below



- **Email Tag:** Important, use the exact syntax provided by this documentation. In this example: 360 . PROGRESS
- **Type:** Select the right type for each field
- **Available languages:** Make sure that **ALL** languages are selected

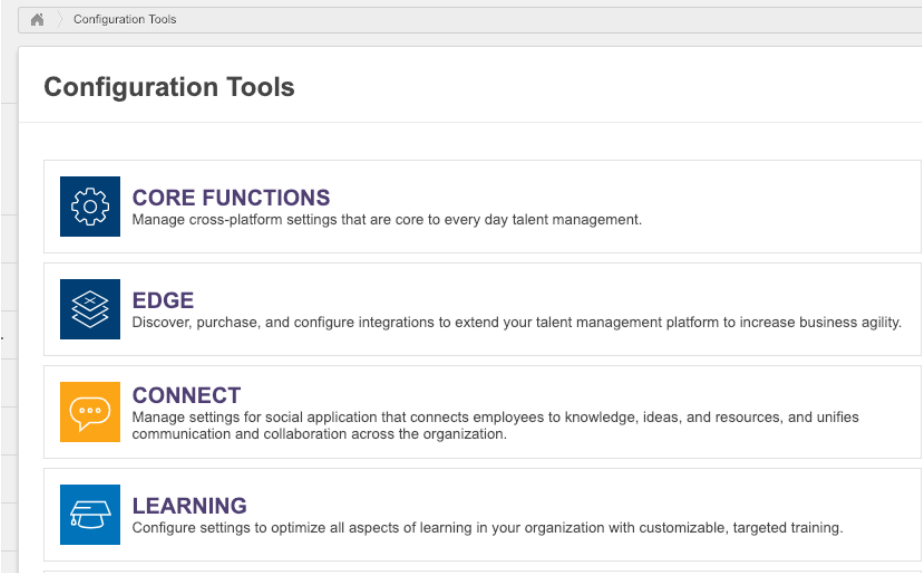


- **Active:** check the box
- Other Options. Check options for Material as below

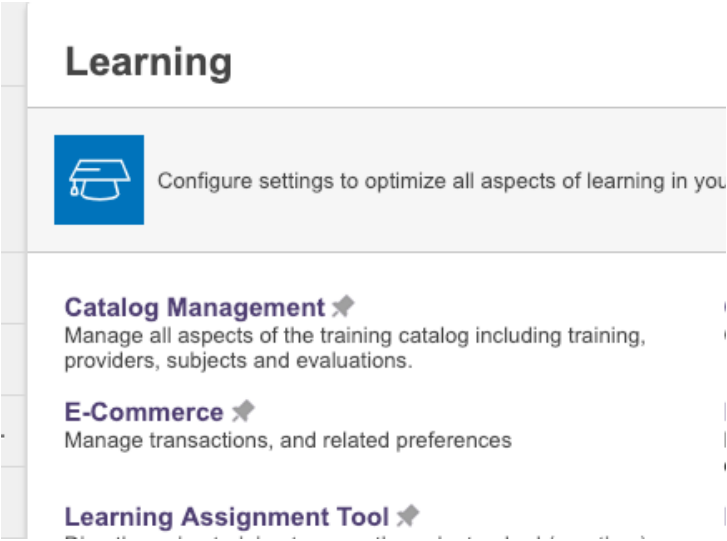
Cornerstone Material type setup

You need to create the **360Learning** Material Type in Cornerstone.

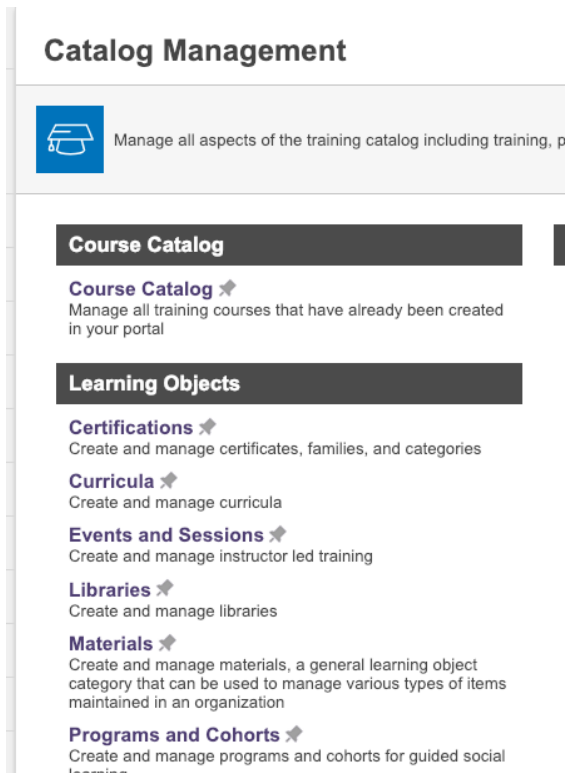
1. In the **Admin/Tools** section, select the **LEARNING** section




2. Then **Catalog Management**



3. Then **Materials**



Catalog Management

 Manage all aspects of the training catalog including training, p

Course Catalog

Course Catalog ✦
Manage all training courses that have already been created in your portal

Learning Objects

Certifications ✦
Create and manage certificates, families, and categories

Curricula ✦
Create and manage curricula

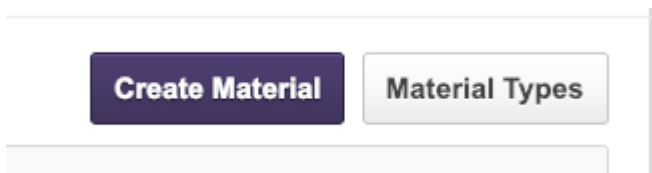
Events and Sessions ✦
Create and manage instructor led training

Libraries ✦
Create and manage libraries

Materials ✦
Create and manage materials, a general learning object category that can be used to manage various types of items maintained in an organization

Programs and Cohorts ✦
Create and manage programs and cohorts for guided social learning

4. Then **Material Types**



Create Material **Material Types**

5. Then **Add New Type**

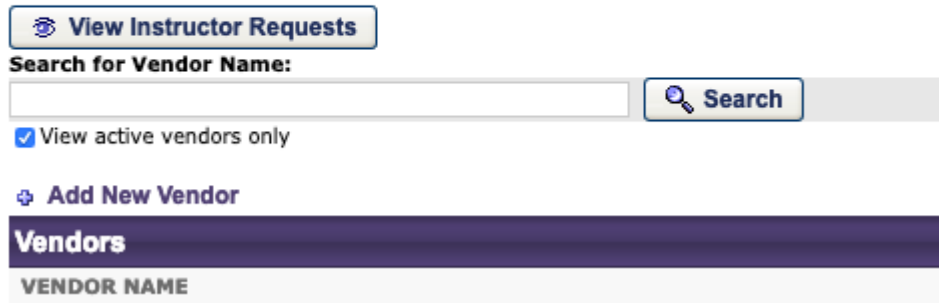
Add a new type with the mandatory name **360Learning**

Cornerstone Provider setup

In the **ILT/Vendors & Instructors** section.

Vendors & Instructors

The tools in this section will help you track details of your organization's ILT vendors and ma



View Instructor Requests

Search for Vendor Name:

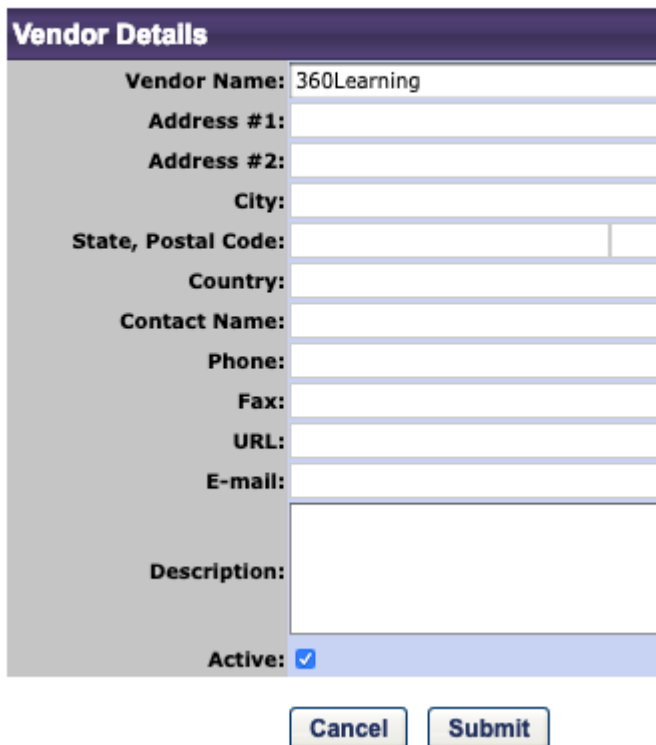
View active vendors only

+ Add New Vendor

Vendors
VENDOR NAME

Click on **Add New Vendor**.

Edit Vendor



Vendor Details

Vendor Name: 360Learning

Address #1:

Address #2:

City:

State, Postal Code:

Country:

Contact Name:

Phone:

Fax:

URL:

E-mail:

Description:

Active:

In the Vendor Name field, type: 360Learning.

Click the **Active** checkbox to activate 360Learning as a provider.

4. 360Learning setup instructions

Just send the following information to your 360Learning technical engineer:

- Cornerstone **Client ID**
- Cornerstone **Client Secret**
- Your platform **url**
- The administrator **username**

Your technical engineer will get back to you when you are ready to test the connector.

5. Your test instance

You will perform your tests on a test instance of your 360Learning platform. Your technical engineer will provide you with your test instance url.

Example:

- Your production platform url is: **myacademy.360learning.com**
- Your test instance url will be something like: **myacademy.360mooc.com:14532**

This test instance is a snapshot of your production instance at the moment it was created. It lives separately from your production instance.

- Any modification done to your production instance is **not** reflected in the test instance
- Any modification done to your test instance is **not** reflected in the production instance

Important note

The connector on the test instance does not behave exactly like the connector in the production environment:

- real time synchronisations are performed automatically
- but daily synchronisation scripts need to be run manually by 360Learning

You will see that you will still be able to test most features on the connector.

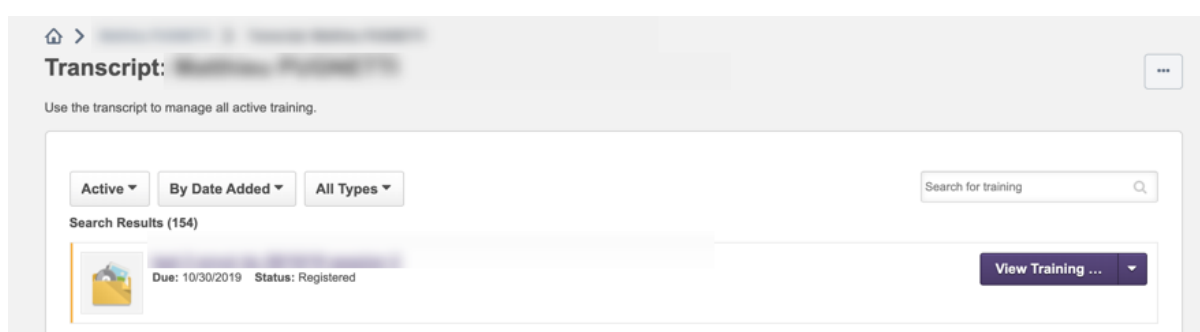
6. Test scenarios

6.1 Initial tests

When you receive your test instance url, the connector has already been setup and the data have been sent from 360Learning into Cornerstone.


You can check that:

- For all ongoing sessions in 360Learning, for all enrolled users to these sessions, you should see a corresponding Transcript in Cornerstone.



- **Learning statistics:** Users progress and completion should appear in the Transcripts detail, for both "completed" and "registered" states.

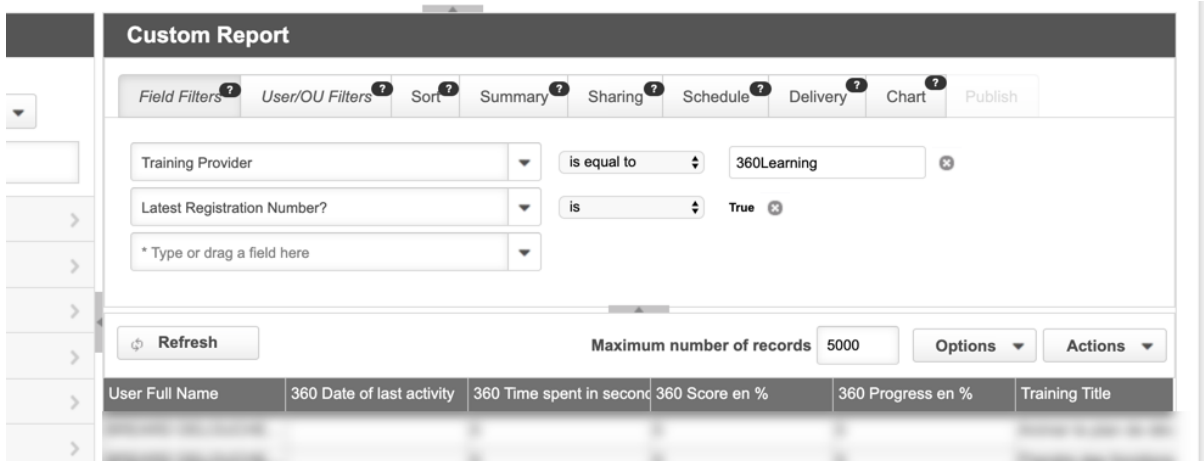
Training Type: 360Learning
Provider: 360Learning
Version: 1.0
Training Hours: 1 Hours 0 Min
Description:

Status: Registered ✔ [Mark Complete](#)
Training Purpose:
Due Date: 12/31/2019 
Bilan à 6 ans: No
360 Progress en %: 100
360 Date of last activity: 8/11/2018
360 Score en %: 82
360 Time spent in seconds: 2581

- **Custom reports**

You can build a custom report to see the data received in Cornerstone from 360Learning.

A typical filter setup for such a report could look like this



Please note the filter: "Latest registration Number? is True". This allows to see only the latest record for a given user / session couple.

6.2 Creation of a session

- Create a new session starting immediately in 360Learning. Enroll a few users.
- After a few minutes, you should see the corresponding transcripts in Cornerstone for these users.

Important note: If you create a session that starts in the future, this session will not be automatically synced in the test instance. It requires 360Learning to run manually the daily scripts. This is specific to the test instance.

6.3 Learners advancement in a session

- Play a session in your test instance for a user, you should see the progress stats be modified after a couple of minutes.



6.4 Learners can launch a session from Cornerstone

The sessions to which they are enrolled will appear in their transcripts and in the search. If a user launches the session, he is sent to 360Learning.

6.5 If you need help

Don't hesitate to contact your 360Learning Technical Engineer.

7. Deployment checks

7.1 Configuration checklist

- ❑ [Customer] Check that the CSOD Admin user has the required permissions in its scope
- ❑ [360Learning] Check that all the routes listed can be called using the provided credentials
- ❑ [360Learning] Check that all the users have their CSOD ID in the “Additional Information” field.
- ❑ [360Learning] Request temporary access to CSOD instance for rapid validation
 - ❑ Validate Materials Creation
 - ❑ Validate user Registration
 - ❑ Validate user stats synchronization
- ❑ [Customer] Validate functional perimeter and scenarios as described above

7.2 Launch meeting

During a short meeting with a customer ensure that all the above are set and validated to ensure complete alignment.