# Integrating
# Open Badge Factory / CanCred Factory
# with Brightspace LMS
# using LTI 1.3

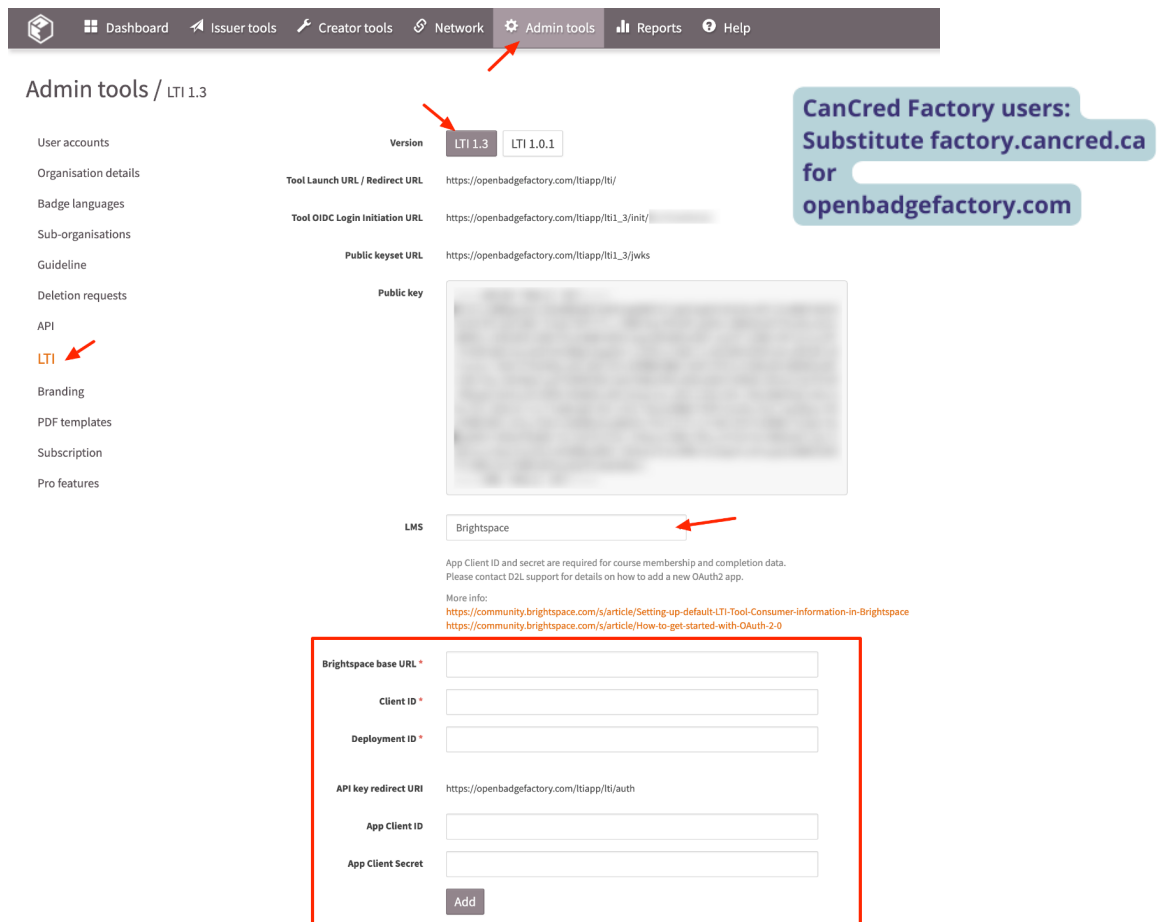| version | Date | Release note |
|---------|------|--------------|
| 1.0 | 2023-02-27 | Document issued |

# About LTI

Learning Tools Interoperability (LTI) is a standard developed by [1EdTech Consortium](#), which allows courseware and learning tools from different vendors to be launched within a learning platform, often an LMS.

LTI Integration provides a link between an LTI supported LMS and your account in Factory[1]. Our customers can use LTI 1.3 integration with **Brightspace.** LTI integration requires a Pro subscription level. LTI 1.3 has a more straightforward upgrade path than other versions and the full support and endorsement of major platform providers.

# Connecting Factory to Brightspace

## Step 1: Register a new LTI 1.3 App

Log in to Factory and go to Admin Tools > LTI. Choose **Version**: 1.3 and **LMS**: Brightspace. In this page you can see configuration values you need to connect the tool to Brightspace:



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[1] Factory stands for Open Badge Factory or CanCred Factory

1. In Brightspace, go to Admin Tools -> Manage Extensibility -> LTI Advantage
2. Click Register Tool:
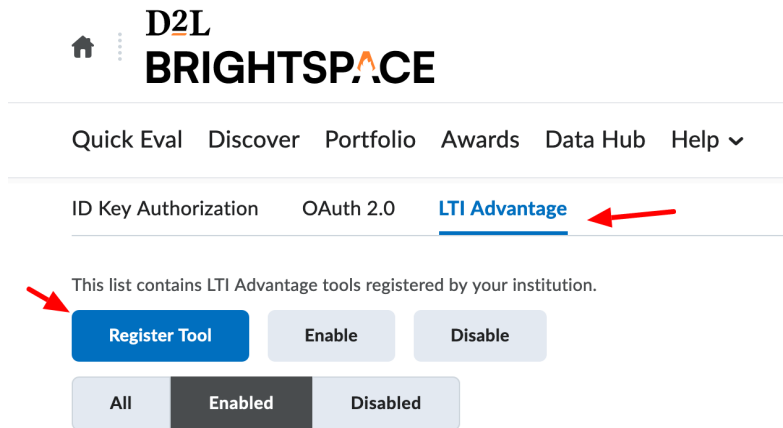


3. Choose Standard method
4. Set tool Enabled

Your tool name
For instance Open Badge Factory or CanCred

Open Badge Factory: https://openbadgefactory.com

CanCred: https://factory.cancred.ca

| Version | LTI 1.3 | LTI 1.0.1 |
|---|---|---|

Tool Launch URL / Redirect URL — https://openbadgefactory.com/ltiapp/lti/

Tool OIDC Login Initiation URL — https://openbadgefactory.com/ltiapp/lti1_3/init/lZYi5a9NZaKJ

Public keyset URL — https://openbadgefactory.com/ltiapp/lti1_3/jwks

**CanCred Factory users:**
**Substitute factory.cancred.ca**
**for**
**openbadgefactory.com**

Send Institution Role

5. Input descriptive value for tool **Name**
6. Input tool domain :
   ○ For Open Badge Factory: https://openbadgefactory.com
   ○ For CanCred: https://factory.cancred.ca
7. From Factory, copy following values to Brightspace settings form:
   ○ Tool Launch URL / Redirect URL => Redirect URLs
   ○ Tool OIDC Login Initiation URL => OpenID Connect Login URL
   ○ Tool Launch URL / Redirect URL => Target Link URI
   ○ Public keyset URL => Keyset URL
8. Under **Roles**, enable **Send Institution Role**
9. Click **Register**
10. A popup opens with the registration details for this app. Copy **Client Id** value for later use.



## Step 2: Create Tool Deployment

1. In Brightspace, go to Admin Tools -> External Learning Tools
2. Click **New Deployment**

3. Under **Tool**, select the tool registered in step 1
4. Input descriptive value for deployment **Name**
5. Under **Security Settings**, enable **Org Unit Information** and all values in **User Information**
6. Click **Add Org Units** and select all units (Course Offering, Semester, Department, Organizations etc.) where this tool should be available.  If applicable, you can select "This org unit and all descendants":



7. Click **Create Deployment**
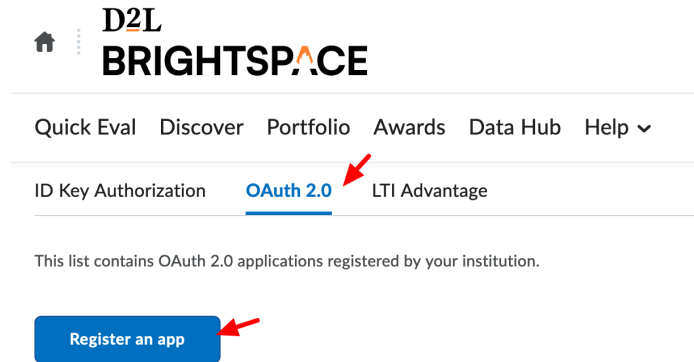8. A popup opens with the deployment details. Copy **Deployment Id** value for later use.

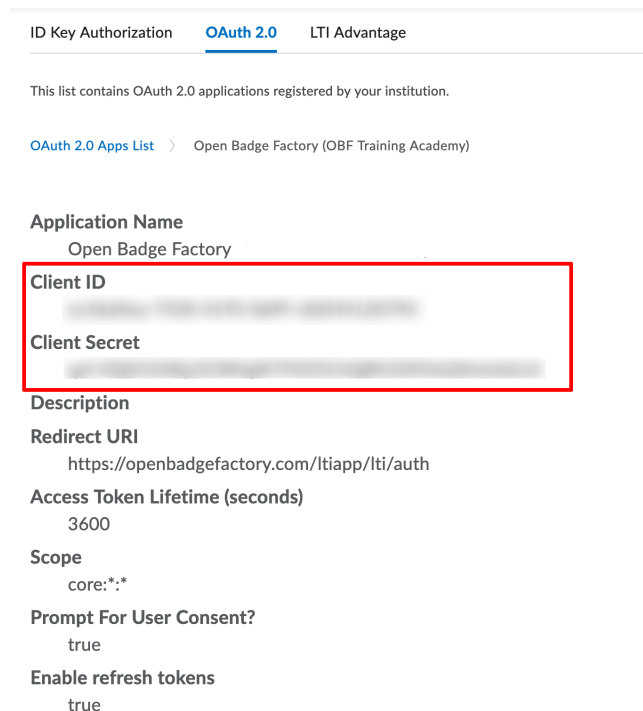**Brightspace Deployment Details**

Deployment Id

# Step 3: Register a new OAuth 2.0 application

1. In Brightspace, go to Admin Tools -> Manage Extensibility -> OAuth 2.0
2. Click **Register an app**:



3. Input descriptive **Application Name** (e.g. Open Badge Factory or CanCred Factory)
4. Set the **Redirect URI**:
   - For Open Badge Factory: https://openbadgefactory.com/ltiapp/lti/auth
   - For CanCred Factory: https://factory.cancred.ca/ltiapp/lti/auth
5. Input **Scope** => core:*:*
6. Enable **Prompt for user consent** and **Enable refresh tokens**
7. Click **Register**
8. Copy **Client ID** and **Client Secret** values for later use:

## Step 4: Add Tool Deployment to Factory

1. In Factory, input the following values to the LTI settings form:
   a. Brightspace base URL => your Brightspace installation url
   b. Client ID => Client ID created in step 1.
   c. Deployment ID => Deployment ID created in step 2.
   d. App Client ID => OAuth2 Client ID created in step 3.
   e. App Client Secret => OAuth2 Client Secret created in step 3.
2. Click "Add"

# Usage

## Add LTI Link to Courses

1. Go to a Course, click **Course Tools** -> **Course Admin** -> **External Learning Tools**
2. Click **New Link**:
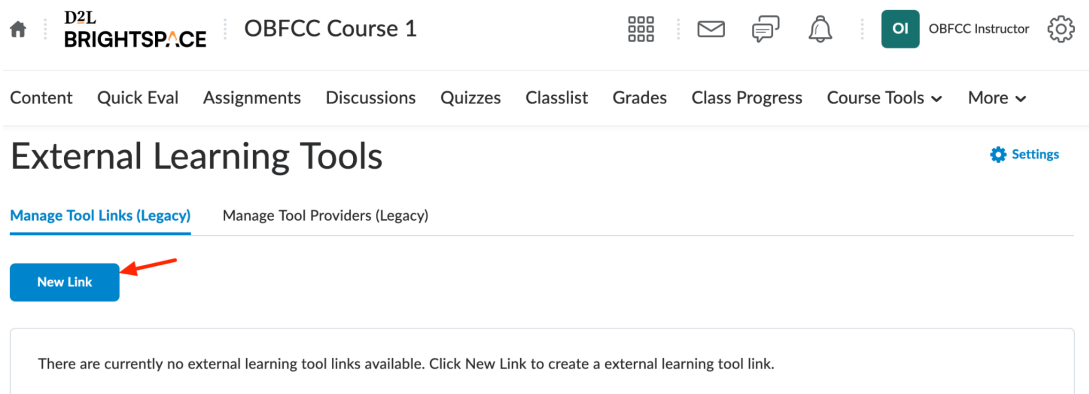


3. Select the deployment created in step 2.
4. Input descriptive link **Name** (e.g.: Open Badges)
5. From Factory, copy Tool Launch URL / Redirect URL => URL
   - For Open Badge Factory : https://openbadgefactory.com/ltiapp/lti/
   - For CanCred Factory: https://factory.cancred.ca/ltiapp/lti/
6. Click **Save and Close**

7. Click the **Content** link in the top navigation
8. Choose a Module and from **Existing Activities** dropdown, select **External Learning Tools**
9. In the item type drop-down menu, select **External Tool**.
10. Select the Open Badge Factory or CanCred Factory external tool and review the settings

Important: some browsers and/or Brightspace may not accept iframes. You may have to edit your course link property to : "Open as External Resource":



# Issuing a badge to course participants

1. In Brightspace, from your Course, from the External Learning Tool link created in the previous step
2. Click Issue badge



3. Select the badge you want to issue:
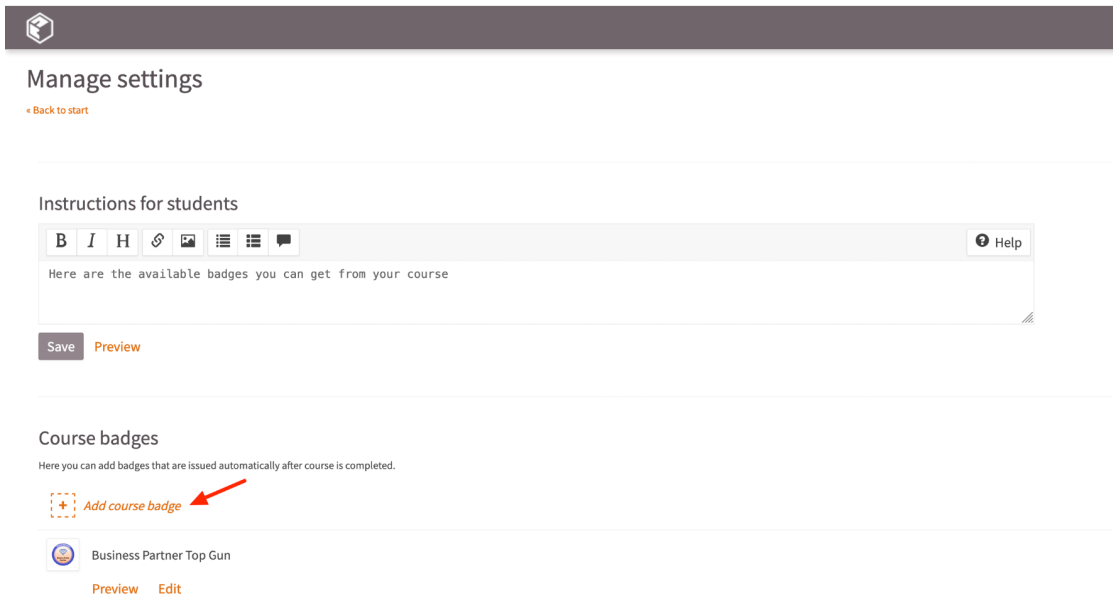
1. Define all your badge details
2. Select your students
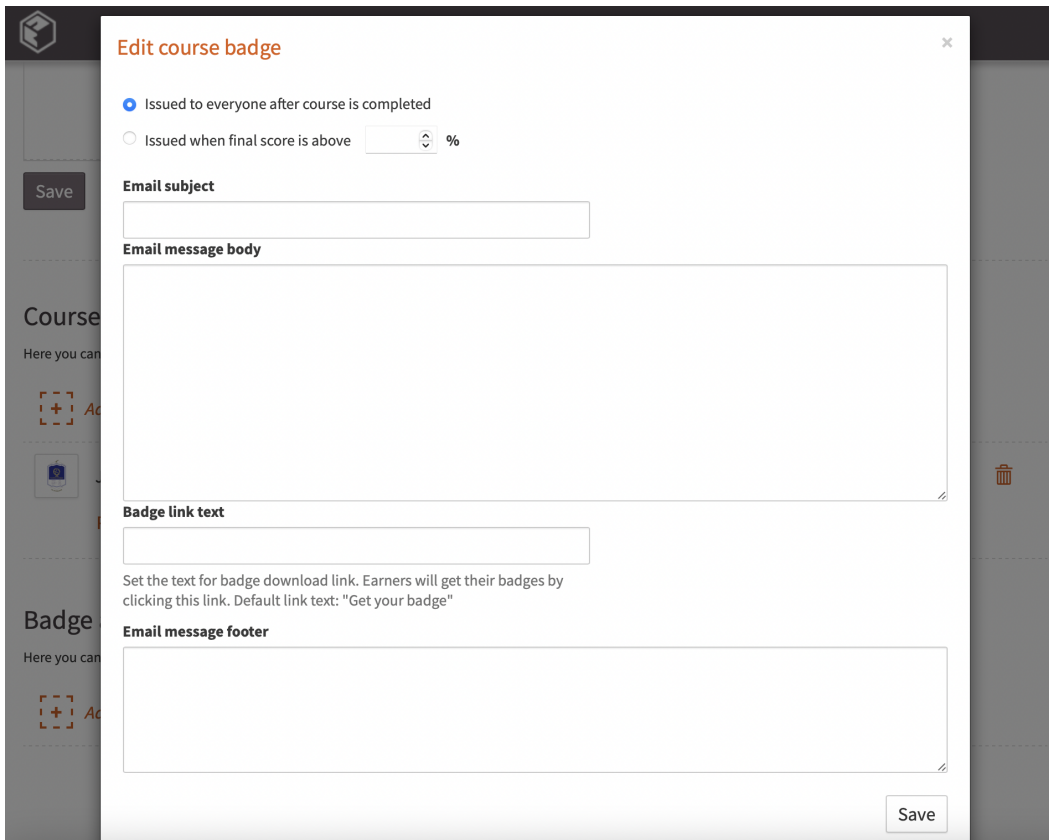3. Edit your email message
4. Issue your badge

## Issuing a badge automatically on course completion or score

1. In Brightspace, from your Course, from the External Learning Tool link created in the previous step, click Manage settings
2. Click Add course badge and pick the badge to issue



3. Click Edit on the badge
4. Choose if the badge is issued to all course members after the course completion or based on final score
5. Input the email message that is sent when the badge is issued

Please note that course badges are issued periodically once a day after course completions are checked.
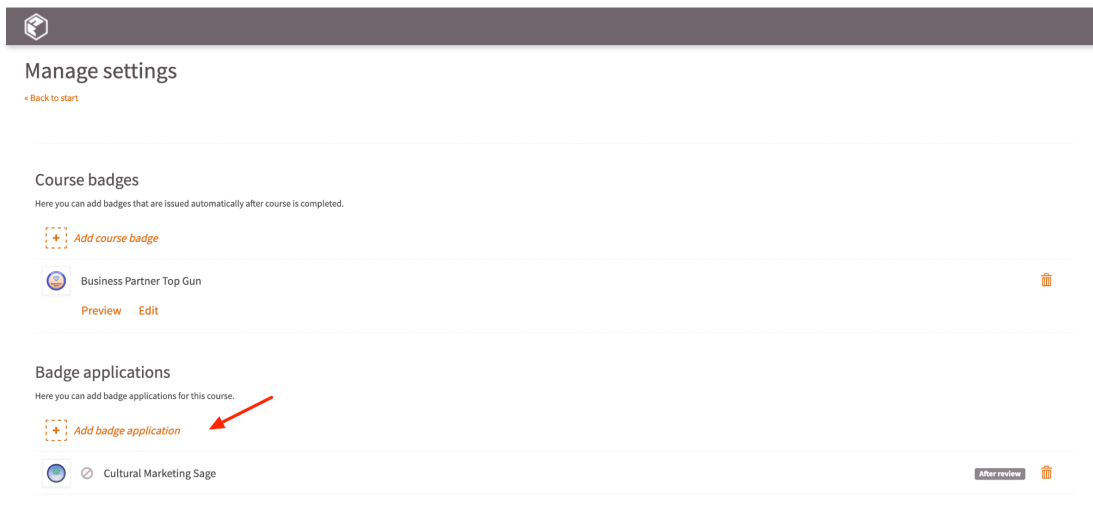
## Adding badge applications for a course

1. In Brightspace, from your Course, from the External Learning Tool link created in the previous step, click Manage settings
2. Click Add badge application
3. Select the badge application you want to add to the course

# Reviewing badge applications

1. In the LTI tool, click Manage settings
2. Click Review applications



# Issuing history

You can get your issuing history. From your Course, go to **Tools** > Open Badge Factory > Issuing history:

# Student view

Your students can view course badges and badge applications from the course > **Tools** > Open Badge Factory: