

# MS Teams Integration

**LMS Service Configuration**  
**imc Learning Suite**

# MS Teams Integration

LMS Service Configuration  
imc Learning Suite

Author(s): Andreas Pohl  
Date: 2023-02-21

Document	Description
Version	ILS 14.14
Status (Draft / Review / Finalisation)	Finalisation
Contact Person(s)	Andreas Pohl

History	Status	Who
2020-07-02	Draft	Andreas Pohl
2022-03-30	Review	Nadine Gohr
2022-06-30	Review	Lia Ghiță
2022-06-30	Finalisation	Dr. Peter Zönnchen
2022-10-06	Included information about the virtual classroom scenario	Lia Ghiță
2023-01-24	Version 14.15	Bettina Stiehl/ Karlo Susac

# Content

---

<b>1</b>	<b>Description</b>	<b>4</b>
<b>2</b>	<b>Audience</b>	<b>4</b>
<b>3</b>	<b>Prerequisites / Limitation</b>	<b>4</b>
<b>4</b>	<b>Functional Summary</b>	<b>5</b>
<b>5</b>	<b>Configuration</b>	<b>6</b>
5.1	Service configuration inside the ILS	6
5.2	Known Issues	8
<b>6</b>	<b>Administration of Ms Teams credentials</b>	<b>9</b>
<b>7</b>	<b>Media type and media creation</b>	<b>11</b>
<b>8</b>	<b>Calendar invitations</b>	<b>15</b>
<b>9</b>	<b>Attendance Tracking</b>	<b>16</b>
<b>10</b>	<b>Meeting details</b>	<b>17</b>
<b>11</b>	<b>Limitations related to the online meeting scenario.</b>	<b>19</b>
<b>12</b>	<b>Data protection and security</b>	<b>20</b>

# 1 Description

---

This document provides information on configuration on back-end application along with Postman & Swagger document for using APIs.

In addition, the document describes the solution that the LMS provides for allowing the possibility for MS Teams meetings to be created as course components without a need to create a meeting separately and linking it to an event.

The MS Teams virtual classroom integration relies on Azure active directory application permissions OnlineMeetings.ReadWrite.All. Microsoft asks, for this integration, that the permissions need to be linked to an admin account.

Delegated permissions are not supported in this version of the integration by the LMS.

Microsoft states:

“To use application permission for this API, tenant administrators must create an [application access policy](#) and grant it to a user to authorize the app configured in the policy to create online meetings on behalf of that user (with user ID specified in the request path).”

# 2 Audience

---

The Intended audience of this document is composed of system administrators, course administrators, content administrators and tutors and trainers.

# 3 Prerequisites / Limitation

---

- The service (social-integration-backend) needs to be configured to be part of the delivery package.

- A MS Teams tenant is needed (usually included in an Office 365 subscription / tenant).
- A technical user / app needs to be created to access the Microsoft Graph API with specific permissions.
- The frontend URL need to be configured in the client properties.
- Only internal users belonging to the company's tenant can be added to the teams - no guests.
- The following MS Teams administration rights are required:  
Group.Read.All, Group.ReadWrite.All, TeamsTab.ReadWrite  
(see <https://docs.microsoft.com/en-us/graph/permissions>-reference for more details).

## 4 Functional Summary



This briefly states the required behaviour to be accomplished.

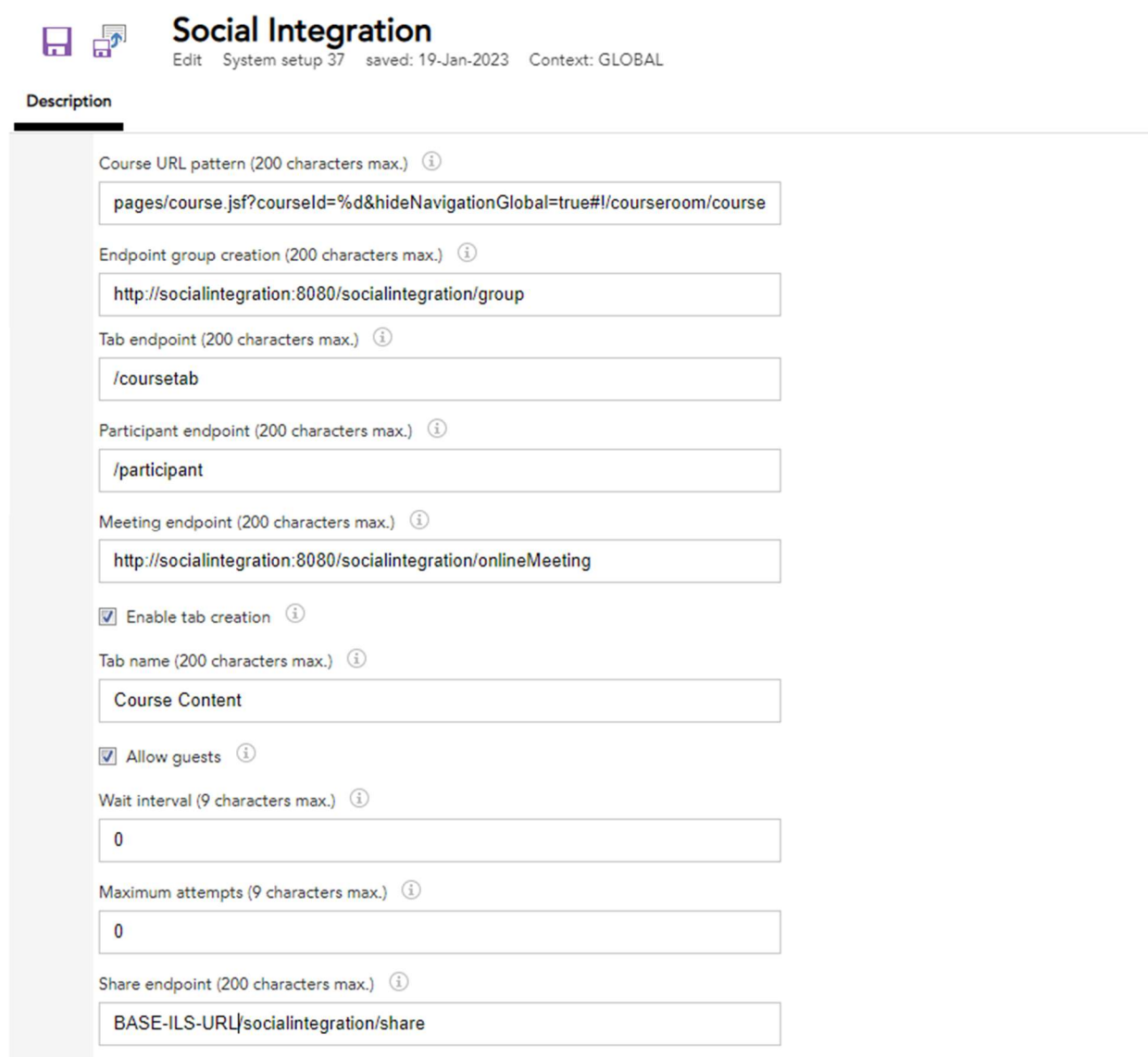
- Sharing of visual representation of courses into Teams and Channels.
- Creation of an individual Teams Team per Course from within Course's Creation.
- Representation of the Course Content (Syllabus) inside the Course 's Team.
- Online meetings

## 5 Configuration

### 5.1 Service configuration inside the ILS

At the current state, the configuration is done in the configuration manager, entry “Social integration”.

Please see the following screen shot for an example configuration:



**Social Integration**  
Edit System setup 37 saved: 19-Jan-2023 Context: GLOBAL

**Description**

Course URL pattern (200 characters max.) ⓘ  
pages/course.jsf?courseId=%d&hideNavigationGlobal=true#!/courseroom/course

Endpoint group creation (200 characters max.) ⓘ  
http://socialintegration:8080/socialintegration/group

Tab endpoint (200 characters max.) ⓘ  
/coursetab

Participant endpoint (200 characters max.) ⓘ  
/participant

Meeting endpoint (200 characters max.) ⓘ  
http://socialintegration:8080/socialintegration/onlineMeeting

☒ Enable tab creation ⓘ

Tab name (200 characters max.) ⓘ  
Course Content

☒ Allow guests ⓘ

Wait interval (9 characters max.) ⓘ  
0

Maximum attempts (9 characters max.) ⓘ  
0

Share endpoint (200 characters max.) ⓘ  
BASE-ILS-URL/socialintegration/share

Fig. 5.1: “Custom parameters” inside the ILS.

The detailed explanation of the parameters is given in below table:

Parameter / Division	Description	Example Value
<b>SocialIntegration</b>	Division to hold the needed.	Parameters
<b>courseUrlPattern</b>	pages/course.jsf?courseId=%d&hideNavigationGlobal=true#!/course-room/course	hideNavigationGlobal=true is used to specify that the navigation should not be displayed inside the tab
<b>enabled</b>	Used to generally enable or disable the integration.	true
<b>shareEndPoint</b>	API endpoint used for sharing; including external domain.	e.g. <a href="https://achievemore.imc.com/socialintegration/share">https://achievemore.imc.com/socialintegration/share</a>
<b>groupEndpoint</b>	API endpoint to create groups (i.e. teams); including internal domain and port.	Value for Kubernetes:  <a href="http://socialintegration:8080/socialintegration/group">http://socialintegration:8080/socialintegration/group</a>  Value for Windows:  <a href="http://localhost:8081/socialintegration/group">http://localhost:8081/socialintegration/group</a>
<b>Meeting endpoint</b>	The API endpoint used for managing online meetings created via the LMS	<a href="http://socialintegration:8080/socialintegration/onlineMeeting">http://socialintegration:8080/socialintegration/onlineMeeting</a>
<b>tabCreationEnabled</b>	Used to enable or disable tab creation; currently only generally.	true
<b>tabName</b>	Used to define the name of the channel tab.	Course Content
<b>tabEndpoint</b>	API endpoint to create a tab with a website URL in the general channel.	/coursetab
<b>participantEndpoint</b>	API endpoint to add and remove participants.	/participant
<b>meetingEndpoint</b>	API endpoint to create/edit/delete online meetings.	Value for Kubernetes:  <a href="http://socialintegration:8080/socialintegration/onlineMeeting">http://socialintegration:8080/socialintegration/onlineMeeting</a>  Value for Windows:

		http://localhost:8081/socialintegration/online-Meeting
<b>guestAllowing</b>	Used to generally enable or disable guest allowing for groups and meetings.	true

## 5.2 Known Issues

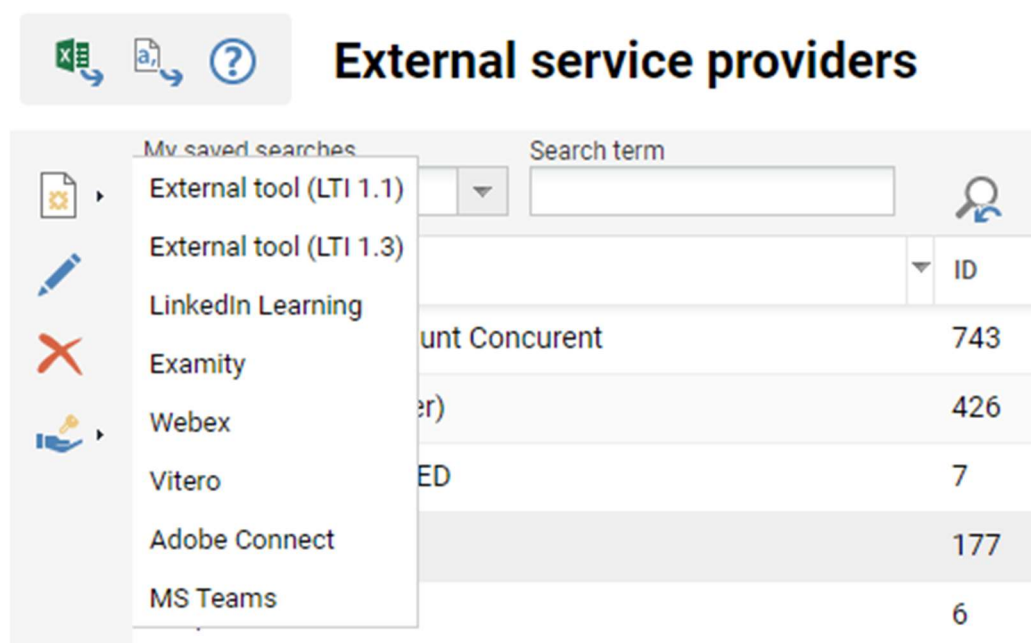
- MS Teams owners are created from Administrator and Tutors on the first saving, they are currently not updated later.
- Tab name only in one language; will be moved to a bundle.
- Teams are not removed when course is deleted / archived - Teams can be deleted by owners inside Teams.
- If organization has set up Group Naming Policy for their Groups, this will cause issues for the group creation feature.





## 6 Administration of Ms Teams credentials

To be able to create MS Teams meetings via the LMS, the active directory credentials for the tenant must be linked to the LMS.

This is possible via the External Service provider manager, by selecting MS Teams:



The external service provider for MS Teams requires a client ID, Client Secret and Tenant ID that must be obtained via the Azure Active Directory setup.



## New: MS Teams

MS Teams

**Description**

Created	Last update	Object ID
13-Sep-2022 15:37 (Genius Simon Sup	13-Sep-2022 15:37 (Genius Simon Sup	813

Note: Mandatory fields are marked with an asterisk (\*).

☐ Relevant to validation ⓘ

Name\* (50 characters max.)

Description (2000 characters max.)

MS Teams Client ID\* (255 characters max.) ⓘ

MS Teams Client Secret ID\* (255 characters max.) ⓘ

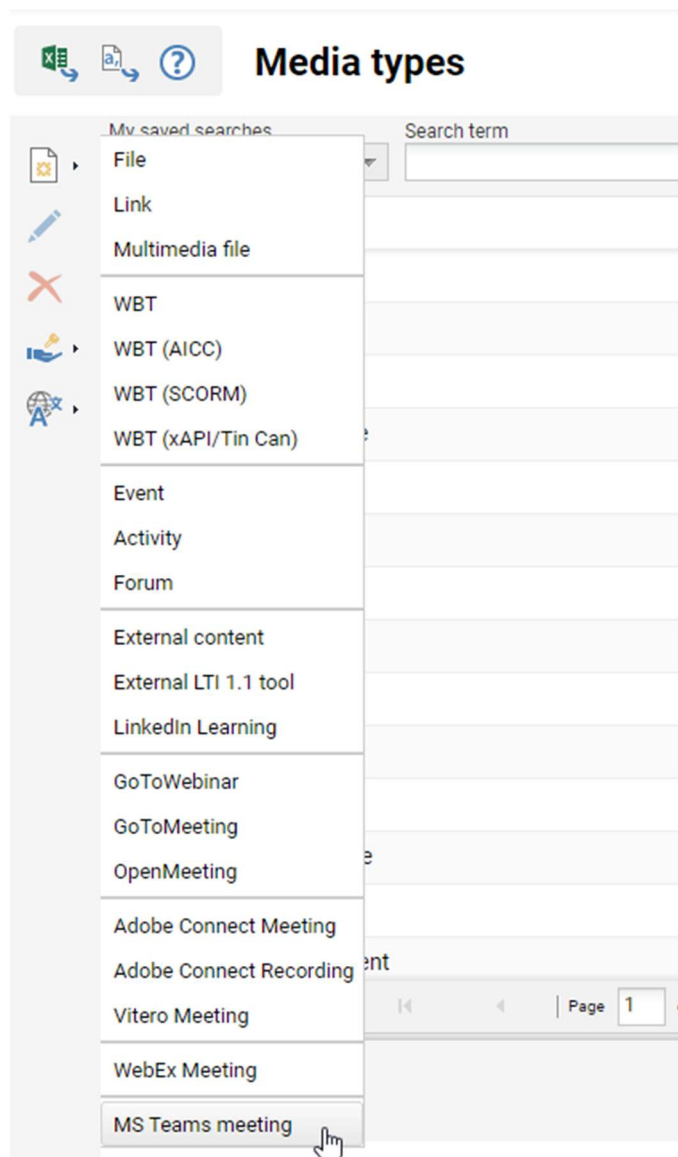
Tenant ID\* (255 characters max.) ⓘ

Corresponding fields are available for each of the three.

The system allows to create multiple external providers of type MS Teams. This ensures that in a multi-tenant system, users belonging to different tenants can use different Teams installations.

Once an external provider is setup, a media type MS Teams needs to be created.

## 7 Media type and media creation






By default, the MS Teams media type will ask the admin to select the external service provider that should be used for all meetings created from the given media type.

A meeting organizer is available to be selected, but not mandatory for the media type. Both the organizer and the scheduling will be required on the media level, as it is not possible to create a meeting without scheduling or an organizer.

The organizer selection is made available based on group assignment and clearances, based on the MS Teams organizer function of the group.

In addition, one or more presenters can be defined in the meeting.

A special attention must be paid to the fact that the system cannot determine which organizers belong to which organizations, therefore it is advisable that dedicated groups are created for dedicated tenants. Selecting an organizer that belongs to another Teams installation than the one used for the media setup will result in the meeting not being created.


## New: MS Teams meeting



MS Teams meeting



Info Languages **Description** Classifications

---

### Basic information Top

Name\* (500 characters max.) 

Description (16000 characters max.)  


Upload preview  



Max image size: 1920 x 1080 pixels


No file uploaded



Upload


Delete


Keywords (4000 characters max.) 

Purpose of media  



For learning 


☐ Allow rating  

MS Teams External Service provider \* 



Presenters 

No Presenters has been selected yet



 

Meeting organizer\* 

No Meeting organizer has been selected yet



### Duration Top

Start date\*  

Once a media type is available, it can be released to the relevant media or course admins that can create system-wide or course specific meetings. Tutors are also able to create course specific meetings in der tutor center.

After the media is added to the course and the course is saved, the meeting will be created on the Microsoft side.


A successfully created meeting will display the option to open the meeting from the media details inside the course components tab:















## Master data structures

Edit Course -0006 Start: 15-Sep-2022 End: 26-Sep-2022 saved: 16-Sep-2022

Info Languages Description **Components** Classifications Skills Social media Library Tutors

Name	Type	ID
 Q&A session	MS Teams meeting	936178

### Details

**Languages** English (GB) (Administrative, basis, default), German

**Purpose of media content** 0

**Allow rating** No

**MS Teams External Service provider** 765

**Meeting organizer** Mod Administrator

**Start date** 16-Sep-2022 12:00

**End date** 16-Sep-2022 13:00

**Create appointment in the participants' calendars** Yes

**Access before meeting starts** No

**Fix the time zone for the learner** No

**Link** [Click here to join the meeting](#)

If participants are already enrolled or have started the course, they will be added as meeting attendees.

Adding participants later to the course will ensure that they are also added to the meeting.

Removing participants from the course will result in the participant being removed from the list of meeting attendees.

## 8 Calendar invitations



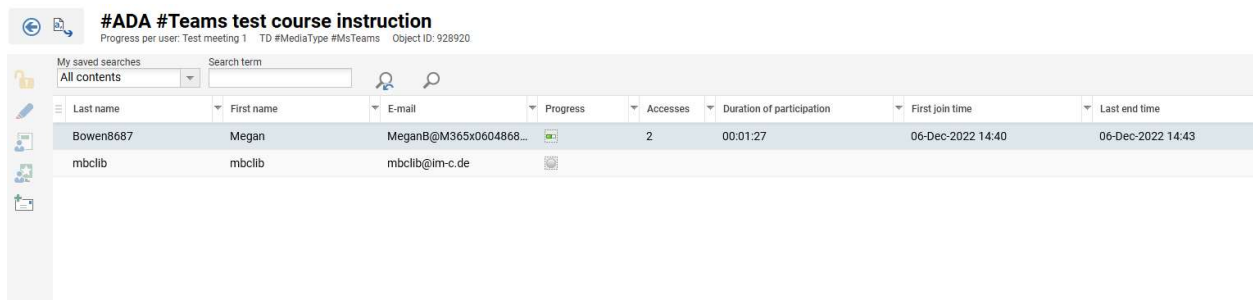
Based on the meta tag “Create appointment in the participants’ calendar”, course participants will receive a calendar invite containing the option to join the meeting.

If an MS Teams meeting is removed from a course, the meeting will be deleted on Microsoft side and participants will receive a calendar cancellation.

## 9 Attendance Tracking

Via the Attendance tracking it is possible to see how much time a learner has spent in the meeting. The function can be opened via the course instruction.

On the syllabus tab you can open the progress per participant and here you'll find 3 new columns



The screenshot shows the LMS interface for a course instruction titled "#ADA #Teams test course instruction". Below the title, there is a search bar and a table with attendance data. The table has columns for Last name, First name, E-mail, Progress, Accesses, Duration of participation, First join time, and Last end time. Two rows of data are visible: one for Megan Bowen8687 and another for mbclib.

Last name	First name	E-mail	Progress	Accesses	Duration of participation	First join time	Last end time
Bowen8687	Megan	MeganB@M365x0604868...		2	00:01:27	06-Dec-2022 14:40	06-Dec-2022 14:43
mbclib	mbclib	mbclib@im-c.de					

- Duration of participation (sum of time spent in the meeting)
- First join time (fix date)
- Last end time (time when the learner left the meeting)



## 10 Meeting details

All meetings created via the LMS will share the following configuration:

Property	Default value	Description
allowedPresenters	roleIsPresenter	Only meeting participants which will be set the role as Presenter will be able to share their screen during the meeting
allowAttendeeToEnableCamera	true	
allowAttendeeToEnableMic	true	
allowMeetingChat	enabled	
allowTeamworkReactions	true	
endDateTime	Based on component end date and time	
isBroadcast	false	
isEntryExitAnnounced	true	
lobbyBypassSettings	invited	Only participants who have been added as meeting attendees are able to directly join the meeting. Any other person who received the meeting URL by other means will need to wait in the lobby for approval.
participants	Participants are identified by their e-mail address	
recordAutomatically	false	

startDateTime	Based on component start date and time	
subject	Includes the title of the medium and the course name	

## **11      Limitations related to the online meeting scenario.**



- There is no possibility to extract meeting recordings via the LMS.

## 12 Data protection and security



No special handling in terms of data protection.

Participants will be added to teams and their e-mail addresses will be transferred for this purpose between the LMS and Microsoft.

END OF THE DOCUMENT