## Using LMS365 Connectors in Microsoft Power Automate

LMS365 give you an ability to automate some of the most common actions and manual processes in the LMS365 via Microsoft Power Automate. It means to react on the events happening LMS365 and send data to the LMS. You can use <u>the existing templates</u> for your flow or create your own one.

To create your own flow:

- 1. Go to the Microsoft Power Automate page and <u>https://flow.microsoft.com</u> and sign in.
- 2. Click My Flows section, and then click the New button in the top navigation bar and select Instant from blank button:



3. On the creation page, you can see the full list of the MS Power Automate connectors. Search for the **LMS365** to see all actions related to the learning system:



The Connector consists of two groups of items:

**Triggers** – give you the ability to subscribe to some events in the LMS. Each trigger has a proper title that describes when the event is triggered. Usually, that is the starting point of the flow.

For example, the trigger "When a user has been deleted" means that the operation will be triggered when a user has been disabled/deleted from LMS365.

**Actions** – give you the ability to affect LMS. That means these are the set of predefined API calls to the LMS service.

For example, an action "Approve enrollment request" will approve the enrollment request. For more information about the actions, visit <u>the connector reference for the LMS365</u>.

- 4. Select the desired trigger from the list.
- 5. Add the steps.
- 6. Search for the required action that can be performed within the LMS365.
- 7. Fill in the required fields.

8. Add other actions if needed.

Let us create a **simple flow** which reacts to the Course Published event, gets the course information, and sends an email with the course information to the specified users. To perform this action:

• Choose the "When training has been published to a catalog" trigger:

← Search connectors and triggers	
Triggers Actions	
When a learner has completed training LMS365	
When a learner has enrolled into training LMS365	Ū
When a learner has requested approval for training LMS365	Ū
When a learner has started any of the course activities LMS365	Ū
When a learner has unenrolled from training LMS365	Ū
When a user has been created LMS365	Ū
When a user has been deleted LMS365	Ū
When training has been deleted from a catalog LMS365	Ū
When training has been published to a catalog LMS365	Ū
When training has been unpublished from a catalog	Ū
Don't see what you need?	-

If you use the LMS365 Connector for the first time, enter connection name (LMS365) and credentials for the LMS API service. Please use the API key for both **username** and **password** fields.

(1) The API key is a password for your LMS365 data. Keep it safe.

To get the API key for your tenant domain e.g. *elearningforce.sharepoint.com*, the Office 365 Global Administrator should navigate to LMS365 Admin Center – Global Settings – Settings – LMS Configuration – API key management and copy the API key:



• After the connection is set, you will see a message that your flow has only a starting point and you need to add new steps:



- Click the New step button.
- Enter LMS365 in the search box to find the available LMS connector action.

In our example, we want to get information about the course that has been published – we select "Get course details" action:

$\bigcirc$	When training has been	published to a	catalog		
			$\downarrow$		
₽	Choose an action				×
Q	LMS365				
All	Built-in Standard	Premium	Custom	My clipboard	
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Tri	ggers Actions				
	Vpload File				•
6	LMS365				0
6	Send an HTTP request LMS365				0
6	Create course category LMS365				Ū
(	Get course details	լիդ			0
	Create course tag	$\mathbf{O}$			
	LMS365				Û
6	Get course tags LMS365				•

• Specify the Course Id value in order to get the information about the specific course. Click the field to see all available data you can operate with. Select the Course Id from the list to proceed:

	÷	used in this flow.
Get course	details (j) ····	Dynamic content Expression
* Course Id	Specify the internal course id	Search dynamic content
Expand Query	DueDate,Publishing,CertificateExpiry,SharepointWeb(\$select=Url),Categories,	When training has been published to a catalog
	Tags,CourseSessions,ProvisioningProgress,Trainers	Action Action
		Attempt Attempt
	+ New step Save	Course Id Course Id
		CourseType Coursetype
		Published Published
		Siteld Siteld
		<b>TimeStamp</b> Timestamp
		Training Title

After the Course Id value is selected, you can choose what to do with the data returned by the 'Get course details' action (by adding new action).
 In our example, we will select the Office 365 Outlook Connector and search for the 'Send an email' action:



① Once you have set up a specific connection (Outlook, LMS365, SharePoint, etc.), you can reuse that connection in all flows.

and fill in some course data (e.g. title and description):

When training	has been published to a catalog	
	↓ ↓	
Apply to each		
* Select an output from previous steps	Votifications ×	
Get course deta	ails	
	⊕ ¥	Add dynamic content from the apps and connectors Hide used in this flow.
Send an email	(i) ····	Dumamic content Expression
*То	Specify email addresses separated by semicolons like someone@co	
* Subject	specify the subject of the mail	Search dynamic content
* Body	Add dynamic content ■ Font ▼ 12 ▼ B I U I 目目目目目 0 8	ShowTimer Show timer
	Specify the body of the mail	Start Date Start date
Show advanced options	~	Time limit
		Title Title
		Title Title
	🕎 Add an action	<b>Trainers Display Name</b> Display name of the trainer
		Training Title Title of the training plan or course
	+ New step Save	Uri Uri
		When training has been published to a catalog

That is all, we are ready with the Flow that is triggered when a Course has been published, gets the detailed information about it, and sends Course's description via email to the specified recipients.

The logic and approach are the same for all other cases.

You can make a request to get the desired data from API via Microsoft Power Automate as well. Let us create one more flow to get the list of all Courses and the enrollments withing the Course Catalog:

• Choose the "Send an HTTP request" trigger and define the methods for the HTTP request. In our case use the GET as method as we need to receive the information.

There are 5 HTTP methods: GET, PUT, POST, PATCH, DELETE.

- the GET method is used for retrieving information,
- the PUT method is used for updating the existing resource,
- the POST method is used for creating a new resource,
- the PATCH method is used for making a partial update on a resource,
- the DELETE method is used for deleting resources.
- Specify the path in the Uri field. You can get these data from <u>Swagger</u>. Navigate to the desired endpoint. In our case we use the endpoint GET /odata/v2/Courses that returns the list of all Courses. As we want to have all enrollments, we need to specify the "Enrollments" as the parameter. So the path will be Courses?\$expand=Enrollments:

15 Manually	y trigger a flow		
		$\downarrow$	
Send an	HTTP request		
* Method	GET		$\sim$
* Uri	Courses?\$expand=Enrol	lments	
Headers	Enter key	Enter value	(ii)
licaders			

Once you have tried out the endpoint you can find the Uri in the Request URL field as well.

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(1) You can find all available parameters in the Responses field – Model.
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When you run the flow, you will find required information in the Body field. The API will response in the JSON format:

```
"Enrollments": [
```

```
{
    "Id": "407de1a8-e9a0-40a6-94ed-e70d7a1992b4",
    "CourseId": "144e2fc1-76d1-4387-ae26-27df7f77ef26",
    "UserId": "ae5119a5-3426-4402-982a-f071b54f0545",
    "UserLoginName": "c:0t.c|tenant|e6e6f293-8809-4c64-a888-
71f824be52df",
    "Roles": [
    "Teacher"
    ]
```

() You can find more about JSON format in the <u>JSON Tutorial</u>.

To apply it for each course you need to add the new "Apply to each" action, click Expression and specify the following expression, which is the output from the previous step and looks like:

body('Send\_an\_HTTP\_request')['value']

C Manually trigger a flow		
↓		
Send an HTTP request		
Apply to each		
* Select an output from previous steps		
	Add dynamic content 🛨	Add an expression to do basic things like access, Hide convert, and compare values. <u>Learn more</u>
Add an action		Dynamic content Expression
		f <sub>x</sub> body('Send_an_HTTP_request')['value']
+ New step Save		OK String functions See more

• To get all enrollments add one more "Compose" action.

1 Manually trigger a flow	
Send an HTTP request	
Apply to each	
* Select an output from previous steps	
Value ×	
Choose an action	×
✓ Compose	
All Built-in Standard Premium Custom My clipboard	
Data DocFusion36	
Operation 5 – SP	
×	
Triggers Actions	See more
Compose Data Operation	0

In the Input field add the desired expression. As we want to get the enrollments for each of the courses, we need to specify the following expression:

items('Apply\_to\_each')['Enrollments'].

For the detailed information about functions see <u>the guide to using functions in expressions</u>.

That is all, we are ready with this flow and get all enrollments:

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$\bigcirc$	Send an HTTP request	1s
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t⊒	Apply to each	22s
	Previous Previous failed Show 1 of 101 Next failed > Next	t <b>&gt;</b>
{0}	Compose	<b>⊘</b> 0s
	Click to download	
	OUTPUTS	
	Outputs	
	[ {	
	"Id": "a0241891-a284-4fef-a450-35d0ff5f2670", "CourseId": "915b0890-91d4-4fb3-b9fc-1684303d8da3".	111
	"UserId": "ae5119a5-3426-4402-982a-f071b54f0545",	
	"Roles": [	
	\"! comon"	

Useful links: <u>Swagger;</u> <u>The JSON tutorial;</u> <u>The API fast track learning</u>.