

# Learning History Import

Service Description

## **imc Learning Suite**

February 24, 2024

## Preface / Objectives

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This document describes the services that the imc project team provides as part of an order to import a learning history into the Learning Management System (LMS) imc Learning Suite. In general, the **learning history import** (or **migration of historical data** from another LMS) takes place together with an implementation project in which the customer's historical data needs to be imported to the learning platform.

Typically, the goal of a learning history import is to import the completed courses of users into the new LMS so that a user can view the courses he or she has completed at any time, even if this was not done via the imc Learning Suite. The **objective** of the service description is to create a mutual understanding about the services to be provided by imc as well as the process and the cooperation of the customer. For this reason, the service description contains the following aspects:

- **Description of the entities** that can be imported into the LMS as part of a learning history import by imc. Here, the functions of the standard software are addressed, which are the basis of the service description. Additional requirements that need an extension of the functionality of the software are not part of the service to be provided and must be considered separately.
- **Description of the data** that the customer must provide in the context of the learning history import so that an import by imc can take place. The import of the data is predefined by imc and changes that occur, for example, because the data is already available in a different form, would also have to be considered separately.
- **Description of the process** including the individual steps and responsibilities to be completed for a learning history import. The agreed procedure pursues the goal of achieving the highest possible quality of the imported data. Deviations from the process would also have to be considered separately with the imc project team.

## Entity Description

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Here, the relevant objects of a learning history import are described:

- **Import of users:** The learning history import assumes that the users whose learning history is to be imported already exist in the LMS via a user interface. This may have been done as part of setting up a CSV user import interface. If historical course data is also to be imported for users who have not been imported via an existing interface (e.g., because the current interface only imports active users and a migration is also to take place for users who have already been passivated), the existing interface must either be extended, or the missing users must be imported separately (e.g., as part of another CSV import). If an increased effort is required here (e.g., an additional import is to be created that requires its own set of rules), this would have to be covered by an extension of the order. It is important that a unique identifier exists in the LMS for all relevant users, via which the course completions can be clearly assigned to a user in the LMS (i.e., LOGIN).
- **Import of course templates:** The learning history import not only allows the import of courses but also the structured mapping and assignment of courses to course templates. For this purpose, it is possible to import course templates into the LMS, which are then used as templates for the courses to be imported. If there is no need to import course templates (e.g., because all courses can be created from one course template), at least one course template is created as part of the learning history import, which serves as the basis for the subsequent import of the courses. All imported course templates are listed as published version (1.0) under "Course templates" after the import and the access rights are based on the standard access rights of the user performing the import. Subsequent editing of course templates is possible, but created courses are always based on the published version of the course template at the time, the courses are imported. An import can only take place if the import data is sufficient to fill all mandatory fields of a course template, i.e., no mandatory fields may be defined and empty for course templates, which are not filled within the scope of the import of the course templates.
- **Import of courses:** The import generates courses based on course templates. These course templates have either been created manually in the LMS or have been imported into the LMS via the previous import of course templates.

Both time-dependent courses (with start and end dates) or courses with a duration of use can be imported. The most important descriptive fields / meta tags are available to describe the courses (name, description, start date, end date, duration of use, organizer, planning status, administrator, maximum number of participants, price). All other descriptive and functional fields / meta tags are taken over from the course template to the course and should therefore already be set as desired in the course template or the course type (e.g., sending of mails or certificate). This also includes the course language settings, as courses are only imported in one language. All imported courses are listed under "Courses" after the import and the access rights are based on the default access rights of the user performing the import. Subsequent editing of courses is possible. An import can only take place if the import data is sufficient to fill all mandatory fields of a course, i.e., no mandatory fields may be defined and empty for courses, which are not filled during the import of the courses.

- **Import of course enrolments:** In the last step, after all course templates and courses are imported and all users are present in the LMS, the imports of course enrolments take place. Import covers course completions (passed, failed) but also enrolled and started users (registered, in progress). This import connects user and course and defines when a user has started or completed a course. For a time-dependent course, the personal start and end dates result from the start and end dates of the course. For courses with a duration of use, the dates indicate on which date the course was started by the learner and on which date it was completed. Important Note: importing enrolments for passive users will be extra effort.

## Data Description

The imports of the course templates (if required), the courses and the course completions are done via three separate import files based on csv templates. The following describes the csv templates that must be provided by the customer to perform the import.

All csv files must have the **UTF-8** file format and use a **comma** as separator. The first line contains the column headers as named in the following tables.

### Course Templates (course\_templates.csv)

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>Import type</b>	Defines the import type. For course template, the value TEMPLATE must be added	X	TEMPLATE
<b>External Template ID</b>	The unique external course template ID that is referenced when importing courses (limited to 50 characters max).	X	AB27000
<b>Course type ID</b>	The OBJECT_ID of the course type in the LMS that is to serve as the basis for the course template. The import always uses the settings of the course type at the time of the import.	X	113037
<b>Name</b>	Name of the course template, which is also used as the name of the template of the course template (meta-tag ID 10000). Max lengths of 500.	X	Compliance-Training

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>Description</b>	Description of the course template, which is also used as description of the template of the course template (metatag ID 10001). It should be noted that the metatag of the LMS is a text area that also supports html. No formatting takes place during the import, i.e., the text content is written to the database unchanged.	--	This is the monthly compliance training offered by the Compliance department.
<b>Administrator</b>	The LOGIN of the course administrator who is to be stored for the template of the course template.	--	imc_admin
<b>Provider</b>	THE OBJECT_ID of the organizer to be stored for the template of the course template.	--	145835
<b>Price</b>	The external price (as a value) that will be stored in the template of the course template (metatag ID 10128).	--	500
<b>Currency</b>	The currency of the external price as an abbreviation (meta tag ID 10128).	--	EUR
<b>Location</b>	The OBJECT_ID of the location to be stored in the course template (metatag ID 10097).	--	145825
<b>Max participants</b>	The maximum number of participants that will be stored in the template of the course template (metatag ID 10009).	--	15

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>Planning status</b>	Planning status of the template course (metatag ID 10072) with values: 0=released, 1=fixed, 2=locked, 3=canceled, 4=completed	--	0
<b>Duration in days</b>	Duration in days (decimal values possible) for metatag with metatag ID 10119	--	2
<b>Duration in hours</b>	Duration in hours (decimal values possible) for metatag with metatag ID 10120	--	16

**Notes:** If mandatory fields are not filled, no course template can be created. If non-mandatory fields are not filled, the default values of the course type are used. The same applies if the column of a non-mandatory field does not exist in the csv import file. The import of further (customer specific) fields / metatags is technical possible but needs to be checked with the project team in terms of effort.

It is to consider that the import skips a record if valid data is used such as too long course titles.

### Courses (courses.csv)

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>Import type</b>	Defines the import type. For course template, the value COURSE must be added	X	COURSE

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>External Course ID</b>	The unique external course ID that is referenced when importing course completions (limited to 50 characters max).	X	AB27000-01
<b>Internal course template ID</b>	The OBJECT_ID of the course template that is to serve as the basis for the course template. The import always uses the last version and its settings. Alternatively, the specification of an <b>External Template ID</b> can be made.	X*	113089
<b>External Template ID</b>	The unique external course template ID. The import always uses the last version and its settings. Alternatively, the specification of <b>Internal course template ID</b> can be made (limited to 50 characters max).	X*	AB27000
<b>Name</b>	Name of the course (metatag ID 10000). Max lengths of 500.	X	Compliance-Training March 2021
<b>Description</b>	Description of the course (metatag ID 10001). It should be noted that the metatag of the LMS is a text area that also supports html. No formatting takes place during the import, i.e., the text content is written to the database unchanged.	--	This is the monthly compliance training offered by the Compliance Department.

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>Start date</b>	The start date of the course (if date-dependent course then mandatory) in the format ISO8601 / YYYY-MM-DDTHH:MM (e.g., 2007-08-31T16:47)	X*	2022-09-21T08:00
<b>End date</b>	The end date of the course (if date-dependent course then mandatory) in the format ISO8601 / YYYY-MM-DDTHH:MM (e.g., 2007-08-31T16:47)	X*	2022-09-21T18:00
<b>Duration</b>	The duration of use of the course (if course with duration of use) in months. Not mandatory, otherwise the value of the course template will be taken.	--	12
<b>Administrator</b>	The LOGIN of the course administrator.	--	156327
<b>Provider</b>	The OBJECT_ID of the organizer.	--	145835
<b>Price</b>	The external price (as a value) (metatag ID 10128).	--	500
<b>Currency</b>	The currency at the external price as an abbreviation (metatag ID 10128).	--	EUR
<b>Location</b>	The OBJECT_ID of the location (metatag ID 10097).	--	145825
<b>Max participants</b>	The maximum number of participants (metatag ID 10009).	--	15

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>Planning status</b>	ID of the planning status to be given to the course: 0=released, 1=fixed, 2=locked, 3=cancelled, 4=completed.	--	4
<b>Duration in days</b>	Duration of the course in days (metatag ID 10119). In addition to integer values, decimal values with a dot (e.g., 1.50) are also allowed.	--	2
<b>Duration in hours</b>	Duration of the course in hours (metatag ID 10120). In addition to integer values, decimal values with a dot (e.g., 4.50) are also allowed.	--	8

**Notes:** The specification of **Internal course template ID** or **External Template ID** is left to the scenario, whether course templates were created manually or via import. For this reason, the columns with restrictions are declared as mandatory fields (\*). The same applies to the **Start date** and **End date** fields, which are also only required for time-dependent courses. If mandatory fields are not filled, no course can be created. If non-mandatory fields are not filled, the default values of the course template are used. The same applies if the column of a non-mandatory field does not exist in the csv import file. Courses are only created if all defined required fields are available – either from import file or from template. The import of further (customer specific) fields / metatags is technical possible but needs to be checked with the project team in terms of effort.

It is to consider that the import skips a record if valid data is used such as too long course titles.

## Enrolments (enrolments.csv)

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>External Course ID</b>	The unique external course ID to which the learner should be deposited (limited to 50 characters max).	X	AB27000-01
<b>Login</b>	The LOGIN of the user who will be deposited on the course. Please note that the service description assumes that the user is active.	X	imc_admin
<b>Enrollment date</b>	The personal booking date of the user. The specification is optional. If no date is specified, the start date of the course is set as the booking date for time-dependent courses. For courses with a duration of use, either the personal start date (if available) or the personal end date is used. Date specification in the format ISO8601 / YYYY-MM-DDTHH:MM (e.g., 2007-08-31T16:47).	--	2022-09-20T13:00
<b>Enrollment status</b>	The participant status: 8=Registered, 9=In progress, 11=Passed, 12=Failed	X	11
<b>Due date</b>	The user's personal due date, which can be specified optionally. The date tells whether the user completed the course "on time". Date specification in the format ISO8601 / YYYY-MM-DDTHH:MM (e.g., 2007-08-31T16:47).	--	2022-09-21T13:00

FIELD	DESCRIPTION	MAN-DA-TORY	EXAMPLE
<b>Start date</b>	The learner's personal start date - only relevant for a course with duration of use. For a time-dependent course, personal start, and end date result from the course data. Date specification in the format ISO8601 / YYYY-MM-DDTHH:MM (e.g., 2007-08-31T16:47). If no start date is specified, the end date (which must be specified) is used as the start date.	--	2022-09-21T13:00
<b>End date</b>	The learner's personal end date - only relevant for a course with duration of use. In case of a time-dependent course, personal start, and end date result from the data of the course. Date specification in the format ISO8601 / YYYY-MM-DDTHH:MM (e.g., 2007-08-31T16:47).	X*	2022-09-21T14:00
<b>Identification</b>	ID of the identifier that must be present in the LMS.	--	2

**Notes:** All course completions result in users being assigned onto the course as successfully completed. For time-dependent courses, the specification of **External Course ID**, **Login** and **Enrollment status** is sufficient, for a course with a duration of use (if status is passed or failed), in addition, the personal end date (course completion date, **End date**) must be specified such that the field is marked as mandatory with restriction (\*).

# Process Description

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The **process of a learning history import** is conducted jointly between the imc project team and the customer and depends on several factors (operating model, test environment available, when the complete user import takes place).

## Phase 1: Planning Phase

The imc project team agrees with the customer on the scope of the learning history import. The following issues are considered in the process:

- How do all users get into the LMS and is the LOGIN the identifying attribute?
- Are course templates also imported or are they created manually?
- Which fields (considering the CSV templates) should be imported?
- What will be the process and timing of the import (e.g., before go-live, after go-live)?
- When will the data to be imported be available in the (final) version?
- How can a test by the customer take place? And how can a sign-off of both a test import and the final import take place?
- Are there reasons / requirements (new requirements) why the standard functionality cannot be used?

For this purpose, the agreed results for the joint procedure are documented by the imc project team so that all sides have a mutual understanding of the data to be mi-grated and the procedure.

## Phase 2: Preparation Phase

In this step, the prerequisites for performing the learning history import must be created:

- For this purpose, the customer must provide the data to be imported in the agreed format (based on the CSV template structure).
- A user import must be performed so that all users relevant for the learning histories import exist in the LMS.
- Course types and course templates (if no import of course templates take place) must be prepared so that the corresponding IDs are known. These objects must be created on the productive environment.
- Other objects that may be required (organizers, locations, administrators) must be created on the productive environment so that their IDs are used in the import files or can be stored in course types and course templates.

- A database copy must be transferred from the productive environment to the test environment so that the test can be conducted as realistically as possible.

### Phase 3: Testing Phase

Provided that the requirements are met, and the complete import data is available, a test phase should take place.

- First, the imc project team checks the import data for plausibility (e.g., correct format) and, if necessary, performs a test on the imc reference environment.
- Ideally, the actual test phase takes place on the customer's test environment with the current production data status. If the customer does not have a test environment, no test phase is possible in the cloud. In the on-premises model, it is up to the customer to implement the test import by resetting the database.
- The actual test import is performed by the imc project team. In the on-premises model, the cooperation of the customer's IT may be necessary.
- After the import has been carried out, the imc project team checks the quantity of the imported data records (e.g., comparison of created courses and courses in the import file) as well as the quality of the imported data on a random basis (are the participants on the created courses stored as successfully passed, etc.) and transfers the status of the test import to the customer.
- The customer checks the test import. If data has not been imported correctly / not as agreed and the cause was not wrong import data, imc will perform a new test import (after resetting the database).
- The goal of the test phase is the **sign-off of the customer for productive import of the learning history**.

### Phase 4: Execution Phase

As soon as the test phase has been completed with the sign-off to perform the import, the actual import takes place on the productive environment (or the future productive environment). It is important here that the identical import data is used.

- The actual execution is conducted by the imc project team. In the case of an on-premises model, the customer IT may have to be involved. Again, the imc project team checks the imported data records (also in relation to the test import) and reports the completed import to the customer.
- If errors occur directly after the import that were not previously detected in the test environment, there is still the possibility of a rollback for some time

(in the on-premises model, the customer IT is responsible for this). The longer the import lapses, the more productive data is lost due to the rollback.

- **The import is considered complete** if no direct errors are reported by the customer to the imc project team after the import.

If problems / errors occur after an import that can be traced back to incorrect data, the customer must check the alternatives roll-back or data correction via script with the imc project team. A new import or the correction of data will be charged additionally according to time and effort. Exceptions are of course import errors that are not due to the import data and can be corrected by data correction.

## Additional Notes

The learning history import, as it is available as a standard function of the imc Learning Suite and offered as a service by the imc project team, only enables the import of certain historical data. Therefore, not all data import requirements are covered. The following points are therefore to be explicitly listed:

- Only monolingual course templates and courses are created, and it is not possible to import multilingual courses.
- Not all statuses are supported. No booking data (course and booking specific data) is imported.
- No media / course components are imported. Manually created, components can be subsequently added to the imported courses, in which case the components are displayed as not processed for the learners even though the course itself is marked as successfully completed.
- No other entities are imported into the LMS (e.g., job profiles, skills, certifications, learning paths, learning content, catalogues, locations, resources, tests/test questions, feedback / feedback questions). Also achieved skills, experience points, badges, certifications, test results, or feedback or assignments of objects to catalogues or components to courses are not covered by the standard functionality of the learning history import. There is no import of SCORM runtime data.

In addition, the following aspects must also be considered:

- The 24-hour time format is required as the date format. All dates consider the time zone of the server.

- The scope of services includes the one-time import of course templates, courses, and course completions. Multiple imports can be conducted on a time and material basis or by the customer.
- The import files provided by the customer are not adopted by imc - except for minor adjustments to column headings, if necessary. The assurance of the quality of the data as well as the completeness of the data is on the side of the customer as well as the correction of the data delivery in the context of the test phase.
- If additional requirements arise during the implementation (e.g., import of other entities), the additional effort must be investigated individually.

The experience of past imports has shown the following:

- The creation of course templates is very important because the course templates and their default values are used to create courses. If values are not set when courses are created, the default values of the course templates are inherited by the courses.
- The learning history import should be carried out as late as possible. As part of an implementation project, the import should take place after the Technical Go-live, if possible, as the system is configured at this point.
- It is also important to emphasize once again that the import cannot be undone. Although an old database backup can be imported, this may mean the loss of data as an old data status is created.

Further restrictions:

- As part of the normal process of importing learning history entries, it is assumed that only entries for *active users* are imported. The LMS also supports the import of learning history entries for users who have the status passive. However, this is considered as separate service.