



Getting Ready for Esploro Implementation

Customer:

Customer Code:

Project Manager:

Email To:



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Introduction

Dear Esploro Customer,

The purpose of this document is to provide you with an overview of the Esploro implementation process and help you getting ready to it.

Ex Libris Esploro paves the way to maximum impact of academic research by elevating visibility, efficiency, and compliance of research activities. The Esploro cloud-based solution helps institutions showcase their research and measure its influence by systematically capturing, managing, and disseminating research output and data, and seamlessly integrating with existing library and research workflows.

Migration to Esploro

Migration Scope

The scope of data migrated is specified in your contract and may not be expanded during the Esploro implementation project. Requests for migration of additional data not specified in your contract may be submitted to your Ex Libris account manager before the beginning of the implementation project.

Security

As Esploro is a hosted solution, no secure private data such as social security numbers or other sensitive information may be stored or passed to Esploro. For personal data migration, please make sure to use the secured FTP to upload the files.

Suggestions for Optional Data Preparations

During your preparations for migration to Esploro, Ex Libris recommends that your institution take advantage of the opportunity to perform some data clean up. While completely optional, undertaking some data clean-up efforts will improve the migration process and provide the best possible outcome as you make the transition to Esploro.

Note - Not all suggestions for preparing your data must be done now – many can be done in Esploro later.

Migration to Esploro

Introduction to The Esploro Data Model

Esploro has few fundamental building blocks that are required for the system functionality: the **research organization units**, the **researchers**, and the **research assets**. There are additional entities that can be loaded to the system as part of the implementation project or over time, such as grants, external organizational units, and nonaffiliated researchers.

In most projects, data from your source systems will be migrated to Esploro as part of the Implementation.

In Figure 1, There is a high-level schema of the Esploro data model. Below is more information about each of the main entities and their structure.

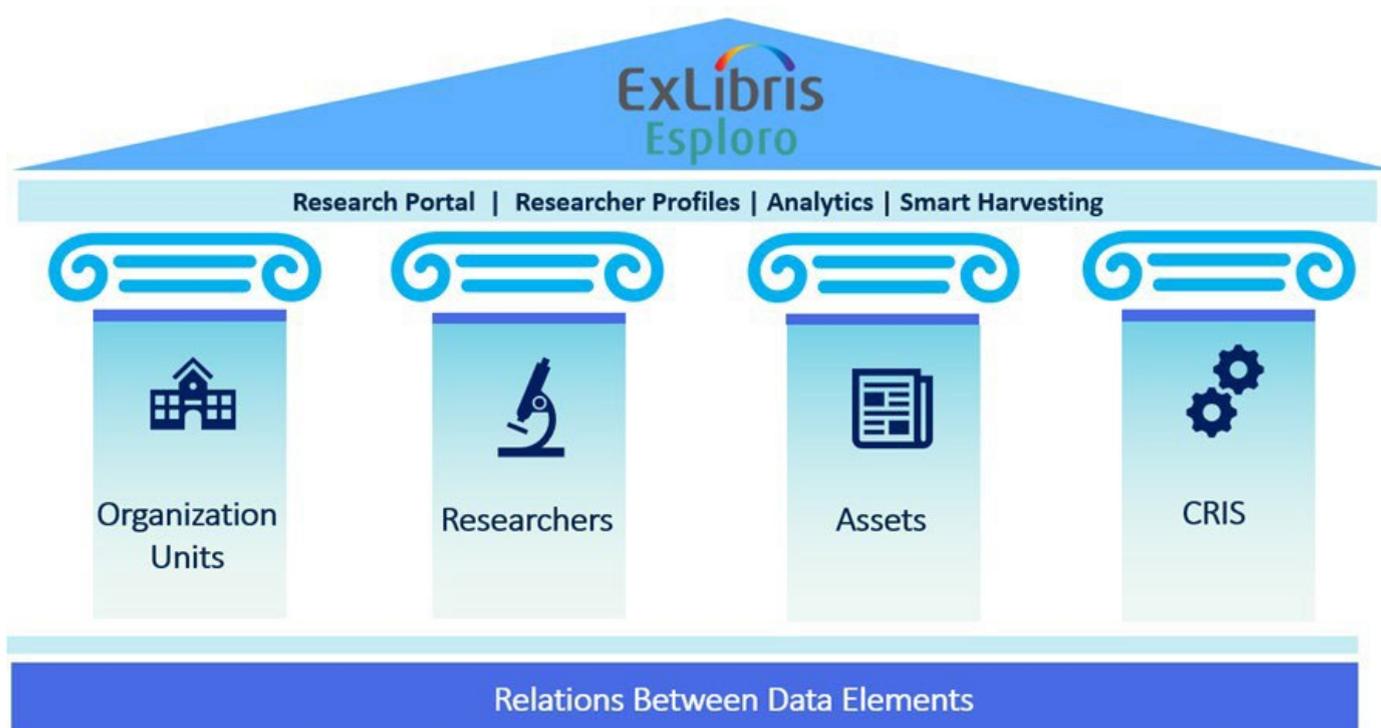


Figure1 Figure 1 - The Esploro Data Model

The Organizational Units



What is the organizational units' structure?

Organization units represent the colleges, faculties, departments, research centers, institutes, laboratories, etc., of your university which are engaged in research activities.

Esploro models these organization units in a hierarchical structure. The top-level should be your institution (the university), becoming a more granular structure at the department level (Esploro supports up to 6 hierarchical levels in the organization unit structure).

The units represent the Academic departments and sub-units that specify the general or specific area under which a paper or work was produced, also called "affiliations." The affiliations are tied deeply to the other data elements - researchers and research assets.

How is it established in Esploro?

Esploro supports a one-time migration of the organizational units from the library systems and manual configuration of the Research Organization Units. Currently they can only be loaded to Esploro once. They cannot be overwritten in bulk after researchers and research asset has been loaded to the system.

Any changes to the institution's organization units after the load can be reflected in Esploro by updating the organization units via the Esploro user interface.

What is required for the Esploro implementation project?

Customers are asked to provide formatted input of the organization units that conforms to the input requirements of Esploro migration. The input should contain relevant information about the organization units (e.g., hierarchical relationships, optional contact information).

The codes used for the units must match the affiliation codes in the researcher data and the research assets affiliations.

You can learn more about the research organization units [here](#)

The expected XML structure XSD can be found [here](#)

See also, Appendix 1 - The Organization Unit Loader Schema

Sample XML file - [here](#)

The Researchers Record



What is the researcher's record?

Researchers are the producers of the research activity in the institution. Every affiliated researcher in Esploro is connected to one or more research organization unit.

Esploro enables the automatic creation and update of researcher profiles, displaying researchers' publications, achievements, and academic activities in one location based on the researcher's information in Esploro.

How is it established in Esploro?

The researcher record is an extension of Ex Libris Higher Ed Cloud Platform user record. In other words, to create a researcher record in Esploro, the researcher first must have a user record in the platform. Better researcher information improves system quality and accuracy. Fields such as areas of interest, emails, and unique identifiers are used for better automatic matching between the research assets and the affiliated researcher.

For Pivot customers, the Esploro's researcher data can be optionally enriched with relevant information from the researcher profile in Pivot, such as areas of interest and researcher identifiers.

What is required for the Esploro implementation project?

Researchers can be added via the Platform user loader (SIS) in two ways:

1. As part of an **existing** SIS load procedure - The existing integration profile can be modified to load user and researcher records. The SIS load file should be enriched with the researcher tag and additional researcher data elements.
2. As a **separate** load procedure - A new integration profile can be configured to load only researchers or researcher data. In this case the Platform user must already be in the system. The loaded file should contain the researcher tag, additional researcher data elements, and a unique identifier that can be used as the matching point with the Platform user record (usually the primary identifier but any identifier can be used).

These options are not mutually exclusive. If you have researcher data in multiple systems, you can import distinct researcher information from each system, provided that each load file contains a unique identifier that can be used to match the existing Platform user record.

The researcher's information in the SIS file should include a flag that the Platform user is a researcher (or at least a potential researcher), e.g., faculty and some staff are generally at least potential researchers. Also, the SIS should include the researcher related information. The single most important data element is the researcher's academic unit affiliations – at a minimum, the primary affiliation should be provided.

IMPORTANT - the organization unit codes in the researcher record must match the organization unit codes in Esploro for researchers to be updated in Esploro.

For Pivot customers, as early as possible, customers will be asked to provide a list of the institution's researchers that includes: the researcher's name, researcher primary identifier, and any additional information that can assist in uniquely identifying the researcher, such as name variants, organization unit affiliations,

and researcher identifiers such as ORCID. If the researchers have Pivot profiles, information from their Pivot profiles will be imported to Esploro.

All customers will be asked to provide researcher records in SIS loader format to migrate their researchers to Esploro. If the researcher's relevant information is available in a structured data source that is not in SIS load format, please contact your project team. There is a possibility for a one-time transform of your researcher records as part of the migration task, provided that the data is structured per researcher, contains the platform user ID and relevant affiliations (organization units codes).

For ongoing import, customers will be asked to provide this information in the SIS XML format required by Esploro for ongoing import/update of your user and researcher records in Esploro.

Important! For privacy regulation, please make sure to upload the relevant data via a secured channel. The project team will grant you access to the Ex Libris secured FTP servers (also called MFT) to upload the researchers files.

For more information about researcher records, see [Managing Researchers](#) in the Esploro online help.

Specifications of the required format for importing researchers are in [Researchers Data Format](#)

Optional Data Preparations in the researchers' record

When importing research assets, Esploro uses a proprietary author matching algorithm for linking assets to existing affiliated researchers. Authors who do not match an affiliated researcher are created as new non-affiliated researchers. The accuracy of the information in your researcher's records and its consistency with the researcher's names in their published output will affect the results of the author matching algorithm. Thus, by reviewing the information in your existing researcher records before the migration, you may be able to improve the results of the algorithm.

- Verify that the name information accurately reflects the names of the researcher as they appear in their publications. Nicknames (e.g., Bob for Robert) are helpful if the researcher publishes under those nicknames. Otherwise, the presence of nicknames in the researcher record will decrease the accuracy of the matching algorithm. So, too, maiden names if they were never in formal use for publications.
- Middle names and initials can increase the matching algorithm's accuracy, but only if used in the researcher's publications.
- Name prefixes, such as Mr, Ms, Dr, and suffixes, such as PhD, Editor, Author, should not be part of the name, per se, but can be in the Prefix/Title/Suffix fields of the researcher record.
- Incorrect names (first, middle or last) greatly reduce the accuracy of the matching algorithm.
- Verify that the source of the researcher records to be migrated to Esploro contains an indication of the affiliation(s) of the researcher with his/her organization unit(s). (To create these affiliations in Esploro automatically upon the migration of your researcher file, the organization units contained in the researcher record must match the code of the organization units in Esploro, as defined in the Organization Units file you provide to Ex Libris).

- The presence of information concerning the researcher’s research areas of interest can enhance the matching algorithm’s accuracy.

As an example, if the researcher’s name will be migrated as Matilde Washington Smith, there is no need to add any of the following variants since the matching algorithm will already consider them:

Matilde Smith
M Smith
M W Smith
Matilde W Smith

The algorithm will match these variants even if they have not been added explicitly in Esploro.

However, if the researcher’s name is migrated as Matilde W Smith but she sometimes publishes under her full name, Matilde Washington Smith, adding her full name as a variant can provide a more accurate match and prevent an incorrect match with someone called Matilde Wilson Smith, for example. If she does not publish under her full name, do not add the full name as a variant.

If the researcher sometimes publishes under a nickname, for example, “Tillie,” adding the nickname as a name variant, Tillie Washington Smith or Tillie W Smith, can improve the matching results.

Research assets and files



Research Assets are research outputs of all kinds, e.g., Journal articles, Conferences Proceedings, Books, Datasets, Creative Work, etc.

Every asset can have many to many relationships with researchers, organizational units, grants and other entities in the system.

For projects that include assets migration, the Research Assets and file streams are migrated from customers' source system(s) as defined in your Esploro contract. Generally, a single metadata format per source system is used to migrate all assets to Esploro (transformation and Load). Esploro migration is a one-time data migration (test load and cutover load).

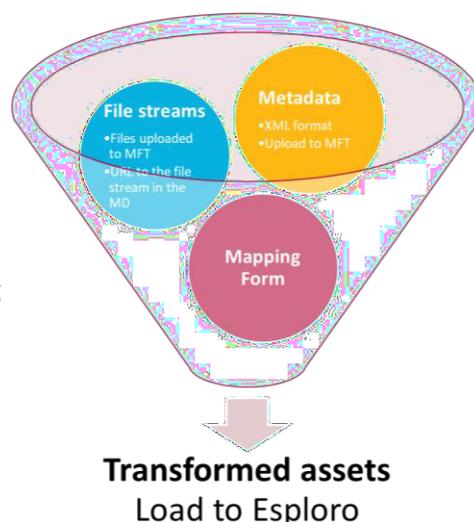
Since Esploro is a research repository, digital assets that are not of a research nature (e.g., library collections, personal/institutional/historical archives) are best managed in a digital asset management system such as Alma-D.

In preparation for the final migration of your research assets to your Esploro production environment, we suggest you minimize any backlog of research records that have been deposited to the source system but not yet included in the repository (e.g., in process, not yet approved).

Incoming Data for Assets Migration

Customers will be asked to extract from their current system(s) metadata and file streams for all research assets to be migrated to Esploro. This extract will be used for the initial test load of your data. Before go live, you will be able to provide a fresh extract to capture any changes that may have occurred to your data since the initial extract. **Important - Customers are requested to submit their data using the native AIP/export format.**

NOTE: DSpace customers are requested to submit their data using the native DSpace AIP format.



Customers will be asked to provide the Asset data using Ex Libris MFT. Once the asset data retrieved, it will be transformed into Esploro format as part of the migration task. For this transformation, a completed Migration Form (Mapping Form) will be required. Review and completion of the migration form will be done as part of the implementation project.

The Asset Metadata (XML, CSV, or Excel)

All Research assets must include Asset ID, Resource type (see information: [Research Asset Categories and Types](#)), Title, Affiliation (organizational unit ID), Date (one date of any kind).

Additional information that will improve usage results: Author affiliation, IDs, or emails.

Every author in an asset must be linked to a researcher. If you can provide assets with identifiers for the authors (platform user IDs and or /emails) this will ensure better matching between. When there is no ID, Esploro will automatically match authors with researchers using its Author Matching algorithm. Note that it may be necessary to approve the match post migration.

The Assets File streams

All files must have an extension.

File streams can be loaded to Esploro either as file stream load or as URL file harvest. The file name or the URL should be available in the record metadata. In case you use URLs – make sure the files are not restricted and that the URLs appear in the metadata and are not encoded.

Optional Data Preparations - Research Assets

The research asset type (e.g. journal article, dataset, conference paper/presentation) is a mandatory field in Esploro. As such, verify that your research assets to be migrated to Esploro contain an indication of the research type (e.g. <document-type>article</document-type>; <resourceType resourceTypeGeneral="Dataset">Dataset</resourceType>) and only one such indication per asset.

Research assets can be associated directly with one or more of your organization units. To associate your assets with organization units during migration, verify that your data contains an indication of such associations (associations in your source data do not need to reflect the exact code or name of the organization units in Esploro. Rather, your data values can be mapped to the appropriate Esploro organization units based on the input you will provide to Ex Libris before migration in the Migration Form).

ETD assets should contain indications of the Degree grantor (usually the university), the Awarding academic unit (could be the university or one of its colleges, faculties, or schools), and the degree awarded. These metadata fields are mandatory in Esploro.

Additional Entities Migration to Esploro**

** The below migration options are only relevant to institutions with the Advanced Edition

External organization units

Esploro installations include Central Organization Units with Global Identifiers. As part of the process of loading your external organizations, Esploro will match the incoming organization units against the central organization units using the Global Identifier so that unique external organization units are loaded. Matched organizations will be loaded as Esploro Local to Central Organization Links, and unique organizations will be loaded as Local External Organization Units.

For more information about external organization units in Esploro, see [here](#)

Grants

A grant is a money or other funding provided by an organization to assist in research. Grants are associated with one or more researchers [known as investigators], organizations [known as funders], and assets. While a grant is associated with a single organization, an organization can be associated with multiple grants. Esploro enables you to manage information about grants and associate grants with assets and/or researchers, mostly for reporting purposes in Esploro Analytics and for display in Esploro's Research Portal.

Customers with a legacy system that managed grants and funders will need to load both grants and their matching external organization units.

Read about grants in Esploro [here](#)

Non-Affiliated Researchers

Esploro has a non-affiliated researchers loader for loading non-affiliated researchers into Esploro. With this loader non-affiliated researchers can be imported into Esploro when migrating from other systems.

Customers with a legacy system that managed non-affiliated researchers will need to load both non-affiliated researchers and their matching external organization units.

See more information [here](#)

Historical Usage Data

You can choose to supply Ex Libris with historical usage statistics for your research assets. These statistics will be migrated to Esploro and be available for reporting purposes in Analytics. Speak with your Esploro implementation team concerning the Esploro usage statistics and read [here](#)

Note: It's possible to import external organizational units, non-affiliated researchers and grants from other systems, using the import options available in the Esploro Research configuration menu.

The input file containing the data should be in XML format and must be compatible with the Esploro data schema.

For more details about these import options and the input file structure please refer to the following documentation:

<https://developers.exlibrisgroup.com/esploro/integrations/organizations/importing-external-research-organizations/>

<https://developers.exlibrisgroup.com/esploro/integrations/grants/importing-research-grants/>

<https://developers.exlibrisgroup.com/esploro/integrations/researchers/importing-non-affiliated-researchers/>

Projects

It's possible to migrate information about research projects to Esploro, this information allows researchers to store and manage research projects conducted in their institution. By adding projects to Esploro, you can enrich the research information available for display and reporting and provide a wider and more comprehensive picture of the research done in the institution. Projects can be associated with organization units and researchers in the institution and display on the researcher profiles.

Please note that it's recommended to migrate the external organizational units information along before adding the projects information. In addition it is mandatory to migrate non-affiliated researchers data before migrating the projects information.

Projects data migration will require mapping of the source data to Esploro format. If you choose to migrate

projects data to Esploro, consult with your Esploro implementation team .

For more information refer to the following [documentation](#).

Activities

It's possible to migrate information about researcher activities to Esploro.

An activity in Esploro relates to researcher actions that support research, e.g., service to the profession, supervision of students, etc.

Please note that it's recommended to migrate the external organizational units information along before adding the activities information. In addition it is mandatory to migrate non-affiliated researchers data before migrating the activities information.

Activities data migration will require mapping of the source data to Esploro format. If you choose to migrate activities data to Esploro, consult with your Esploro implementation team .

For more information refer to the following [documentation](#).

Preparing for the Implementation Project

Campus Engagement

For successful implementation and in-campus adoption, it is recommended to involve internal stakeholders in the university, such as the research office, researchers, graduate school, dean office, IT, and others that eventually will use Esploro.

Researchers Profiles

Esploro's Researcher Profiles is a dedicated user interface for your institution's researchers to view and edit their profile information, submit new deposits, and view their deposits, assets, and other research-related entities, along with usage statistics. It is recommended to plan the researchers' profile launch throughout the implementation project.

Researcher Portal

The Esploro Research Portal is the public user interface that showcases a university's research output and researchers. The Research Portal provides discovery features for access to researchers (their profile/organization), the research outputs and other research-related entities. The portal launch preparations will include portal customization and redirection.

Training

Recorded [Esploro training sessions](#) are available in the Ex Libris Customer Knowledge Center (CKC). You are welcome to begin to explore these sessions, as well as the [Esploro online documentation](#), also available in the CKC. Esploro training is an integral part of the implementation project, and the recorded sessions, together with live review sessions, are scheduled as part of the project.

Integrations with Esploro

You may choose to integrate other systems with Esploro, for example, to publish research assets from Esploro to an external source, to update Esploro researcher records from an external source, and to import research assets to Esploro. If you choose to integrate other systems with Esploro, you must verify that all technical requirements have been satisfied (e.g., IP addresses are accessible and ports are open). For specific information, refer to [Esploro Integration - Ex Libris Knowledge Center \(exlibrisgroup.com\)](#) in the Ex Libris Knowledge Center. It is recommended to plan which integrations are required, timeline, and effort during the implementation project.

SIS (Student Information System)

It is highly recommended that you configure ongoing updates of the user and researcher records in Esploro. Researcher updates can be handled as part of the user SIS load or as a separate load. Your Ex Libris implementation team can assist you with this. More information in the [ExLibris Knowledge Center](#).

Ongoing Bulk Import of Research Assets

Research assets that you continue loading into your current research management systems can be imported into Esploro via file upload, FTP, or OAI, using an import profile configured via the Esploro user interface and a drools-based crosswalk template that you may need to customize for your specific asset metadata format. Your Ex Libris implementation team can assist you with this during the implementation project. More information is available in the [Esploro Documentation](#).

Digital Object Identifiers (DOI)

Esploro currently supports registering DOI for research assets via CrossRef and DataCite. Registering a DOI requires that your institution be registered with one or both DOI registration agencies (or some other organization that works with CrossRef or DataCite, such as ANDS). DOIs are migrated from your source systems as part of the asset migration. Upon going live with Esploro, DOI the relevant DOI registration agency will be updated with the necessary information concerning your Esploro instance. More information about [DOI registration](#).

Handle Server

You can add persistent identifiers, called handles, to assets that allow them to be located in case the URL of the asset changes. See more about [Adding Handle Identifiers](#).

Publishing to external systems – see more information [here](#).

Google / Google Scholar - Indexing research assets in Google and Google Scholar publishes a a sitemap of research assets for Google and Google Schol. This publishing will takes place after go live with Esploro and setting redirection from the old system.

Primo - Research assets managed in Esploro can be discovered via the Esploro Research Portal. In addition, you can choose to publish Esploro research assets to your library's Primo discovery system , for which you can configure a distinct view and/or search scope to separate Esploro research assets from other library data discoverable in Primo. See training about [Primo publishing](#).

OAI/PMH - Publishing Research Assets using OAI/FTP to publish research assets to an XML file.

ProQuest ETD Administrator (PQDT)

Esploro can integrate with ETD Administrator for depositing dissertations and theses into Esploro. Information about the [ETD Admin integration](#). IR questions should be enabled for embargo data to be transferred to Esploro.

Esploro API

You can read about the Esploro API in the [Ex Libris developers network](#).

Establish the Project Team



Roles and Responsibilities

Ex Libris - Roles

- Get the institution up and running successfully with Esploro
- Coordinate all activities related to Esploro implementation and perform all activities that are Ex Libris' responsibility as detailed in the project plan (for example – data migration, configuration, training, implementation support, documentation, and so forth).

Ex Libris - Responsibilities

- Allocate an expert implementation team to work with the institution implementation team and deliver agreed-upon services to meet the “Go Live” date.
- Perform Esploro implementation, including Esploro configuration and data migration
- Provide documentation to the institution implementation team in support of the Esploro implementation, provide detailed project plans, coordinate testing activities with the institution project manager.
- Provide executive project reports and regular communication with the institution project manager.

The Institution - Responsibilities

- Implement Esploro within the agreed-upon timeframe, according to the agreed-upon contractual scope.
- Form an institution implementation team of functional experts and appoint a project manager who serves as the primary contact for the Ex Libris project manager and manages the institution implementation team.
- Manage the internal institution implementation team
- Review accuracy of migrated data.
- Test workflows end-to-end in the Esploro production environment and provide feedback to the Ex Libris implementation team concerning any necessary configuration modifications.

Esploro Project Team Roles/Skills

- Project Manager
 - leads and coordinates activities related to the implementation of Esploro for the institution
 - responsible for ensuring that institutional staff resources are available to assist as necessary
 - manages internal and external communications about the status and priorities of the project
 - keeps the project moving and on track
 - helps to mitigate project risks
- Project Team - Functional Experts
 - Research Assets – has overall familiarity with data and workflows in the current system(s)
 - Electronic Theses and Dissertations (ETD) – has overall familiarity with workflows in the current system(s)
 - Additional Data Experts
 - Organization Units – has knowledge of the institutions organizational structure or access to source system where the organizational structure is stored

- Researchers – has knowledge of the institutions' SIS/Users integration profile, access to researcher's source system data, and ability to create/modify the SIS import file to include researcher and user information
- Public Services Staff – Primo Expert
- Technical expert – data extract and API development when required
- IT – authentication establishment

Appendix 1 - The Organization Unit Loader Schema

The following fields can be loaded per organization unit:

Data Element	Occ	Description	Notes
Code <code>	1	The code of the unit. The same code should be used as in the loader for researcher information. The code must be unique.	Mandatory
Name <name>	1	If not supplied will default to code	Mandatory
Alternative names <altname>	0-n		
External Identifiers + Type <external_id>	0-n	Any external identifiers. These could be global or local. Types: <ul style="list-style-type: none"> • FundRef • INSI • HESA • UCAS • UKRLP • OrgRef • Wikidata • GRID • Pivot ID • Other 	

Unit type (unit_type)	1	The type of unit. Below are the codes. Customers can change the label. <ul style="list-style-type: none"> • university • faculty • school • college • department • institute • research_center • library • administration • service • other 	Mandatory
Description (description)	0-1	Free text This would display in an “organization profile” in the public facing portal.	
Contact – email (contact_email)	0-n	Email This would display in an “organization profile” in the public facing portal.	
Contact – phone + type (contact_phone)	0-n	Types: <ul style="list-style-type: none"> • office • fax • other This would display in an “organization profile” in the public facing portal.	
Address (address)	0-n	This would display in an “organization profile” in the public facing portal.	
Webpages	0-n	This would display in an “organization profile” in the public facing portal.	
Email suffixes	0-n	An email suffix that indicates the organization. This information can be useful for matching authors in external capture – e.g., <u>inst.edu</u>	