

# Terminology and Data Model

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Esploro manages information about entities, such as research assets, researchers, and organizations, as well as the relationships among them. In this video, we will define these three entities and explain how their information is organized behind the scenes, also known as the data model.

Information about each entity is stored in its own data table, and there is another table that stores the relationships.

Esploro is built on the Ex Libris Higher Education Platform, the same platform used for Alma and Leganto. Some Esploro entities are based on existing platform entities, with modifications, while others are new.

A Research Asset is the information about a research output, called its metadata, along with its associated files. The metadata is stored in an asset record, using the Esploro schema. Files are linked to the asset.

Esploro research assets have a dedicated format. It is based on other standard formats, such as DataCite and Dublin Core, but with additions in order to include more types of metadata. This expansive format has many asset fields specific to each asset type. Esploro Asset format is therefore able to serve many asset types across several disciplines.

Esploro has a long, granular list of asset types to choose from. These types are organized by categories, for more efficient selection and management. For example, configuration settings can be set for a category of asset types. The category of publication, for example, includes the asset types of book, book chapter, journal article, and more. Each asset type has fields for metadata relevant to that type. For example, a journal article has fields for journal name, volume, and issue.

We will take a closer look at a research asset form in a few moments when we will discuss the relationships among research assets and other entities.

A Researcher is defined as a person who creates or contributes to a research asset, where “research” is broadly defined as any output that your institution wants to track. Therefore, your researchers can include people who don’t do “research” in the traditional sense, such as a faculty member from the drama department who wrote a screenplay.

There are a few types of researchers. A researcher can either be affiliated with your institution, non-affiliated, or previously affiliated. Your institution may want to maintain a public profile for a previously affiliated researcher even though they are no longer at your institution.

Another type of “researcher” is a research proxy, who can act on behalf of a Researcher to update their profile, but the proxy does not themselves have a public profile.

Researcher records are extensions of the Higher Education platform User records. If a researcher is already an Alma user, for example, then the researcher record takes information from the user record, such as contact information and identifiers, and adds more metadata to that. This means that the affiliated researcher can use a single sign-on for Alma, Esploro, and other platform applications.

Non-affiliated researchers appear as co-authors of assets along with affiliated researchers. Non-affiliated researchers have the same data model, but they are not active users and cannot sign-in. They are important for analytics related to collaboration. They are added automatically as part of the author matching process.

Organizations in Esploro have two types, Internal and External. They are stored in the same data table, but they have different functional roles in the system.

Internal Organizations are the Academic units within the institution. Every asset must be associated with at least one academic unit. The academic units are organized in a hierarchical structure with the institution as the top level. This allows for browsing by department and finding assets that were associated with sub-departments.

External Organizations include all collaborators that are not part of your institution: Universities, funders, publishers, etc.

For consistency, Esploro maintains a central database of external organizations called EROD, Esploro Research Organizations Database. It is based on GRID, an open-access database, with other sources added. Unlike the internal organizations, external organizations are not stored as a hierarchy.

You can also add organizations locally, if they do not appear in the global database.

That was a brief overview of assets, researchers, and organizations. Now, let’s look at the research asset form of a journal article to see some of the relationships connecting it with other entities.

Each research asset is related to one or more academic units, otherwise known as internal organizations. These are not necessarily the same as the academic unit affiliations of the researcher associated with this asset.

Each asset has a list of authors, which is metadata, to be distinguished from the researchers, which are entities. The author names appear as they do in the article, along with each author’s affiliation at the time of publication. Each author is related to a Researcher in your system, whose name and affiliation may have changed since this article was published. You can see the related researcher and their current affiliation by clicking on this ID icon. If you manually add a researcher to an asset, you can specify the author name, if it is different from the Researcher name.

Assets can also have relationships with other assets. For example, this article is related to the dataset the research is based on, as well as the patent that resulted from it.

Those are just some of the relationships that we can see with a research asset. In fact, each Esploro entity has relationships with the others.

That was a brief overview of the Esploro data model and basic terminology.