# What is BIBFRAME & Why Does it Matter?

# Linked Data and BIBFRAME

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# The problem with MARC and other traditional formats

Libraries today describe their collections with formats like MARC, a closed format that the web does not understand. MARC was created long before the internet, and as a result, the web does not know that the library's catalog 'exists'; popular services like Google and Bing cannot index the library's catalog. Library users cannot engage with the library's catalog anywhere on the web.

Furthermore, the web shares information using open standards to connect topics, people, places and more so users can enjoy an in-depth discovery experience. Due to the limitations of MARC records, the library catalog does not allow for expansive connections to resources within catalogs, between libraries or many authoritative data sources on the web. Users only have limited pathways to find information in their area of inquiry.

#### **Problems with MARC:**

- It is not adaptable to new technologies: MARC was developed in the 1960s, before the advent of the internet and other digital technologies. As a result, it is not well-suited for use in a digital environment and does not easily integrate with other systems such as linked data, and other modern cataloging tools.
- It is not flexible enough: MARC is a fixed-field format, which means that each field must be used for a specific purpose. This makes it difficult to accommodate new types of information or changes in the way information is organized.
- Limited ability to share data: MARC is primarily a local format, it's hard to share data among different systems, organizations, and services created by other industries.





## How BIBFRAME can help

BIBFRAME is a bibliographic framework and open standard. BIBFRAME provides a modern, flexible way for libraries to describe and link resources using the Resource Description Framework (RDF), a standard for modeling and sharing information on the web.

With BIBFRAME, libraries can more effectively manage and share their bibliographic data. BIBFRAME supports a more comprehensive discovery of resources by enabling the use of linked data, which connects information from different sources on the web.

#### Why BIBFRAME matters:

- It is a standard and movement initiated by the Library of Congress with the intention of replacing the aging MARC (Machine-Readable Cataloging) format.
- It uses linked data principles to allow for more flexible and powerful data relationships and connections, which can facilitate more efficient discovery and access to library resources.
- It is designed to be used with other linked data vocabularies and ontologies, which can enable more detailed and nuanced information to be represented and shared.
- It is easily understandable and machine-readable which makes BIBFRAME more suitable for use in automated systems.
- It provides a sustainable data model to meet the long-term needs of libraries by using RDF and thus will not become obsolete as technology changes.



### **BIBFRAME & linked data**

BIBFRAME uses linked data principles, a method of publishing and connecting data on the web in a way that makes it easily accessible and usable. The key idea behind linked data is to use the structure of the web itself to describe relationships between data elements. This allows data to be linked together in a way that creates a network of information, making it easier to find, understand, and use.

There are many benefits to using linked data. For one, it makes data more discoverable and usable, as it allows data from different sources to be linked together and queried as a single dataset. This makes it easier for data users to find the information they need, and for data providers to share their information with others.

Additionally, linked data makes it easier for data to be updated and maintained over time. Because data is connected using standardized methods, updates to one dataset can be automatically propagated to all other linked datasets, making it easier to keep data up-to-date and accurate.

Finally, linked data has the potential to greatly enhance collaboration and data sharing between organizations. By connecting data across organizations, it becomes possible to build new applications and services that draw on a much broader range of data, making it easier to solve complex problems and make better decisions.

#### How libraries can take advantage of BIBFRAME today

With BiblioGraph from EBSCO, libraries can take advantage of BIBFRAME without migrating their catalogs away from MARC. BiblioGraph transforms catalog records to BIBFRAME resources for inclusion in an ever-expanding graph of information. Now libraries can take advantage of BIBFRAME by:

- Making library resources visible on the web, including Google Search
- Creating and publishing collections of connected resources on websites and within web applications
- Enriching collections with data from authoritative data sources on the web
- Connecting and interacting with other libraries' collections to see what the library shares or what is missing within its own collections

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