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The BIBFRAME Editor
and
BIBFRAME Database

Unit 1: Getting Started

Prepared by
Policy, Training, and Cooperative Programs Division
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2019
What is BIBFRAME?¹

BIBFRAME provides a foundation for the future of bibliographic description that is grounded in Linked Data techniques.

When a resource is cataloged -- a book, for example -- the resulting description includes information elements such as the author, what the book is about, various published forms, and information about copies of the book.

BIBFRAME 2.0 organizes this information into three core levels of abstraction: Work, Instance, and Item.

- **Work.** The highest level of abstraction, a Work, in the BIBFRAME context, reflects the conceptual essence of the cataloged resource: authors, languages, and subjects.
- **Instance.** A Work may have one or more individual, material embodiments, for example, a particular published form. These are Instances of the Work. An Instance reflects information such as its publisher, place and date of publication, and format.
- **Item.** An item is an actual copy (physical or electronic) of an Instance. It reflects information such as its location (physical or virtual), shelf mark, and barcode.

¹ For a more detailed description of BIBFRAME’s history, see: [BIBFRAME: Why? What? Who?](#)
BIBFRAME versus Integrated Library System (ILS)

BIBFRAME is not an ILS. BIBFRAME is a tool through which we are utilizing linked data techniques to increase the visibility and usage of library data on the Web but a next-generation ILS must still be created to fully utilize the BIBFRAME tool.

BIBFRAME Editor

The BIBFRAME Editor (BFE) is a tool that enables the organization of this information through the input of BIBFRAME vocabulary elements.

Key BIBFRAME Editor Terminology

Description: the term description is used in this manual to refer to the cataloging of the resource in hand and the output from the BIBFRAME Editor.

Profile: an online form for creating a description of a resource or concept. The profiles used in the BIBFRAME Pilot 2.0 are: monograph, notated music, serial, cartographic, sound recording: audio CD, sound recording: audio CD-R, sound recording: analog, sound recording: cassette, moving image: BluRay DVD, moving image 35 mm feature film, and rare materials.

Template: a modification that can be made by a user to a BIBFRAME profile (see also Profile above) to streamline work. For example, a user may be working with a set of resources that require certain bibliographic elements. A BIBFRAME profile may be modified by creating a separate template for the resources being described.

Workspace: the area which provides access to saved BIBFRAME descriptions in a browse screen interface, the BIBFRAME Editor profiles for creating BIBFRAME descriptions, tools for loading BIBFRAME descriptions to the editor, and access to the BIBFRAME Database.

Fields: separate spaces on the template in which you enter cataloging data.

Dialog Field: a field represented by a button; clicking on the button displays a dialog in which you record data in text boxes; these dialogs sometimes involve separate elements (e.g., publication data) and can utilize either “Lookup” or the recording of “literal values.”

Direct-Entry Field: a field represented by a text box in which you enter data directly, e.g., for transcribed fields.
Field Edit Buttons: buttons which appear after you ‘set’ data; clicking on the ‘pen’ allows you to revise the data; clicking on the ‘trash can’ allows you to delete the data.

Lookup: (also known as “AutoComplete”) a function which searches the database as you type and displays a menu of matching terms, from which you select the term to be used in authorized access points or other ‘controlled’ fields (e.g., “Language of the Expression,” “Relator Role,” etc.).

Data Box: a box that displays the specific data you have entered in a field; in some cases, these boxes contain default data which you can change as needed.

Save: a function in the BIBFRAME Editor used to save your completed resource description without adding it to the BIBFRAME Database.

Post: a function in the BIBFRAME Editor used to send your completed resource description to the BIBFRAME Database.

Preview: a function in the BIBFRAME Editor used to review a resource description before saving it or posting it to the BIBFRAME Database.

Work Stub: a BIBFRAME work description generated from a Machine Readable Cataloging (MARC) record bibliographic 7XX title. The software checks the BIBFRAME file for an existing work to make a link, but if the title is not found the software makes a very brief work record with what it has, which is just the title or author/title. These are identified in the BIBFRAME Database by “Work Stub from Bib.”

**Accessing the BIBFRAME Editor**

Open Chrome\(^2\) and go to the **BIBFRAME Editor** by pasting in the URL:


You will see the **Browse** screen:

---

\(^2\) The BIBFRAME Editor responds better in Chrome than in Firefox, IE, or Edge.
Click Editor to access the BIBFRAME profiles.

BIBFRAME profiles are listed under Create Resource.
Select an **Instance** or **Work** profile to begin the description.

The Work profile for a monograph is displayed below.

**Logging into the BIBFRAME Editor**

There is no login procedure for the BIBFRAME Pilot. Use of the BIBFRAME Editor is strictly limited to those working in the Pilot.

Once BIBFRAME is implemented, there will be access and login requirements, and other features intended to ensure the integrity and security of Library data.
Unit 2: BIBFRAME and Linked Data

BIBFRAME is a linked data project that seeks to lower barriers to accessing library data, partly by adopting contemporary data practices, but more by fostering an environment that is not just on the World Wide Web but part of the World Wide Web. Library bibliographic data is built upon a solid infrastructure of authoritative names and subjects. It is reliable, consistent, and “clean,” thanks to its use of regulated standards. But it is encased in a data format that is not easily understood or easily deployed by non-library professionals.

With BIBFRAME and linked data, the library community has an opportunity to make its controlled and well-crafted bibliographic data accessible to a global audience. Wider accessibility of a library’s bibliographic data makes the library’s resources and holdings known and available to “outsiders.” If one of those outsiders, for example, is Google, then exposing library bibliographic data in this way can translate into more relevant search results for users, and more patrons utilizing library collections.

What is Linked Data?

The Web supports linked, related documents. It also allows for linking related data and stating the relationship amongst resources. The term Linked Data refers to a set of best practices for publishing and connecting structured data on the Web. Key technologies that support linked data include the following:

- Uniform Resource Identifiers (URIs) - a generic means to identify entities or concepts in the world
- Hypertext Transfer Protocol (HTTP) - a simple yet universal mechanism for retrieving resources - descriptions of resources
- Resource Description Framework (RDF) - a generic graph-based data model with which to structure and link data that describes things in the world.3

Using Anglo-American Cataloging Rules (AACR2), Resource Description & Access (RDA), and MARC 21 for the creation of authority and bibliographic records in library environments results in “flat” records that live in silos of data and are not integrated with the Web. By transitioning from a static two-dimensional collocated record to decentralized data with links that illuminate relationships, linked data potentially increases the visibility and usage of library data on the Web. Integrating library data with the large number of structured data sources and links on the Web thus potentially enhances the sharing of library data with a wider audience. Moreover, linked data allows for a fuller implementation of RDA.

Linked data is integral to the Semantic Web, a collaborative effort led by the World Wide Web Consortium (W3C) to provide a framework that allows data to be shared and reused across application, enterprise, and community boundaries.4

---

4 Ibid.
What is a Web of data?

The semantic web of data provides a structure that allows machines to return information about the relationships between resources; it makes use of the existing http protocol and common linked data standards such as RDF to provide the semantic structure. The traditional web of documents is characterized by a flat web of links between documents and files posted on the web.

<table>
<thead>
<tr>
<th>Web of Documents</th>
<th>Web of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>information resources</td>
<td>“real-world objects”</td>
</tr>
<tr>
<td>links between documents</td>
<td>links between things</td>
</tr>
<tr>
<td>unstructured data</td>
<td>structured data</td>
</tr>
<tr>
<td>implicit semantics</td>
<td>explicit semantics</td>
</tr>
<tr>
<td>for human consumption</td>
<td>for humans and machines</td>
</tr>
</tbody>
</table>

A Web of Data uses a set of best practices for publishing and linking structured data on the Web with technologies that are more generic, more flexible, and which make it easier for data consumers to discover and integrate data from a large number of sources and links.

Resource Description Framework (RDF)

RDF is the standard model for exchange of data on the Web. RDF structures relationships between resources, people, and things on the web, and uses a graph model to represent the relationships. RDF and related standards are maintained by the World Wide Web Consortium (W3C).

The RDF data model consists of:
- Triple statements (informally called “triples”)
- URIs and IRIs
- Ontologies and vocabularies

Triple Statements

RDF uses triples to make systematized statements about semantic data. The subject, predicate, and object are the basis of the triple statement, and can be modeled using graph data. Graph data
is used for the semantic web, and represents the relationships between resources, books, people, etc. in a way that computers can process the information.

This is a graph data model of the triple statement "This work was written by this author."

Subjects, predicates, and objects can all be identified by URIs and Internationalized Resource Identifiers (IRIs). In RDF, URIs and IRIs retrieve content to be read by humans and machines via content negotiation, the use of redirects, or the minting of hash tag identifiers. Humans can get a Hypertext Markup Language (HTML) page to read, and machines can retrieve an RDF Extensible Markup Language (XML) file upon which they can interpret and act.

Uniform Resources Identifiers (URIs) and Internationalized Resource Identifiers (IRIs)

On the traditional Web, URIs are used primarily for Web documents -- to link to them, and to access them in a browser. The notion of resource identity was not so important on the traditional Web; a URL simply identified whatever we see when we type it into a browser. On the Semantic Web, URIs identify not just Web documents, but also real-world objects like people and cars, and even abstract ideas and non-existing things like a mythical unicorn.

The IRI was defined by the Internet Engineering Task Force (IETF) in 2005 as a new internet standard to extend upon the existing URI scheme. While URIs are limited to a subset of the ASCII character set, IRIs may contain characters from the Universal Character Set (Unicode/ISO 10646), including Chinese or Japanese kanji, Korean, Cyrillic characters, and so forth. IRIs are defined by RFC 3987.
**Triple Statements and URIs/IRIs**

The subject of a triple is the URI identifying the described resource. The object can either be a simple literal value, like a string, number, or date; or the URI of another resource that is somehow related to the subject. The predicate, in the middle, indicates what kind of relation exists between subject and object, e.g., this is the name or date of birth (in the case of a literal), or the employer or someone the person knows (in the case of another resource). The predicate is also identified by a URI. These predicate URIs come from vocabularies, collections of URIs that can be used to represent information about a certain domain.

A blank node is a resource without a URI. IRIs and literals together provide the basic material for writing down RDF statements. In addition, it is sometimes handy to be able to talk about resources without bothering to use a global identifier.

There are multiple ways of creating a URI. The Library of Congress typically works through ID.LOC.GOV, the Library of Congress Linked Data Service, where a base is defined for any given dataset. ID.LOC.GOV will be explored in further detail in Unit 4 of this manual.

**Vocabularies and Ontologies**

Vocabularies and ontologies allow us to add meaning and relationship information in triple statements, and are in standard formats so that computers can process the meaningful relationships and serve meaningful search results to humans. Vocabularies and ontologies are the basic building blocks for inference techniques on the Semantic Web. Ontologies are a means of organizing and conceptualizing a domain of interest, and tend to be used for more complex collections of terms. Vocabularies are used when such complexity is not necessary. Different institutions develop unique vocabularies and your BIBFRAME use will comply with local norms and guidelines.
The BIBFRAME Editor and BIBFRAME Database

Unit 3: Searching

Prepared by
Policy, Training, and Cooperative Programs Division
Library of Congress
2019
Unit 3: Searching BIBFRAME

The initial page of the BIBFRAME Editor Workspace provides a browse view of recently completed descriptions and links to the BIBFRAME Editor and the BIBFRAME Database. All of the completed BIBFRAME descriptions may be viewed in the browse list (1) or the user may choose to display only those descriptions completed in the last two weeks (2). Additionally, a cataloger can search (3) by cataloger code (Windows User ID) to retrieve descriptions they have completed.

Searching in the BIBFRAME Editor and the BIBFRAME Database is a key step in completing BIBFRAME descriptions. Both interfaces retrieve completed BIBFRAME work and instance descriptions and authority data for agents and subjects via the LC Linked Data Service. The BIBFRAME Editor provides the further capability of allowing the cataloger to attach retrieved authority data for works, creators, subjects, and genre/form terms to the description in the BIBFRAME Editor.

It is important to remember that the BIBFRAME Editor and the BIBFRAME Database are two separate platforms, with links to connect them. As a comparison, think of the cataloging module in an Integrated Library System (ILS) and the Online Public Access Catalog (OPAC) that displays the data from the cataloging module in user-friendly format. However, right now the BIBFRAME Database is intended for cataloger use only. It is not intended to be a public discovery layer.

There are advantages and disadvantages to both methods of searching.
Searching the BIBFRAME Database

The BIBFRAME Database is an online platform for linked data versions of the Library’s bibliographic and authority data for works and instances. The Database provides extended search parameters and may be searched to determine if the Instance in hand has already been cataloged and has a Work associated with it; if there is a related Work / Instance for the Item in hand; or to verify there is no Work / Instance yet and one still needs to be created in the BIBFRAME Editor.

A recommended workflow strategy for adding an additional instance to an existing Work description is to search for the Work in the BIBFRAME Database and if found, load it into the BIBFRAME Editor. Then, complete the Work and Instance descriptions in the editor.

Go to BIBFRAME Editor Workspace. Click on Search BIBFRAME database.

Searching directly in the BIBFRAME Database is much more robust than searching in the Editor because there are more search options:

- Everything (keyword)
- Title
- Author/Creator
- Subject

In addition, more data is displayed in a BIBFRAME Database search result.
Searching can also be refined by using a variety of filters including categories of MARC records from which Work and Instance descriptions in the BIBFRAME Database have been derived.

The search results interface below contains a list of faceted “Refinements” on the left hand side of the screen. Searches can be narrowed by format, LC classification, LCSH, language, publication date, etc. using the facets. For a complete list and explanation of the available faceted refinements, please consult the searching tips at the end of this unit.
The screen shot below illustrates a work description retrieved from the search result list for the work “Treasury of Walt Whitman.”

The left side of the display provides information about the Work and the source of its description. The right side of the display presents information about related Works and Instances and provides a link for loading the description into the BIBFRAME Editor.

On the left side of the snapshot below, the description is identified as a “Work from Bib (Text)” meaning that the description was derived from a MARC bibliographic record with content type “text.”

The display also provides links to authority data in the LC Linked Data Service for the agents involved with the Work, in this case contributors. The display also presents administrative and other metadata contained in the source bibliographic MARC record.
<table>
<thead>
<tr>
<th>Title</th>
<th>Treasury of Walt Whitman</th>
</tr>
</thead>
<tbody>
<tr>
<td>SubTitle</td>
<td>Leaves of grass</td>
</tr>
<tr>
<td>Genre/form</td>
<td>Autobiographies</td>
</tr>
<tr>
<td></td>
<td>of2014026047</td>
</tr>
<tr>
<td>Genre/form</td>
<td>sound recording</td>
</tr>
<tr>
<td>PrimaryContribution</td>
<td>Person</td>
</tr>
<tr>
<td>Role</td>
<td>Contributor</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Contribution</td>
<td>Person</td>
</tr>
<tr>
<td></td>
<td>Sourceby, Alexander 1912-1986</td>
</tr>
<tr>
<td>Role</td>
<td>Contributor</td>
</tr>
<tr>
<td>Language</td>
<td>English</td>
</tr>
<tr>
<td></td>
<td>eng</td>
</tr>
</tbody>
</table>

### Administrative metadata

<table>
<thead>
<tr>
<th>Local identifier</th>
<th>5717243</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>United States, Library of Congress</td>
</tr>
<tr>
<td></td>
<td>DLC</td>
</tr>
<tr>
<td>Source (Agent)</td>
<td>United States, Library of Congress</td>
</tr>
<tr>
<td></td>
<td>DLC</td>
</tr>
<tr>
<td>Source (Agent)</td>
<td><a href="http://id.loc.gov/vocabulary/organizations/serp">http://id.loc.gov/vocabulary/organizations/serp</a></td>
</tr>
<tr>
<td>Status</td>
<td>c : corrected or revised</td>
</tr>
<tr>
<td>Description change date</td>
<td>(dateTime) 2006-06-22T11:46:25</td>
</tr>
<tr>
<td>Description created date</td>
<td>(dateTime) 1985-12-25</td>
</tr>
</tbody>
</table>
The display also presents links to related Works and Instances. The related Work links in this case are to descriptions of Leaves of grass. The “Has Instance(s)” points to a related Instance of the work in hand Treasury of Walt Whitman.

Pressing **Load to Editor** results in the Work description being loaded to the BIBFRAME Editor.

The default profile is Monograph, another profile may be if more appropriate for the resource. **NOTE:** When choosing a URI to import from the Database, do not choose a Work Stub from Bib. A Work Stub from Bib is converted from the 7XX field in MARC and is an access point,

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but not catalogued separately or under authority control. When MARC records were converted to BIBFRAME, all 7XX indicators were converted to Work Stubs from Bib, and de-duping of those records has not occurred. Work Stub from Bib will eventually disappear as they are matched to full level records.

Searching in the BIBFRAME Editor

To search the editor, click on the Editor tab.

Then, select the type of resource from the list of profiles presented.
Next, click on **Instance**.

In the BIBFRAME Editor, search by name/title combination and by title with a “type ahead” function. Name title searches must be entered in author title form as in the example below.

Click on **BIBFRAME Work** button.
Begin typing the name/title combination in the **Lookup** box.

When the desired Work is found, press the **Save changes** button. The Work is now associated with the Instance being cataloged.
The search interface in the BIBFRAME Editor is limited to the type ahead with exact matching on the Author/Title or Title. Keyword searching does not currently work in the editor, but additional search parameters are being explored.

Searching LCNAF, LCSH, and other authorities in the BIBFRAME Editor

Select a Work profile to search names and subjects.
Searching for names of agents: The Primary Contribution field and the Contribution field have a lookup box that searches the LCNAF. The lookup box works the same way in each field.

Select an entity to search; person in this example.

Enter text in the Search LCNAF.

Hovering over the entries in the drop down list displays data from the authority record and can be used by the cataloger to determine the appropriate authorized access point for the person.
Click on the appropriate authorized access point to link the entity to the Work.

Subject headings may also be searched in the Work profile either as a string or as a component part of a string. The search includes terms from LCS, LCNAF, and LC Children's Subject Headings.

To begin, select the **Subject components** dialog box.
Select the appropriate heading.

If an appropriate heading string does not exist, the components may be searched and if necessary may be input as a literal string.
Searching Tips for the BIBFRAME Database

(http://mlvlp04.loc.gov:8230/static/lds/html/help.html)

Stemming of Search Words is Automatic
Stemming is the process used to reduce words to their base or root form – generally a written word form (e.g., a search for "facility" should return "facility," "facilities", "facilitation," etc.)

Stemming of words in vernacular scripts for the following languages is supported: English, French, Italian, German, Spanish, Russian, Arabic, Chinese (Simplified and Traditional), Korean, Persian (Farsi), and Dutch.

Stemming of words in transliterated or romanized scripts is not currently supported.

Diacritics, Punctuation and Case Insensitivity
Diacritics (accents and other marks), uppercase letters, and all other forms of punctuation are ignored when entered as part of the search. However, exact case and diacritics can be used when searching.

Examples:
A search for "resume" would find "Resume," "resume," "Résumé," and/or "résumé."

A search for "four year degree" would also find "four-year degree."

Exact Phrase Searching
An exact phrase is when two or more words occur in exact order entered.

Use quotation marks to indicate that an exact phrase search (e.g., "Gone with the wind").

Phrase searches are also subject to stemming rules (e.g., "West Virginia" will also return "West Virginian").

Boolean Logic
Boolean logic in keyword searching generally consists of three logical operators: OR (match any of the words entered); AND (match all of the words entered); and, NOT (match the first word, but eliminate occurrences where the second word entered is present).

By default, the Boolean AND operator is turned on in Linked Data Service. If multiple words are entered in the search box, then "all of the words entered" will be present in each search result.

The Boolean NOT operator is expressed using the "minus" immediately prior to the search word that you wish to negate. Please Note: do not enter a space between the "minus" and the word being negated (e.g., a search for iberian -peninsula will find results where "iberian" is present, but will eliminate all results which also contain the word "peninsula")
Please note: the Boolean OR operator is not currently supported in Linked Data Service, but may be included in a future release. Some search refinements (like the "language" facet) use Boolean OR logic in order to allow the selection of several languages (e.g., show me the results where language is either English, French, German OR Spanish).

**Refine Results**

Facets (limits) allow the user to refine results, while making those results better match your needs.

When viewing search results, several categories of limits (facets) will be displayed in the left column. In the Linked Data Service, the ability to refine results is presented to the user after a search is performed and multiple hits display on the screen. The following search refinements will are available in this release: Access; Format; Library of Congress Classification; Language; Publication Year; and, Library Location.

**Access** - the three groupings available in the Access limit are: At the Library; Online; and, Partly Online

**Format** - this limit allows the user to limit the search results to a particular material type, including (but not limited to): Book; Journal/Periodical; Photograph/Art; Printed Music; Film/Video/Slide; Audio (Music); Computer File; Audio (Spoken); Manuscript; Manuscript Music; and more.

**Library of Congress Classification** - using only the high-level categories of the Library of Congress Classification outline (see http://www.loc.gov/catdir/cpso/lcco/ for more information), this limit allows filtering of the results by high-level topic. Please note that about 83% of the materials in this catalog have been assigned a Library of Congress Classification.

**Language** - this limit provides the user a way to limit the results to one or more languages.

**Publication Year** - using the year of publication or issue, the user can limit the search results to single year.

**Library Location** - Library of Congress collections are served from various locations (mostly Reading Rooms or "research centers"). Many collection materials, specifically ones in special formats, will only be available from the custodial area responsible for maintaining those collections (e.g., sheet music and scores are only available in the Performing Arts Reading Room). In addition, most Reading Rooms also have a special set of materials available via "reference collections." This limit allows filtering by individual Reading Rooms and/or collections. Please note, most books in English and the Western European languages are considered part of the General Collections category.
Library of Congress
BIBFRAME Manual

The BIBFRAME Editor
and
BIBFRAME Database

Unit 4: Introduction to ID.LOC.GOV, the Library of Congress Linked Data Service

Prepared by
Policy, Training, and Cooperative Programs Division
Library of Congress
2019
Introduction

ID.LOC.GOV, the Library of Congress Linked Data Service, enables both humans and machines to programmatically access authority data at the Library of Congress. This service is influenced by -- and implements -- the Linked Data movement's approach of exposing and inter-connecting data on the Web via dereferenceable URIs.

Why is ID.LOC.GOV Important?

ID.LOC.GOV is a critical component of the Library of Congress BIBFRAME Pilots. ID.LOC.GOV serves as the linked data source of the standard vocabularies used in describing bibliographic resources in the BIBFRAME Editor. For example, ID.LOC.GOV contains linked data versions of the LC/NACO Authority File (LCNAF), Library of Congress Subject Headings (LCSH), and Library of Congress Genre/Form Terms (LCGFT). Values from ID.LOC.GOV are represented by dereferenceable URIs, with a choice of serializations.

Searches in the BIBFRAME Editor retrieve results from specific datasets in ID.LOC.GOV. In this sense, access to ID.LOC.GOV, and the minting of URIs, is done “transparently” by machine, allowing catalogers to select values as needed without actually querying ID.LOC.GOV directly.

It is important to note that the character of ID.LOC.GOV has changed since its inception in 2009, and its size and number of vocabularies has grown exponentially. At the time of its inception, ID.LOC.GOV was accessed primarily by machines, with requests for URIs over the HTTP protocol. Machines would then specify the preferred serialization of the data. Today, ID.LOC.GOV has become a powerful discovery tool that allows humans to interact with the datasets in a user-friendly and detailed way. The number of vocabularies in ID.LOC.GOV has also grown dramatically from six vocabularies in 2010...
…to more than 100 vocabularies in 2019.

The arrows in the image above point to just a few of the vocabularies that are searched in ID.LOC.GOV through the BIBFRAME Editor.

In June 2019, the entire Library of Congress MARC bibliographic database, and all MARC title and name-title authority records from the LC/NACO Authority File, were converted to BIBFRAME linked data and added to ID.LOC.GOV. 19,000,000 BIBFRAME Work descriptions and 21,000,000 BIBFRAME Instance descriptions were created from the MARC data. The related Works and Instances are linked and there are links to the authority data for Agents related to the resources.

The BIBFRAME Work and Instance descriptions in ID.LOC.GOV are a representation of Library of Congress MARC bibliographic and authority data as of June 2019. In the BIBFRAME Pilots, participants access BIBFRAME Work and Instance descriptions through the BIBFRAME Database, which is a separate source of data outside of ID.LOC.GOV. The BIBFRAME Database is interactive, and is updated and refreshed daily, as new descriptions are added from July 2019
the BIBFRAME Editor, and new MARC data is converted and added from the Library of Congress ILS.

Identity Management in ID.LOC.GOV

Identity management is a concept that relies on the use of identifiers over “labels” (text strings) to provide access to entities. Identity management is perfectly suited to a linked data environment. In identity management, there is no need to provide unique text strings for identification, since the identifier used for the identity is unique. This can make authority work much easier. Disambiguation becomes of secondary importance to a dereferenceable URI identifier.

ID.LOC.GOV has implemented identity management concepts as a means to discovery.

![Image of Lincoln, Abraham, 1809-1865 from Library of Congress Name Authority File]
Identity management also provides more robust linking to other sources of identities, using semantic web “sameAs” techniques to assert that an entity in one controlled vocabulary is the same as an entity in a different controlled vocabulary.

In the authority record for Abraham Lincoln in ID.LOC.GOV, there are links to four other controlled vocabularies:

1) Virtual International Authority File (VIAF)
2) Wikidata
3) Getty Union List of Artist Names (ULAN)
4) Faceted Application of Subject Terminology (FAST)

**Discovery Layer in ID.LOC.GOV**

There is a powerful faceted search component in ID.LOC.GOV now that enables humans to interact with the datasets to enhance discoverability.
The image above shows the results on a search for Lincoln, Abraham, 1809-1865. Over 1400 results are retrieved. Refinement of the search results can be achieved through the faceting filters on the left-hand side of the screen. A user may be interested in bibliographic resources by or about Lincoln. This result set can be retrieved through selecting BIBFRAME Instances or BIBFRAME Works. Additional faceting allows specific formats to be discovered. Another user may be interested in authority data on Lincoln. This result set can be retrieved through selecting Subject Headings or Name Authority.

**Data Currency**

Vocabularies in ID.LOC.GOV are updated regularly, depending on the dynamics of the vocabulary. The LC/NACO Authority File (LCNAF) is updated daily in ID.LOC.GOV. Library of Congress Subject Headings (LCSH) and Library of Congress Genre/Form Terms (LCGFT) are updated weekly. Other vocabularies are updated less frequently, as determined by the update schedule for the vocabulary.

**More Information**

The [About](#) page at ID.LOC.GOV gives more detail on the Linked Data Service.
Library of Congress
BIBFRAME Manual

The BIBFRAME Editor and
BIBFRAME Database

Unit 5: Templates

Prepared by
Policy, Training, and Cooperative Programs Division
Library of Congress
2019
Unit 5: Templates

What is a Template?

When creating a Work or Instance, users are presented with a complete list of elements related to the type of material being added. This full list of elements is not always required to complete a description. Templates enable catalogers to work more efficiently by streamlining the profile to include only elements necessary to catalog the material in hand.

Creating the Template

In the BIBFRAME Editor Workspace, select the resource type.
A user can create multiple templates for each profile type. Templates will show up in the Your Templates drop-down in the upper right, where there is the option to Create New Template. A user can switch between templates and edit them.

Each Template is assigned a name after selecting Create New Template.
In setting up a Template, the user can decide what elements to remove from the list of options. Once that list is completed, click on the **Save** button.

Once created, the Template will be active for that profile even when the page is refreshed or reopened in the browser. The active Template can be turned off by clicking on the **Stop Using** button.
Delete a Template by clicking the **Edit** button and then the **Delete** button.

NOTE: Templates are stored locally in the browser, which means if the cataloger switches to a different browser or computer, the Templates he or she created will not show up. Once a login system is in place the Templates will be associated with individual logins.

**Templates for Like Materials**

A user can create templates for like materials to expedite cataloguing a large number of similar materials. Templates for like materials include a minimal number of elements that share similar data. For example, if there is a large batch of novels published by the same provider, where no call numbers or subjects need to be assigned, the user can create a pared down profile, then clone it for each novel.
In this case, create a Work and Instance description in the BIBFRAME Editor with the default values you want, but do not add an LCCN. Name the templates with a term that you can search on in the future, for example, TestTemplate, or TemplateForProject. Save the descriptions. Because you did not add an LCCN, the descriptions will not migrate to the BIBFRAME Database. You can call up the templates in the BIBFRAME Editor, make changes individually, depending on the bibliographic needs for each resource, then at that point, add an LCCN, and Post the descriptions to the BIBFRAME Database. The template without the LCCN will remain in your local template cache.

Here is a video demonstrating the template creation process: https://i.imgur.com/eGQ6A6L.gifv

Things to remember:
- You can create multiple templates for each profile type. They will show up in “Your Templates” dropdown list.
- You can switch between profiles and edit them. Video demonstration: https://i.imgur.com/ikX4b5F.gifv
- Once turned on, the template will be active for that profile even when you refresh the page or reopen the browser. You can press the “Stop Using” button to turn off the active template.
- You can delete a template by clicking the Edit button and then the Delete button.
- These templates are stored in the browser locally. That means if you switch to another browser or computer the templates you created will not show up.

Clone Work or Instance
Another option for creating descriptions for like materials is to use the Clone Work or Clone Instance feature in the profile. The process begins by loading an existing Work or Instance into the BIBFRAME Editor.

Pressing the Clone Instance or Clone Work button creates a copy of the existing resource:

The resulting copy of the description may be used as the basis of a new description of a similar Work or Instance. The option cannot be used across formats. For example, an audiobook description cannot be cloned from a monograph description.
Unit 6: Creating a New Work and Instance

Prepared by
Policy, Training, and Cooperative Programs Division
Library of Congress
2019
Unit 6: Creating a New Work and Instance

The highest level of abstraction in the BIBFRAME context, a Work, reflects the conceptual essence of the cataloged resource: authors, languages, and subjects. A Work in BIBFRAME is equivalent to Work and Expression in RDA.

A Work may have one or more individual, material embodiments, for example a particular published form. These are Instances of the Work. An Instance reflects information such as its publisher, place and date of publication, and format. An Instance in BIBFRAME is equivalent to Manifestation in RDA.

Creating a new Work and Instance requires:
- Adding Work level information
- Adding Instance level information
- Adding Administrative Metadata
- Reviewing and Posting the description to the BIBFRAME Database

Creating a new Work

The recommended workflow is to create a new Work before creating a new Instance.

Click on Create Resource.

Choose the intended resource type.
Choose Work.

Add Work-level information.
In the BIBFRAME Editor, the appearance of a data-entry box indicates the function of the box.

A data-entry box with a white background and a plus sign (+) at the end is for uncontrolled data, which is generally transcribed data from a resource.

A data-entry box with a grey background will be one of the two following options:

- a look-up to ID.LOC.GOV (the Library of Congress Linked Data Service) for controlled data
a link to a pop-up resource template that will include boxes for both controlled and uncontrolled data.\(^5\)

Data entry fields in blue have labels that are hyperlinked to the RDA toolkit.

Once you have input data into the various fields there will be options to edit or delete your entries in that field.

**Creating a new Instance**

Click on **Create Resource**.

Choose the intended resource type.

---

\(^5\) A controlled Provider Entity list is now available at ID.LOC.GOV. When adding publication information, click **name** to search within the list.
Choose **Instance**.
Select **Instance of BIBFRAME Work.**

Search for the Work that needs a new Instance.
Add Instance-level information.
Add Item-level information.
Add Administrative Metadata.

Administrative Metadata exists to track record creation and update history in BIBFRAME.

After completing the Instance description, complete the Administrative Metadata for the resource by clicking on BF DB Admin Metadata at the bottom of the page.

Different institutions develop unique requirements and the Administrative Metadata will comply with local norms and guidelines.

Administrative Metadata elements like assigning agency and description conventions, by default, lock to information required of Library of Congress catalogers. Other elements, such as a personal cataloger ID and encoding level are left to the individual cataloger to complete, and are required fields for Library of Congress catalogers.
To alter a default element, click on the associated red trash icon. The element then becomes searchable and a new parameter can be locked in place.

In the example above, though, remember that Description language is not the same as the language of the resource being described. Description language is the language of cataloging for the resource being described, and will generally be English for LC cataloging.
Unit 7: Adding a New Instance to an Existing Work

Prepared by

Policy, Training, and Cooperative Programs Division

Library of Congress

2019
Unit 7: Adding a New Instance to an Existing Work

In BIBFRAME, an Instance is a specific embodiment of a Work. For example, *Leaves of Grass* (as a Work) is embodied in various editions (Instances). When cataloging an Instance, the record for the Work should be searched in the BIBFRAME Database, and if found, loaded to the BIBFRAME Editor. Once loaded, the cataloger can then add a new Instance.

To add a new Instance to an existing Work starting from the Database:

Search BIBFRAME Database or BIBFRAME Editor for existing Work.  

![BIBFRAME Database](image)

Click **Load to Editor**.

---

6 Consult Unit 3 for further instruction on searching within BIBFRAME
Select the appropriate BIBFRAME profile from the drop-down list.

Click Submit URL.
Complete Instance description by clicking on **BIBFRAME Instance** (label: Has BIBFRAME Instance).

Add **Administrative Metadata**.

---

7 For more information about adding Instance-level descriptions, consult Unit 6: Creating a New Work and Instance.
Administrative Metadata exists to track description creation metadata and update history in BIBFRAME.
After completing the Instance description, complete the Administrative Metadata for the resource by clicking on BF DB Admin Metadata at the bottom of the page.

Different institutions develop unique requirements and the Administrative Metadata will comply with local norms and guidelines.

Administrative Metadata elements like assigning agency and description conventions, by default, lock to information required of Library of Congress catalogers. Other elements, such as a personal cataloger ID and encoding level are left to the individual cataloger to complete, and are required fields for Library of Congress catalogers.
To alter a default element, click on the associated red trash icon. The element then becomes searchable and a new parameter can be locked in place.

In the example above, though, remember that Description language is not the same as the language of the resource being described. Description language is the language of cataloging for the resource being described, and will generally be English for LC cataloging.
Save Changes, Preview, and then Post to the BIBFRAME Database.

Bibframe Editor Workspace

There is more information on Preview and Post in Unit 9.

When adding an Instance to a Work that does not yet exist in BIBFRAME, follow the copy cataloging workflow in the appendix to import through Voyager. Note: this process is applicable to LC catalogers but potentially may not applicable for non-LC catalogers.

As mentioned in Unit 5, the BIBFRAME Editor has two options for using existing descriptions to create a new description for cataloging multiple resources with minimal changes, such as multiple seasons of a television show or adding multiple maps by the same publisher. See the sections “Templates for Like Materials” and “Clone Work or Instance” in Unit 5 for more information on these options.
Unit 8: Importing Descriptions from the BIBFRAME Database

In BIBFRAME Pilot Phase One, participants described resources first in MARC, and then in BIBFRAME. In Pilot Phase One, the BIBFRAME Database was “frozen” and descriptions could not be added or retrieved through the BIBFRAME Editor. The BIBFRAME Database was “read-only” for pilot participants.

In BIBFRAME Pilot Phase Two, the BIBFRAME Database interacted directly with the BIBFRAME Editor, and descriptions could be added to the database from the BIBFRAME Editor, and retrieved for editing.

This unit describes the steps to import existing BIBFRAME descriptions from the BIBFRAME Database to the BIBFRAME Editor. This was also described in Unit 7, adding a New Instance to an Existing Work, but in this unit, more details are included.

There are two situations below, each of which requires you to search the BIBFRAME Database, but only one of which required that you import an existing description into the BIBFRAME Database.

Why Import Descriptions from the BIBFRAME Database?

When you are describing a resource in the BIBFRAME Editor, in order to prevent creating a duplicate, you want to be sure that you are describing a resource that is not already represented in the BIBFRAME Database.

The manifestation you are describing may already be represented in the BIBFRAME Database, or the Work description for the manifestation may already be represented in the BIBFRAME database.
**Situation 1:** You are describing this resource:

**WHAT THEY DON’T TEACH YOU IN LIBRARY SCHOOL**

ELISABETH DOUCETT

AMERICAN LIBRARY ASSOCIATION

CHICAGO

2011

Bibliographic details:

- **Extent:** vii, 149 pages, 23 cm.
- **Series:** ALA guides for the busy librarian
- **Note:** Includes bibliographical references and index
- **Subjects:** Library science
  - Library science—Vocational guidance
- **LC Classification:** Z665

Questions:

- Is there a Work description for this resource in the BIBFRAME Database?
- Is there an Instance description for this resource in the BIBFRAME Database?

First search in the BIBFRAME Database:

[http://mlvlp04.loc.gov:8230/lds/](http://mlvlp04.loc.gov:8230/lds/)
<table>
<thead>
<tr>
<th>Sort by: Relevance</th>
<th>Go</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>What they don’t teach you in library school</strong> (Instance)</td>
<td></td>
</tr>
<tr>
<td>2. <strong>Doucet, Elisabeth. What they don’t teach you in library school</strong> (Work from Bib)</td>
<td></td>
</tr>
</tbody>
</table>
Did you find a Work description?

✓ Yes – a BIBFRAME work converted from a bibliographic record in the ILS

Did you find an Instance description?

✓ Yes

It is a good idea to check the descriptions in detail.

Work from Bib:
Instance:

<table>
<thead>
<tr>
<th>Print</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
</tr>
<tr>
<td>LCCN</td>
</tr>
<tr>
<td>ISBN</td>
</tr>
<tr>
<td>Qualifier</td>
</tr>
<tr>
<td>ISBN</td>
</tr>
<tr>
<td>Qualifier</td>
</tr>
<tr>
<td>Local identifier</td>
</tr>
<tr>
<td>Source</td>
</tr>
<tr>
<td>Creative responsibility statement</td>
</tr>
<tr>
<td>Series statement</td>
</tr>
<tr>
<td>Mode of issuance</td>
</tr>
<tr>
<td>mono</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Place</td>
</tr>
<tr>
<td>train</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date</td>
</tr>
<tr>
<td>Place</td>
</tr>
<tr>
<td>Agent</td>
</tr>
</tbody>
</table>

| Extent | viii, 149 p. |
| Dimensions | 23 cm. |

Result: The description is complete in the BIBFRAME Database, and you have an additional copy in hand. There is no need to import a description to the BIBFRAME Editor.
Situation 2: You are describing this resource:

RDA AND SERIALS CATALOGING

ED JONES

ALA EDITIONS
AN IMPRINT OF THE AMERICAN LIBRARY ASSOCIATION
CHICAGO
2013

Bibliographic details:

Extent: xii, 215 pages, 28 cm.
Note: Includes bibliographical references and index
Subjects: Resource description & access
Cataloging of serial publications
Cataloging of integrating resources
LC Classification: Z694.15.R47

Questions: Is there a Work description for this resource in the BIBFRAME Database?
Is there an Instance description for this resource in the BIBFRAME Database?

First search in the BIBFRAME Database:

http://mlvlp04.loc.gov:8230/lds/
BIBFRAME Database
Library of Congress Metadata

Text searching:

- rda and serials cataloging

Filter on:

- Everything
- Title
- Author/Creator
- Subject
- LCCN

Exact match Toggle:

- Exact Match
- Any Match

Instance or Work Categories:

- Everything
- No Merge activity
- E-CIP activity
- IBC Records
- Non Distributed

Work Categories:

- Works that have Bibs merged on them
- NameTitle work
- Title Work
- Expression
- Non-Stub Works
- Work from Title or NameTitle Authority
- Stub Related Works
- Has Links to other objects

Instance categories:

- Instances merged onto any Work
- Instances merged onto Authority Work
- Instances merged onto Bib Work

Results 1 - 1 of 1 (all objects)

Sort by: Relevance

1. Jones, Ed. 1951 - RDA and serials cataloging

(Work from Bib)

Authorized Access Point
Did you find a Work description?

✓ Yes – a BIBFRAME work converted from a bibliographic record in the ILS

Did you find an Instance description?

✓ No

It is a good idea to check the work description in detail.

Work from Bib:

Result: The Work description is in the BIBFRAME Database, but not the Instance description. You can import the Work description into the BIBFRAME Editor to complete the Instance description.
Steps to Follow:

Load the Work description to the BIBFRAME Editor.

Select the Monograph profile.

Submit URL.

Work description will load into the BIBFRAME Editor.
Click on **BIBFRAME Instance**.

Complete Instance description.
Save Changes, Preview, and then Post to the BIBFRAME Database.

There is more information on Preview and Post in Unit 9.
Unit 9: Preview and Post

Preview

There is a Preview function in the BIBFRAME Editor that allows for checking the output prior to posting a completed description to the BIBFRAME Database. The need to preview a description before posting it to the database is decreasing with the addition of more quality control functions in the editor, but it may still be useful to preview a description before posting it to the database to ensure that the bibliographic data are accurately represented.

Click on Preview at the top of the Work or Instance page for the catalogued item.
Preview Output

There are two views of the BIBFRAME data in the Preview: an RDF view (rendered in Turtle-Terse RDF Triple Language) and a JavaScript Object Notation for Linked Data (JSONLD) view. The following screenshot focusses on certain elements of the RDF view.

Highlighted in this portion of the record are:
1. RDF namespace declarations
2. RDA Carrier Type (value 1049 = ‘volume’)
3. RDA Mode of Issuance (value 1001 = ‘single unit’) and RDA Media Type (value 1007 = ‘unmediated’)
4. BIBFRAME Work URL
5. Publication Activity
6. Title Proper

Another way to view the RDF triples produced by the description is to use the Visualize feature at the bottom of the Preview page. Scroll to the bottom of the page to use this feature.
The visualization represents the data as RDF triples. Click open the bubbles to reveal more of the data and how they are rendered in RDF.
Preview Checklist

When previewing the data, check for the following:

- Title Information for both Work and Instance is included in descriptions
- LCCN is included in Instance descriptions
- Administrative Metadata for Instance is completed
- Windows ID is included in descriptions
- Descriptions are successfully submitted for Posting
- Description Posts successfully
- 985 Macro is used in corresponding Voyager MARC bibliographic record to prevent duplication

Things to Remember:

- A copy of descriptions that post successfully remain in the local Save file. To change to a previously posted description, make the change to the copy of the description in the Save file and then re-post
- Track all descriptions by LCCN
- If a description does not post successfully, send a message to bibframepilot@loc.gov with the LCCN so the description can be reviewed by NDMSO
- Finally, either “Save” the record (if the description is correct) or click on the Back arrow to edit it.
Post

Posting a catalogued item loads it into the BIBFRAME database. In order for an item to post successfully, it must include

- A title
- An LCCN

First, create a Work and designate a title. Save the changes to the title.

Next, add organization-specific Administrative Metadata.
Add an Instance to the newly created Work.

In the Instance, designate an LCCN.

Save the LCCN.

Once the Instance with LCCN is added to the Work, click on Post.

The description will begin transmitting to the BIBFRAME Database after an initial validation check.
Yellow highlighting indicates that the description is in the process of being added to the BIBFRAME Database.

When the description is added to the BIBFRAME Database, the yellow highlighting changes to green.
The BIBFRAME Editor and BIBFRAME Database

Unit 10: Workflows

Prepared by

Policy, Training, and Cooperative Programs Division

Library of Congress

2019
Unit 10: Workflows

Because the BIBFRAME Database is not the “catalog of record” at the Library of Congress, BIBFRAME Pilot participants must complete bibliographic descriptions in MARC and in BIBFRAME. The MARC descriptions are added to the Library of Congress Integrated Library System (ILS); those MARC descriptions constitute the “catalog of record” and represent the official catalog for the Library of Congress’ collections.

In BIBFRAME Pilot Phase One, participants described resources first in MARC, and then in BIBFRAME. In Pilot Phase One, the BIBFRAME Database was “frozen” and descriptions could not be added or retrieved through the BIBFRAME Editor. The BIBFRAME Database was “read-only” for pilot participants.

In BIBFRAME Pilot Phase Two, the BIBFRAME Database interacted directly with the BIBFRAME Editor, and descriptions could be added to the database from the BIBFRAME Editor, and retrieved for editing. In addition, MARC bibliographic descriptions migrated daily from the ILS to the BIBFRAME Database. This more robust data exchange resulted in the need for catalogers to explicitly identify MARC descriptions they created in the ILS, to prevent those descriptions from migrating to the BIBFRAME Database as part of the daily distribution, when the same description was added to the BIBFRAME Database from the BIBFRAME Editor. Pilot participants would add a local MARC field which would prevent the MARC description from migrating to the BIBFRAME Database.

These complicated workflows are undergoing continuing refinement and adaptation for the specific formats and types of materials described in the BIBFRAME Pilot. The need for preventing the migration from Voyager to the BIBFRAME Database may not be necessary in the near future.

Until further instructions are provided, please enter a 985 field with the following data to MARC all descriptions created in Voyager (in certain cases, serials are an exception):

985 _ _ $a BibframePilot2 $e YYYYMMDD.

A macro is available for automating the addition of the 985. Further information about the macro and when to apply the 985 for specific formats will be available after the pilot participant training.

Representative catalogers in each of the Library of Congress divisions involved in the BIBFRAME Pilot have been asked to create workflow documents for their division’s BIBFRAME participation. In some cases, visual workflows were created, and in other cases, narrative workflows were created.

These workflows will be updated and enhanced as the BIBFRAME Pilot progresses. New workflows will be added as well.
**BIBFRAME monograph workflow for original Work, Instance description, and updating existing Work, Instance descriptions found in the BIBFRAME Database**
BIBFRAME monograph workflow for updating Instance description based on IBC record in the ILS
**BIBFRAME Pilot Workflows: Monographs (General, No IBC)**

*BIBFRAME monograph workflow involving searching for IBC and follow-up action*
BIBFRAME Pilot Workflows: Rare Materials

1. Begin Description
2. Create New Description (no IBC or Copy record in Voyager)
3. Describe Work in BIBFRAME Editor
4. Describe Instance in BIBFRAME Editor
5. Describe Item(s) in BIBFRAME Editor
6. Create MARC record in Voyager
7. Complete Description
8. Load the instance to the rare materials profile
9. Determine if Work or Instance descriptions need updates
   a. Yes: Update Work and Instance descriptions in BIBFRAME editor
   b. No: No action needed
10. Update MARC record in Voyager

BIBFRAME rare resource workflow
BIBFRAME Pilot Workflows: non-Latin (Right-to-Left)

1. Begin Description
2. Create New Description (no IBC or Copy record in Voyager)
3. Create MARC record in Voyager
4. Describe Instance in BIBFRAME Editor
5. Describe Work in BIBFRAME Editor
6. Complete Description

Search BIBFRAME database for Work and Instance (migrated from Voyager)

Find Instance description in BIBFRAME editor

Update the Instance description

Create the Item(s) description

Find Work description in BIBFRAME editor and make updates

BIBFRAME non-Latin Right-to-Left script (any format)
BIBFRAME Pilot Workflows: Serials (no IBC)
BIBFRAME Pilot Workflows: Cartographic Resources

Begin Description

Create New Description (no IBC or Copy record in Voyager)

Describe Work in BIBFRAME Editor

Describe Instance in BIBFRAME Editor

Create MARC record in Voyager

Complete Description

Search BIBFRAME database for Work and Instance

Edit Existing Description (IBC, Copy, or pre-MARC record in Voyager)

Determine if Work or Instance descriptions need updates

No

No action needed

Yes

Update Work and Instance descriptions in BIBFRAME editor

Update MARC record in Voyager

BIBFRAME cartographic resource workflow
BIBFRAME Pilot Workflows: DVDs and Blu-rays

BIBFRAME DVD and BluRay workflow
BIBFRAME Pilot Workflows
Example for Notated Music

Search the BIBFRAME database at http://mlvlp04.loc.gov:8230/lds/ for the notated music you need to catalog.

If there are no results, you can create a new record.

Create a new record in the BIBFRAME editor at http://mlvlp04.loc.gov:3000/bfe/index.html

In BIBFRAME, to enter data click the plus sign, then click the blue “Save changes” button; to edit data click the pencil icon; to delete data click the trash can icon. To save a record to edit and complete later, click the “Save” button. To finish, click the “Post” button and the record will show up in the Browse display.

If you wish, you can create your own template of data elements:
• Click on “+Create Resource,” then
• “Notated Music,” then
• “Create Work” or “Create Instance.”

The option to “Create RDA Expression” does not work at this time. Use the On/Off buttons beside each field to customize your data entry options, then click “Save” at the top of the screen. You will be prompted to name your template, which you can later select from a drop-down list and edit as needed. Later it will be possible to pre-populate fields with data and save that as a template. You will be able to create as many templates as you need.

Always start with Create a Work. Fill out applicable data fields. Be sure to enter the BF DB Admin Metadata for the Work. Most fields are automatically filled out. The fields that need data are Your cataloger ID (your Windows ID), Encoding level, and Profile (Notated music). Ignore the rest.
• For Creator, you will be able to search the NAF. If you are unsure if you have the correct creator, BIBFRAME will display the authority information so you can select the correct name. If the creator is not already established in the NAF, you will be able to fill in the data and create an authorized form of the name.

After the Work is finished, create an Instance, which you do from the bottom of the Work profile, thus linking the Instance to the Work. Fill out any applicable data fields. Be sure to enter the BF DB Admin Metadata for the Instance. Same instructions as above apply, except be sure to fill in the Creation date field.
• Skip the Publication/Distribution/Manufacture/Production buttons and use the Transcribed Provider Statement field instead because the buttons try to force standardized data that never fits the situation.
• In the Copyright Date field, use the key combination Ctrl-Shift-Alt-6 to make the Copyright symbol. It may take a few tries.
After the Instance is finished, create an Item, which you do from the bottom of the Instance profile, thus linking the Item to the Instance and through the Instance to the Work. Fill out any applicable data fields.

Be sure to enter the BF DB Admin Metadata for the Item. Same instructions as above apply, except be sure to fill in the Creation date field.

- This profile is where you scan in the item barcode, LC item call number, and any item-specific notes (those ending in $5 DLC).

Reminder: after all three sections are finished, click “Post” to add your record. In the Browse screen the record will appear in yellow for a few minutes.

If one or more records already exist in BIBFRAME when you search http://mlvlp04.loc.gov:8230/lds/ you will need to determine if the record represents the item in hand. Open the record and examine the data. If it is a match, you can edit the data as necessary. To edit data, look for the “Editor link” to the right of the screen. Click “Load to Editor.” If there is only a Work record, you can attach an Instance record to it by using the “Add BIBFRAME Instance” option. If there is an Instance record, you can go through the same process to edit that record.

If you are unsure which profile to use to record data, refer to RDA. This is simple to do because there are links from the data fields in BIBFRAME to the applicable instructions in RDA.

If you create a duplicate by accident, contact Nate Trail and he will delete it.

When you create the record in Voyager it is extremely important to enter a 985 field:
985 _ _ $a BibframePilot2 $e YYYYMMDD

This prevents Voyager records from overlaying BIBFRAME records when the data is migrated each evening.
BIBFRAME Pilot Workflows

Example for Cartographic Resources

New Description (no IBC or Copy record in Voyager)

1. Describe Work in BIBFRAME Editor - Use the same Editor for both map sheets and atlases. The only differentiating factor is in BIBFRAME Instance template in which Atlas description has “volume” in “Carrier type,” and Map sheet description has “sheet” in “Carrier type”. The Cartographic template has one template for Work and one template for Instance. One can start Cartographic descriptions in either template.
2. Describe Instance in BIBFRAME Editor
3. Create MARC Record in Voyager

Editing a Description (IBC or Copy record in Voyager)

1. Search BIBFRAME database for Work and Instance (these descriptions would have migrated from Voyager)
2. Check to see if any updates (034, 1XX, 245, 250, 255, 264, 300, 500, 504, 7XX) are needed to the Work or Instance descriptions
   a. If no update, no action needed
   b. If update needed:
      i. Call up Work description in the BIBFRAME Editor and make update(s)
      ii. Call up Instance description in the BIBFRAME Editor and make update(s)
   c. Update MARC Record in Voyager

Cartographic (Map Sheets) – New Description

1. Start with the Work description
2. Enter Creator of Work, Select Cartographer if possible
3. Enter 245 subfield a in the Work title
4. Select Form/Genre for sheet maps, mostly likely “Maps” or “Road maps” etc.
5. Enter Contribution, such as Publisher
6. Enter Subject Components
7. Enter Library of Congress Classification, just the subfield a with the subject cutter
8. If standard phase, select in Scale text box. If not standard phrase, enter only scale value in box. Enter entire phase verbatim in Scale note.
9. Select Language in Language Box
10. Enter “Color” in Color Content Box, leave it blank if black and white or one-color print.
11. Complete Work descriptions
12. Complete Instance descriptions – Select “sheet” in “Carrier type”
13. Complete BF DB Admin Metadata –
14. Complete BIBFRAME Item descriptions – “Copy 1” for first copy, scan barcode in “Barcode,” fill in “Geography and Map Division” in “Held in sublocation”
Cartographic (Atlases) – New Description

1. Start with the Work description
2. Enter Creator of Work, Select Cartographer if possible
3. Enter 245 subfield a in the Work title
4. Select Form/Genre “Atlases” for atlases.
5. Enter Contribution, such as Publisher
6. Enter Subject Components
7. Enter Library of Congress Classification, just the subfield a with the subject cutter
8. If standard phase, select in Scale text box. If not standard phrase, enter only scale value in box. Enter entire phase verbatim in Scale note.
9. Select Language in Language Box
10. Enter “color illustrations, color maps” in Color Content Box, leave it blank if black and white or one-color print.
11. Complete Work descriptions
12. Complete Instance descriptions – Select “volume” in “Carrier type”
13. Complete BF DB Admin Metadata –
14. Complete BIBFRAME Item descriptions – “Copy 1” for first copy, scan barcode in “Barcode,” fill in “Geography and Map Division” in “Held in sublocation”

Cartographic (Atlases) – Editing a Description (IBC or Copy record in Voyager)
Search 245 subfield a in BIBFRAME database
Select (Work from Bib)
Use “Editor Link” to “Load to Editor”
Under URL for BIBFRAME JSON Work, Select “Cartographic”, and click on “Submit URL”
Continue and complete Work descriptions –
- Select Form/Genre “Atlases” for Atlases

Complete Instance descriptions – Select “volume” in “Carrier type”
Complete BF DB Admin Metadata –
Complete BIBFRAME Item descriptions – “Copy 1” for first copy, scan barcode in “Barcode,” fill in “Geography and Map Division” in “Held in sublocation”
BIBFRAME Pilot Workflows
Example for Sound Recordings

Here are all of the possible workflows/paths we could take when cataloging recorded sound materials in the BIBFRAME pilot.

1. Condition: Item is not in ILS already and there is no OCLC copy available. Action path #1a: Catalog in BIBFRAME editor. Post. Wait a day.* Make Voyager record based on BIBFRAME record. Add 985 field to Voyager field.

2. Condition: Item is not in ILS already and there is no OCLC copy available. Action path #1b: Catalog in Voyager. Wait a day.* Find in BIBFRAME database. Load to editor. Edit data. Go back to Voyager that day and add 985 field.

3. Condition: Item is not in ILS already and there is OCLC copy available. Action path #1c: Download copy to Voyager (but don’t save). Catalog in BIBFRAME editor. Post. Wait a day.* Download copy again from OCLC to Voyager and edit based on BIBFRAME data (cataloging in RDA). Add 985 to Voyager record.


5. Condition: Item is in ILS already. Action #2a: Find in BIBFRAME database. Load to editor. Edit and upgrade to RDA (often based on OCLC copy—which may have to be temporarily imported, in order to copy and paste from). Post BIBFRAME record. Add 985 to Voyager record the same day. Wait a day.* Edit Voyager record to match BIBFRAME database record.

6. Condition: Item is in ILS already. Action #2b: In Voyager, upgrade to RDA/OCLC copy. Wait a day.* Find in BIBFRAME database and load to editor. Adjust/delete BIBFRAME data. Re-post. Go to Voyager record that day and add 985 field.

* May take more than a day, but not usually more than two.

Possible wrinkles when name and title authority records are not available in LCNAF. Make a preliminary authority record in BIBFRAME and make the MARC NAR later when it is cataloged in Voyager. Or, do all authority work in Voyager first (wait) and then add to BIBFRAME record later.
Unit 11: Non-Latin Scripts
Unit 11: Non-Latin Scripts

Background – MARC and non-Latin Scripts

The MARC Multiscript Model A technique for encoding non-Latin script bibliographic metadata is used in current MARC cataloging. The Model A technique was developed during an era where many library systems could not handle data in multiple scripts. To satisfy MARC users who could not handle non-Latin scripts, MARC Model A (linked 880 fields) allows any field with non-Latin data to be segregated into field 880. System limitations have since changed dramatically over time, however. It is assumed that most current library systems in use in research libraries are Unicode-based which can handle multiple scripts. Today the main limitation is the lack of integration of Input Method Editors (IMEs) that allow creation and searching for some scripts and the inability of some Integrated Library Systems (ILSs) to use non-Latin scripts in modules such as acquisitions and circulations.

The MARC Multiscript Model B technique for encoding non-Latin script bibliographic metadata is used in current name authority (NACO/LC-NACO Authority File) MARC cataloging. Model B, which allows for the recording of non-Latin script data in most MARC21 variable fields, is already used by many library systems. The Library of Congress began adding non-Latin data to name authority records in 2008, following the Model B approach, for cross references only. The 1XX authorized access point in name authority records is only provided in the Latin script. The linkage between parallel fields containing the original non-Latin script bibliographic data and transliterations of that same data do not benefit meaningfully from the pairing of linking subfields currently part of Model A.

Experimentation with non-Latin Scripts in BIBFRAME

In the BIBFRAME Pilots, experimentation is taking place with the bibliographic description of materials in non-Latin scripts. The results of this experimentation will be analyzed as the pilots progress.

BIBFRAME Pilot participants working with non-Latin resources are providing minimal romanization in the description of those resources. Access points are romanized, but other parts of the bibliographic description are described in the script of the resource.

Access points are:

- **Creators** (1XX field in MARC)
- **Preferred Title** (240 field in MARC, although the 245 field may represent both a Preferred Title and a Title Proper (when a 240 field is not present))
- **Genre/Form** (655 in MARC)
- **Subjects** (6XX in MARC)
- **Contributors** (7XX in MARC)
Example for a Chinese-language resource:

Work description
Instance description

<table>
<thead>
<tr>
<th>BIBFRAME Instance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instance of</strong></td>
</tr>
<tr>
<td><strong>Title Information</strong></td>
</tr>
<tr>
<td>张太贵</td>
</tr>
<tr>
<td><strong>Statement of Responsibility</strong></td>
</tr>
<tr>
<td>林晓国等；岭南文库编辑委员会, 广东中华文化促进会编辑</td>
</tr>
<tr>
<td><strong>Edition Statement</strong></td>
</tr>
<tr>
<td><strong>Publication, Distribution, Manufacture, Production</strong></td>
</tr>
<tr>
<td>China Guangdong ren min chu ban she 2009</td>
</tr>
<tr>
<td><strong>Transcribed Provider Statement</strong></td>
</tr>
<tr>
<td>广州市：广东人民出版社, 2009</td>
</tr>
<tr>
<td><strong>Copyright Date</strong></td>
</tr>
<tr>
<td>Term</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>Administrative Metadata</td>
</tr>
<tr>
<td>BIBFRAME Database</td>
</tr>
<tr>
<td>BIBFRAME Editor</td>
</tr>
<tr>
<td>Clone</td>
</tr>
<tr>
<td>Data Boxes</td>
</tr>
<tr>
<td>Dereferencable URI</td>
</tr>
<tr>
<td>Description</td>
</tr>
<tr>
<td>Dialog Field</td>
</tr>
<tr>
<td>Direct-Entry Field</td>
</tr>
<tr>
<td>Fields</td>
</tr>
<tr>
<td>Field Edit Buttons</td>
</tr>
</tbody>
</table>
ID.LOC.GOV

The Library of Congress Linked Data Service; provides both interactive and machine access to commonly used ontologies, controlled vocabularies, and other lists for bibliographic description.

Instance

a resource reflecting an individual, material embodiment of a Work equivalent to an RDA manifestation. In the BIBFRAME Editor, the Instance profile allow input of Instance or manifestation related elements, such as instance title, publisher information instance identifiers, etc.

Internationalized Resource Identifier (IRI)

Internationalized Resource Identifier (IRI) is an Internet standard that extends the existing Uniform Resource Identifier (URI) scheme to include characters from the Universal Character Set so that resources using, for example, characters from languages such as Chinese, Korean, Cyrillic, etc., can be identified.

Item

a single example of an Instance. In the BIBFRAME Editor, the Item profile contains elements such as LC item call number, barcode, lending and reproduction policies, custodial and acquisition data.

JSON-LD

JavaScript Object Notation for Linked Data. In the BIBFRAME Editor JSON-LD is used as a serialization of the description input by the cataloger.

Linked Data

the term linked data refers to a set of best practices for publishing and connecting structured data on the Web. Key technologies that support linked data are URIs (a generic means to identify entities or concepts in the world), HTTP (a simple yet universal mechanism for retrieving resources, or descriptions of resources), and RDF (a generic graph-based data model with which to structure and link data that describes things in the world).

Lookup

also known as “AutoComplete.” A function which searches the database as you type and displays a menu of matching terms, from which you select the term to be used in authorized access points or other controlled fields (e.g., “Language of the Expression,” “Relator Role,” etc.).

Post

a function in the BIBFRAME Editor used to send your completed resource description to the BIBFRAME Database.

Profile

an online template for creating a description of a resource or concept. The profiles used in the BIBFRAME Pilot 2.0 are: monograph, notated music, serial, cartographic, sound recording: audio CD, sound recording: audio CD-R, sound recording: analog,
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resource Description</td>
<td>a standard graph based model for the exchange of data on the Semantic Web. The model structures and defines relationships between resources in statements that machines can interpret. The model consists of triple statements, URIs and IRIs to identify resources that are the object and subject of a statement, and ontologies and vocabularies (sources of relationship terms). The triple statement is at the core of the RDF model expressing relationships between resources that machines can understand. The object in a triple statement identifies the resource of interest (to which a relationship is being made), a predicate (a term that expresses a relationship), and subject (a property value that has a relationship to the resource of interest)</td>
</tr>
<tr>
<td>Framework (RDF)</td>
<td></td>
</tr>
<tr>
<td>Resource Template</td>
<td>a building block of the BIBFRAME Editor. A resource template describes one of the various resources associated with a given Profile. For example: Work, Instance, Item, Identifier, Language, etc.</td>
</tr>
<tr>
<td>Semantic Web</td>
<td>&quot;The Semantic Web is an extension of the current web in which information is given well-defined meaning, better enabling computers and people to work in cooperation.&quot; May 2001 Scientific American article &quot;The Semantic Web&quot; (Berners-Lee et al.)</td>
</tr>
<tr>
<td>Stub</td>
<td>a BIBFRAME work generated from a MARC Bibliographic 7XX title. The software checks the BIBFRAME file for an existing work to make a link, but if the title is not found the software makes a very brief work description with what it has, which is just the title or author/title. These are identified in the BIBFRAME database by “Work stub from Bib”</td>
</tr>
<tr>
<td>Template</td>
<td>a personalized modification that can be made to a BIBFRAME profile to streamline the description of resources. For example, a Minimal Level Cataloging project may require that only certain data elements to be recorded in the bibliographic description of each resource. A template can be created locally that will be used as the basis of each description</td>
</tr>
<tr>
<td>Triple Statement</td>
<td>the basic data entity in Resource Description Framework (RDF). A triple statement is a set of three entities in the form of subject-predicate-object</td>
</tr>
<tr>
<td>Uniform Resource Identifier (URI)</td>
<td>a string of characters that unambiguously identify resources on the Semantic Web, such as books, authors, and relationship terms (predicates) in RDF triple statements. The URI standard is limited to a subset of the ASCII character set. The internationalized resource identifier (IRI) is a related standard that extends the standard to include characters such as Chinese, Korean, Cyrillic, etc.</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Web of Data</td>
<td>a term that is loosely synonymous with Semantic Web</td>
</tr>
<tr>
<td>Work</td>
<td>the highest level of abstraction in BIBFRAME. A Work, in the BIBFRAME context, reflects the conceptual essence of the cataloged resource: authors, languages, and what it is about (subjects)</td>
</tr>
<tr>
<td>Workspace</td>
<td>the area of the BIBFRAME Editor in which you utilize dialogs, free-text fields, menus, buttons, and look-up functions to create the BIBFRAME record. Also, the Browse link takes you to a workspace where your BIBFRAME records are saved</td>
</tr>
</tbody>
</table>
Help, Support, and Other Resources

BIBFRAME Pilot 2.0 Confluence page

https://staff.loc.gov/wikis/display/BP2/BIBFRAME+Pilot+2.0+Home

- You can post questions
- You can read about what other Pilot participants are experiencing
- You can submit Error Reports
- You can access documentation
- You can read updates and announcements

The BIBFRAME mail box
bibframepilot@loc.gov

- You can ask questions
- You can report errors
- The trainers access and respond to your messages

LC’s BIBFRAME Webpage
http://www.loc.gov/bibframe/docs/index.html

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