Using MARC 21 with FRBR: Record Configurations

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Introduction

IFLA issued the Functional Requirements for Bibliographic records conceptual model in 1998. Since that time there have been various application projects including the VTLS "FRBR version" of Virtua, OCLC's Fiction Finder, Australia's AusLit, and numerous studies such as the Norway/Finland data mining study. There are many other studies and projects that have not been as widely reported. For the MARC Office at LC, Tom Delsey mapped the entire corpus of MARC 21 data elements to FRBR entities, and the Office made it available on the web. MARC Standards also developed a downloadable tool that takes a result set and FRBRizes it. This tool makes it easy for institutions to experiment and see how their data reacts.

The purpose of this report is to clarify the difference between exchange records and internal record configurations. Another purpose it to begin to identify any changes to the MARC 21 format needed to support FRBR-based activities.

Many different groups are experimenting with the FRBR and using their MARC 21 records. There are numerous ways that a MARC 21 record can be configured within bibliographic systems and our systems over the years have demonstrated this. The basic premise is that no matter what efficiencies the internal system uses for record information, when the record is imported or exported, it is an independent record that can be fully understood by itself; it is not a dependent record or collection of records. This principle is in accord with the FRBR model which is a view of data that enables interesting displays for users and record configurations for cataloging efficiencies in an internal system.

The dividing lines between the principal components of the FRBR model (Work, Expression, Manifestation, Item) are not hard but are somewhat flexible to suit the needs, size, and constituency of the institution. For example, at a recent conference on FRBR at OCLC, it was shown that Expression does not need to be precisely defined but may vary, depending on type of library.   This implies that exchange records need to have readily reconfigurable data.

A fundamental decision needs to be made for the record exchange environment concerning placement of Work/Expression records in the MARC structure, irrespective of internal record configurations. It is possible that a system could prefer Bibliographic records for Work/Expression records within a system even if the decision for exchange is for use of Authority records, as long as the data is accommodated in both and easily convertible.

MARC21 Record Models

MARC 21 is essentially a cluster of three MARC 21 record types that together supply the bibliographic, authority and holdings information for bibliographic items. (Classification

information is a component that may be more important in future systems, but is not key to this discussion.) The Bibliographic record can stand alone and represent the item. The Authority record provides assistance in maintaining consistency across the Bibliographic records, but it has not been necessary for the exchange and display of a Bibliographic record. The holdings information can be embedded in a Bibliographic record in some cases, so it is not essential to be exchanged as a separate record for the item information it may carry. The three record types are useful, however, for the increased richness they provide in a system in which they are fully exploited (e.g., authorized forms and cross references in the Authority record and claiming, interlibrary loan, and automatic check-in support in Holdings records).

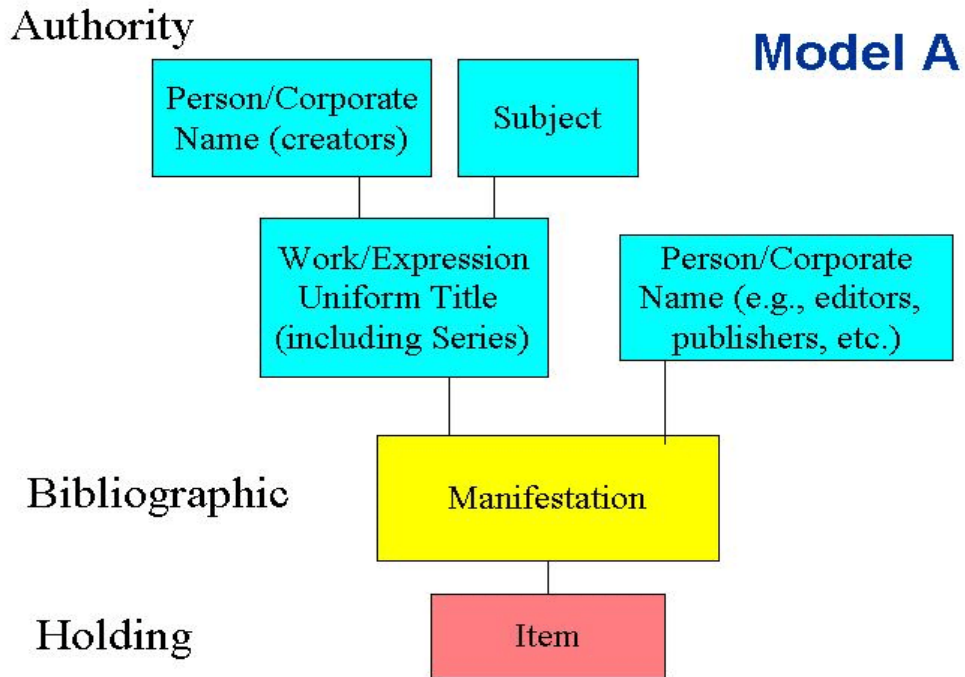In summary what we want to exchange is the following.
- Independent Manifestation records (with and without holdings information) and independent Work/Expression records for end user displays.
- Independent Bibliographic records and independent Authority records for file building purposes.
- Independent Holdings records for pattern information, interlibrary loan, etc.?

In a recent presentation by Barbara Tillett on FRBR, she posited 5 models using the three basic MARC 21 records to break out the FRBR entities. The following discusses two of those models and indicates how MARC 21 can be used to support them, including changes that could be needed. The models differ primarily in their treatment of the Work/Expression as an Authority record (Model A) and as a Bibliographic record (Model B). The current exchange record configuration is first given in a table as a reference. Since the foci for this discussion are the Author/Title and Title records (Work/Expression Uniform Titles), they have been highlighted below. Series are similar to and therefore treated like in Work/Expression Uniform Title records. They have the added characteristic of providing series treatment information.

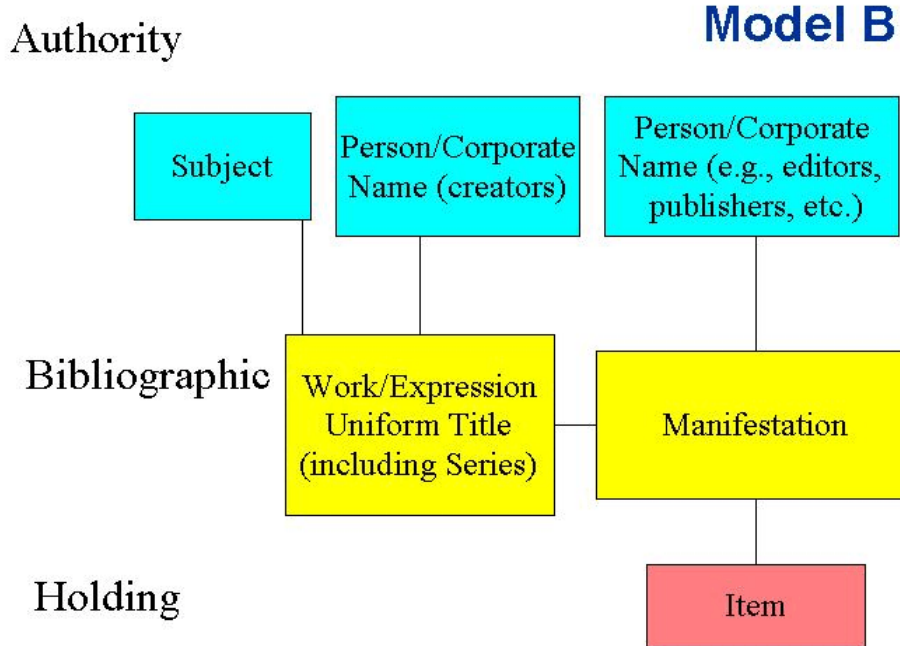**Current Exchange Record Configuration**

Record Type	Record Content	Primary Relationship to
Authority Record		
	Subject	Manifestation
	Person/Corporate Name	Manifestation
	Work/Expression Uniform Title (including Series)	Manifestation and Person/Corporate Name
Bibliographic record		
	Manifestation	
Holdings record		
	Item	

Model A: Using <u>Authorities</u> for Work/Expression Records

Record Type	Record Content	Primary Relationship to
Authority Record		
	Subject	Work/Expression Uniform Title
	Person/Corporate Name (creators)	Work/Expression Uniform Title
	Person/Corporate Name (e.g., editors, publishers, etc.)	Manifestation
	Work/Expression Uniform Title (including Series)	Manifestation
Bibliographic record		
	Manifestation	
Holdings record		
	Item	

Model B: Using <u>Bibliographic</u> for Work/Expression Uniform Title Records

Record type	Record content	Primary Relationship to
Authority Record		
	Subject	Work/Expression Uniform Title
	Person/Corporate Name (creators)	Work/Expression Uniform Title
	Person/Corporate Name (e.g., editors, publishers, etc.)	Manifestation
Bibliographic record		
	Work/Expression Uniform Title (including Series)	Manifestation
	Manifestation	
Holdings record		
	Item	

From the MARC viewpoint, the Author/Title or Title Authority records have always been somewhat different from name and subject records. When closely examined, Author/title and Title records have several characteristics of bibliographic records, such as alternative titles and parent titles. Yet they have the authority aspects associated with the established title and see/see also reference. A case can therefore logically be made for treating them as Bibliographic or Authority records, because elements from both of those formats may apply.

The following table indicates the current location in Authority and Bibliographic records for data needed for **Work/Expression records**. It suggests in italics data how missing data elements might be added.

Element	Work/Expression record is <u>Authority</u> record (Model A)	Work/Expression record is <u>Bibliographic</u> record (Model B)
(1) Alternative titles to the Work title	4XX - See from	246 - Varying form of title
(2) Larger Work	5XX - See also from	440/8XX - Series/Set entry Alternatively, 773 - Host Item Entry
(3) Component Works	5XX - See also from	7XX, Ind.2=2 Alternatively, 774 Constituent Unit Entry
(4) Link of Manifestation record to Work/Expression record	[Through heading match to Authority file] Alternatively, use linking field 787 in Manifestation record. Put Work/Expression record number in $w and "work" as a word or a code in $g or $i	Use linking field 787 in Manifestation record. Put Work/Expression record number in $w and "work" as a word or a code in $g or $i
(5) Names and topics as subjects	*Add equivalent of Bibliographic 600-656 fields to Authorities?*	600-656 fields - Subjects
(6) Indication that record is for a Work/Expression	100-111 with $t subfield or 130 in record. *Alternatively, explicitly identify Author/Title and Title Authority records in Leader/08?*	*Extend values and definition or Leader/08 - Type of control?*

(7) Work date (e.g., copyright date may be appropriate for Work records)	*Add 017?*	017, $d - Copyright information

If the Bibliographic record path is taken for Work/Expression records, then the missing element is one that indicates that the creator of the record considers the record a Work/Expression record (5).

If the Authority record path is chosen, then the subject fields are missing (4) and the Work date is missing (6), and explicit indication that the record is for an Author/title or Title could be added.