LRM and RDA: overview of the 3R Project

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3R Project

RDA Toolkit Restructure and Redesign

Modern responsive design
  Users of mobile devices
  Users with sensory preferences

RDA content infrastructure
  Convert to DITA standard
  Increase re-use of RDA Reference data

IFLA Library Reference Model

RDA Board strategy
"RDA is a package of data elements, guidelines, and instructions for creating library and cultural heritage resource metadata that are well-formed according to international models for user-focussed linked data applications."

RDA Toolkit provides the user-focussed elements, guidelines, and instructions.

RDA Registry provides the infrastructure for well-formed, linked, RDA data applications.
LRM

2017: Library Reference Model
International Federation of Library Associations and Institutions (IFLA)

LRM consolidates the FR family of models
1998: FR for Bibliographic Records (FRBR)
2009: FR for Authority Data (FRAD)
2010: FR for Subject Authority Data (FRSAD)
2011: Working Group on Aggregates report
LRM and RDA

RDA was based on most of FRBR, some of FRAD, all of FRSAD (but mostly out of scope), and none of WGoA

LRM is the opportunity to fill in gaps and reconcile incoherencies
Is LRM suitable for RDA?

LRM “a high-level conceptual model ... intended as a guide or basis on which to elaborate cataloguing rules”

RDA guidance, instructions, elements

“operates at a greater level of generality than FRBRoo, which seeks to be comparable in terms of generality with CIDOC CRM”

RDA cultural heritage communities

LRM “this model is developed very much with semantic web technologies in mind”

RDA linked data communities
LRM as a model

High-level conceptual model
   Entity-relationship structure

Intended for refinement by implementations
   By sub-typing entities, relationships, and attributes
LRM entities

Retained:

Work, Expression, Manifestation, Item, Person**

Added:

Agent, Collective Agent, Nomen, Place, Time-span
+ Res (super-class of other entities)
IFLA LRM and RDA entities

RDA Entity = Any RDA Thing
Covers all other types of entity

Agent

Collective Agent

W is created by
E
M
I is modified by

P**
F
C

Res
is sub-class of

Nomen
has appellation*

Place
is associated with

Time-span

Resource Description & Access
Beta release

Foundational structure for the organization of elements, instructions, and guidance

Combines

• The organization of entities, attributes, and relationships in the IFLA Library Reference Model (LRM)
• The extension of RDA as an implementation of the LRM and resolution of gaps and inconsistencies in RDA
• Explicit provision of recording methods to improve support for RDA data applications
Elements

Element is the unit of focus in the new Toolkit
e.g. “performer” has a “page” all to itself

New elements for access points

Distinction between attribute and relationship
elements is dependent on the recording method

New entities $\Rightarrow$ more relationships $\Rightarrow$ more inverses
$\Rightarrow$ Many more elements
The numbers

<table>
<thead>
<tr>
<th>13 entities</th>
<th>1700+ elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work</td>
<td>388</td>
</tr>
<tr>
<td>Expression</td>
<td>291</td>
</tr>
<tr>
<td>Manifestation</td>
<td>282</td>
</tr>
<tr>
<td>Item</td>
<td>70</td>
</tr>
<tr>
<td>Place</td>
<td>45</td>
</tr>
<tr>
<td>Timespan</td>
<td>54</td>
</tr>
<tr>
<td>RDA Entity</td>
<td>27</td>
</tr>
<tr>
<td>Agent</td>
<td>175</td>
</tr>
<tr>
<td>Person</td>
<td>85</td>
</tr>
<tr>
<td>Collective Agent</td>
<td>34</td>
</tr>
<tr>
<td>Corporate Body</td>
<td>84</td>
</tr>
<tr>
<td>Family</td>
<td>46</td>
</tr>
<tr>
<td>Nomen</td>
<td>169</td>
</tr>
</tbody>
</table>
Modular structure

Instructions are grouped by element and recording method

   Finer granularity is more flexible for a wider range of applications

Every element page has the same basic structure

RDA Reference data are maintained and displayed separately from guidance and instructions

   Reference data are extracted from the RDA Registry
RDA Registry

Linked data representations of RDA Reference Entities (classes)
Relationships and attributes (properties)
Controlled terminologies (concepts)
+ Translations
+ Maps (e.g. to ISBD, MARC Relators, MARC 21)

Open license (BY)
Registry data in Toolkit

3R Project
   Basic structure of all element “pages”
   generated from Registry

Regular releases
   Element page
      Definition and scope; Element reference;
      Related elements
   Glossary
   Vocabulary encoding schemes
   Relationship matrix
<table>
<thead>
<tr>
<th>Definition and Scope</th>
<th>Element Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prerecording</td>
<td></td>
</tr>
<tr>
<td>Recording</td>
<td></td>
</tr>
<tr>
<td>Recording an unstructured description</td>
<td></td>
</tr>
<tr>
<td>Recording a structured description</td>
<td></td>
</tr>
<tr>
<td>Recording an identifier</td>
<td></td>
</tr>
<tr>
<td>Recording an IRI</td>
<td></td>
</tr>
<tr>
<td>Related Elements</td>
<td></td>
</tr>
</tbody>
</table>
Recording methods

Extended to all elements
Confined to relationships in original Toolkit

Linked data “method” now explicit

4 methods = “4-fold path”
Unstructured description
Structured description
Identifier
IRI
Boilerplate

Guidance, instruction, and navigation content components that are re-used in multiple pages in the Toolkit

Re-usable components are updated once
And translated once

Repetition is a desirable feature of the new Toolkit
• Improves consistency and understanding
• Supports a modular editorial infrastructure
• Reduces costs
Instructions

There are no rules!

Most instructions are now optional
Accommodates local practice in a global framework

Instructions assigned to recording methods

Much more choice

Flexibility 😊

How to choose? 😞
Optional instructions

Internationalization
No “one way” of describing and accessing a resource

+ Two or more recording methods are valid for many elements

+ No element is mandatory [except “nomen string”]
  Same as original Toolkit

= Most instructions are optional

Application profile is required to manage choice
Application profile

What elements must be recorded?
What elements should be recorded?
What elements may be repeated?
What vocabularies are used?
What recording methods are used?
What options are used?
Application profiles in RDA Toolkit

Multiple ways:
- Bookmarks and notes
- Policy statements
- Workflows and other user documentation
- External documents

Range of contexts, usage, and sharing
## place of publication

Use structured description only. Record no more than 3 values.

### Definition and Scope

A place associated with the publication, release, or issuing of a published manifestation.
Conditions

Many instructions apply only when one or more conditions is met
• Kind of resource being described
• Specific characteristic of resource being described
• Existence of pre-recorded data
• Etc.

“Alternative” = option for the same set of conditions

“Exception” = different set of conditions
**CONDITION**
More than one value appears on the source of information for the element.

**OPTION**
Record a value that appears first on the source of information.

**OPTION**
Record each of one or more values in the order indicated by the sequence, layout, or typography of the source of information.
Translations

Modular structure supports translation
Boilerplate; standard phrasing

RDA Reference is translated independently of other Toolkit content
Translated data processed in the same way as English data
RSC Translations Working Group (2015-)
Chair
Daniel Paradis

See terms of reference and current membership/tasks of the RSC Translations Working Group.
The new RDA Toolkit

A package of data elements, guidelines, and instructions ...

A package that meets the resource description and access needs of the 21\textsuperscript{st} century
Thank you!

RDA Steering Committee
http://www.rda-rsc.org/

RDA presentations
http://www.rda-rsc.org/node/560

RDA Toolkit
https://www.rdatoolkit.org/