

RDA Toolkit's MARC Linking Service

by James Hennelly, Managing Editor, ALA Digital Reference

RDA Toolkit's MARC linking service allows users and vendors alike to create MARC-related links to RDA Toolkit content. Creators of workflows, training materials or other procedural materials can use this service to embed direct links to specific RDA instructions in their documents. Vendors can build links to RDA Toolkit into their ILS products and other cataloging tools for use by clients who subscribe to RDA Toolkit.

RDA was developed as a content standard, and as such it contains guidelines for choosing and recording data to include in bibliographic and authority records. Unlike the content and display standard AACR2, RDA does not include rules on how a record should be displayed. MARC 21 is an encoding standard and is one possible schema for encoding RDA-based records.

Our MARC linking service uses the data from RDA Toolkit's Mappings collection (found under the Tools tab) to build links between MARC encoding and RDA instructions. The MARC-to-RDA mappings feature a table showing the relationship between MARC 21 fields, indicators, and subfields and RDA elements and instruction number. The MARC linking service uses an URL containing specific MARC 21 information (field, indicator, subfield, etc) to create a link to the appropriate place(s) in the RDA Element Set inside the RDA Toolkit. The RDA Element Set collects relevant information like RDA element, sub-elements, element definitions, and related RDA-defined vocabularies and organizes them by RDA element.

The instructions below describe how to configure the service to map MARC 21 to the corresponding instructions in RDA. It is important to note that not all MARC fields have a mapping to RDA. The linking service is based on the RDA mappings in the RDA Toolkit, and these mappings are living documents that will continually change and evolve. The great advantage of this service is that your links, which contain only MARC information, will **not** need to be updated when the mappings change. We make the change to the proper RDA instructions on our end.

Configuring the RDA Toolkit MARC Web Service URL

With this MARC web service users can create links with persistent URLs from their local documentation, staff wiki's, RDA Toolkit workflows or any other web enabled documents that resolve to the most current and relevant RDA instructions based on specific MARC information encoded into the URL.

Vendors may wish to program their systems (the GET method within the HTML form element is supported) to use this MARC web service to dynamically recognize a user's position in a MARC input screen and provide context-sensitive-help button in their interface (in much the same way that vendors link to MARC documentation) that opens a new window linking the user to the most current and relevant RDA instruction(s).

The syntax of the URL is as follows (variable information is highlighted) `http://access.rdatoolkit.org/?encode=marc&rec=RecordType&tag=MARCFIELD&indpos=IndicatorPosition&ind=Indicator&subfld=Subfield&username=RDAUserName&password=RDAPassword`

URL Variables KEY (*=required field)

*Record Type= The Record Type designator, either "Auth" for an Authority record or "Bib" for a Bibliographic record.

*MARC Field= The MARC field the user is requesting RDA Instruction(s) for. (e.g., "100")

Indicator Position= If present, indicator position (e.g., "1st" or "2nd" for MARC). If both indicators are present, you will have to use this field twice; if this field is null, do not include it or its delimiter "&indpos=" in the pass.

Indicator= If present, the indicator (e.g., 0). If both indicators are present, you will have to use this variable twice; if this is null, do not include it or its delimiter "&ind=" in the pass.

Subfield= If present, the MARC Subfield, for the record field the user is requesting RDA Instruction(s) for. If this field is null, do not include it or its delimiter "&subfld=" in the pass. **TIP:** While this is an optional field, it is also the field that best matches our data. Whenever possible include a subfield to obtain the best possible results.

RDAUserName= The name of the user's Subscription as stored in their ILS profile.

RDA Password= The user's RDA password as stored in their ILS profile.

For vendors the RDA user name and RDA password if stored in your system (for example in a user profile) can be passed as a service to allow users to seamlessly connect to their account by passing the need to login.

Individual users can also include the RDA users name and RDA password variables for internal documents and links, however sharing links including these variables outside of your institution would be a violation of the RDA Toolkit license and habitual violation could result in loss of access to the RDA Toolkit.

If the RDA user name and password are not included the link will resolve. Users with IP access will be seamlessly linked to the link's destination. Users without IP access will be asked to login with their RDA User Name and RDA Password, and then the link will resolve to the correct destination.

Connect with RDA

When RDA Toolkit receives the URL it will first attempt to authenticate the user.

If the user is not authenticated: RDA Toolkit will present the user with a hit list. Clicking on a list item will take the user to a login page.

If the user is authenticated: RDA Toolkit will provide one of 3 types of results.

1. If there is 1 RDA-to-MARC match, then the user will be taken to the corresponding location in the Element Set View.
2. If there is more than 1 RDA-to-MARC match, then the user will receive a list of applicable RDA elements.
3. If there is no RDA-to-MARC match, then the user will receive a hit list based on matches to only the record type and MARC tag fields, or, if there are still no matches, the user will be directed to a landing page stating that the requested MARC field does not correspond to an active RDA mapping.

Sample Links

1. For someone wanting to link to instructions on carrier type, create an URL based on the MARC field 338, subfield a. The link would look like this—

<http://access.rdatoolkit.org/?encode=marc&rec=Bib&tag=338&subfld=a&username=yourusername&password=yourpassword>

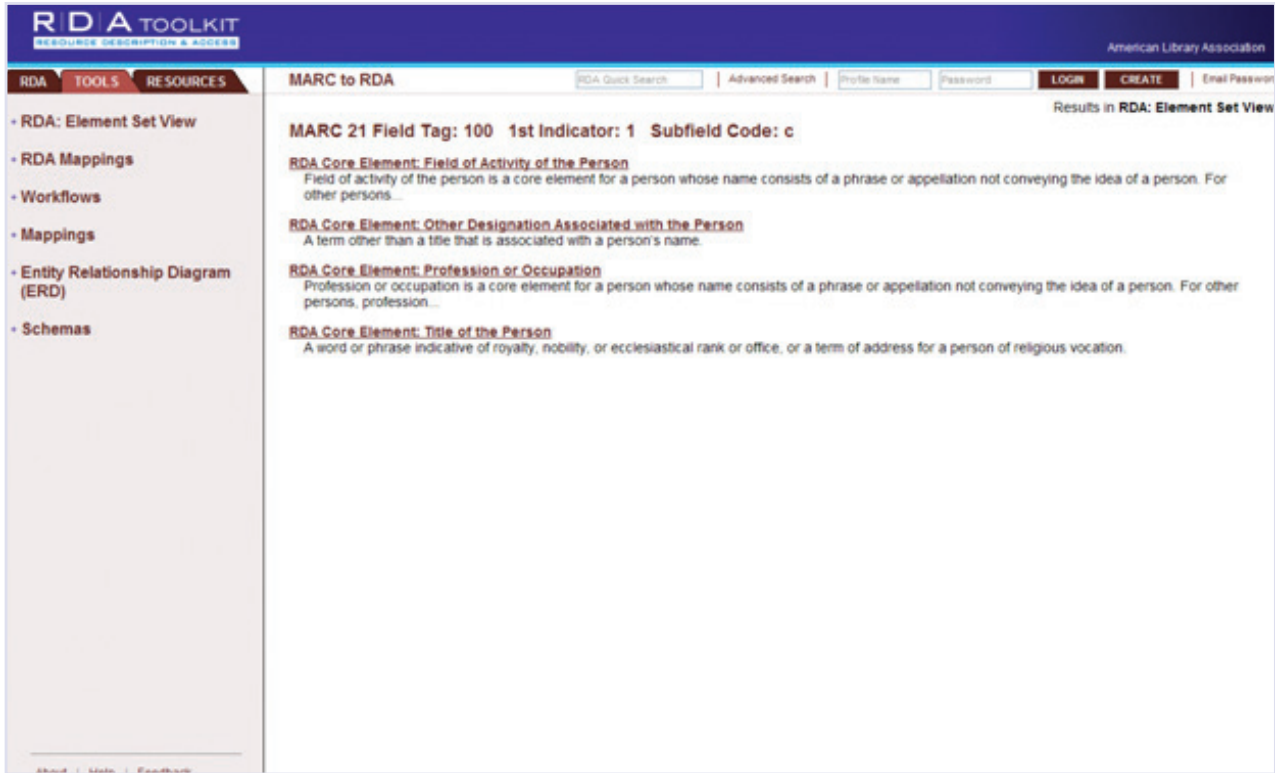
The screenshot shows the RDA Toolkit interface. On the left is a navigation menu with options like 'RDA: Element Set View', 'RDA Mappings', 'Workflows', 'Mappings', 'Entity Relationship Diagram (ERD)', and 'Schemas'. The main content area is titled 'MANIFESTATION' and 'Attributes'. It features a 'Core' section with 'RDA CORE ELEMENT' and 'CARRIER TYPE' highlighted in yellow. Below this is a 'Definition' section with the text: 'A categorization reflecting the format of the storage medium and housing of a carrier in combination with the type of intermediation device required to view, play, run, etc., the content of a resource.' The 'Related Vocabulary' section is titled 'Audio Carriers' and lists several items with their definitions:

Audio Carriers	Definition
Audio Cartridge	A cartridge containing an audio tape.
Audio Cylinder	A roller-shaped object on which sound waves are incised or indented in a continuous circular groove. Includes wax cylinders, wire cylinders, etc.
Audio Disc	A disc on which sound waves, recorded as modulations, pulses, etc., are incised or indented in a continuous spiral groove.
Audio Roll	A roll of paper on which musical notes are represented by perforations, designed to mechanically reproduce the music when used in a player piano, player organ, etc. Includes piano rolls, etc.
Audiocassette	A cassette containing an audio tape.
Audiotape Reel	An open reel holding a length of audio tape to be used with reel-to-reel audio equipment.

The pass would link the user to the Element Set view of RDA 3.3, which can be seen here.

- For someone wanting to link to instructions on titles, professions, or other designations associated with a person, create an URL based on MARC field 100, first indicator 1, and subfield c. The link would look like this—

<http://access.rdatoolkit.org/?encode=marc&rec=Bib&tag=100&indpos=1st&ind=1&subfld=c&username=yourusername&password=yourpassword>



The pass would link to a hit list of RDA instructions relevant to the MARC field query, which can be seen here.

- For someone wanting to link to instructions on describing illustrative content of a book, create an URL based on MARC field 300 and subfield b. The link would look like this—

<http://access.rdatoolkit.org/?encode=marc&rec=Bib&tag=300&subfld=b&username=yourusername&password=yourpassword>

The screenshot shows the RDA Toolkit interface. The top navigation bar includes 'RDA', 'TOOLS', and 'RESOURCES'. The main content area is titled 'MARC to RDA' and displays search results for 'MARC 21 Field Tag: 300 Subfield Code: a'. The results list several RDA elements with their descriptions:

- RDA Element: Extent**: The number and type of units and/or subunits making up a resource.
- SubElement: File Size**: The number of bytes in a digital file.
- RDA Element: Video Characteristic**: A technical specification relating to the encoding of video images in a resource.
- RDA Element: Font Size**: The size of the type used to represent the characters and symbols in a resource.
- RDA Element: Duration**: The playing time, running time, etc., of the content of a resource. Duration also includes performance time for a resource containing notated music or notated movement...
- RDA Core Element: Extent**: Extent is a core element only if the resource is complete or if the total extent is known. Record subunits only if readily ascertainable and considered important...

Below this, the results for 'MARC 21 Field Tag: 300 Subfield Code: b' are shown, listing:

- RDA Element: Sound Content**: The presence of sound in a resource other than one that consists primarily of recorded sound.
- RDA Element: Sound Characteristic**: A technical specification relating to the encoding of sound in a resource.
- RDA Element: Sound Content**: The presence of sound in a resource other than one that consists primarily of recorded sound.
- RDA Element: Illustrative Content**: Content designed to illustrate the primary content of a resource.
- RDA Element: Layout**: The arrangement of text, images, etc., in a resource.
- RDA Element: Base Material**: The underlying physical material of a resource.

The pass would link to a structured hit list of all the RDA instructions relevant to the MARC field 300 and its subfields, which can be seen here.