



MARS 2.0 Authority Control

Condensed Planning Guide



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About This Guide

SCOPE OF SERVICES

The MARS 2.0 Authority Control Planning Guide from Backstage Library Works explains the range of solutions available through our MARC record services:

- Authority Control
- Current Cataloging & Notification
- Bibliographic Record Validation & Cleanup
- Reports: Standard, Optional, Customized
- RDA Enrichment
- Remaster, Manual Review, TOC Enrichment

PLANNING GUIDE

This guide is also freely available on the MARS Authority Control website:

<http://ac.bslw.com/mars/guide>

The information contained within this guide should be shared with cataloging managers and system managers. You may also want to share it with your local system representatives.

As our fuller planning guide is nearly 180 pages, we wanted to create this condensed version to give you a taste of what our processing can accomplish for your records while also providing the defaults for those options.

At your service,

The MARS Authority Control Team



Introduction

OVERVIEW

Our Authority Control service provides a variety of benefits that enhance your patron access by improving heading consistency within your catalog as well as with national-level systems like Library of Congress Subject Headings (LCSH).

This guide represents a condensed version of our larger [planning guide](#). Our default and most popular choices are discussed in this guide.

If you have questions or require more in-depth answers, please view our larger guide. The wiki links in each step refer to the larger guide's corresponding wiki entries .

SIX STEPS

The Authority Control service consists of these six steps:

1. **Database:** Data exchange format specifications
2. **Cleanup:** Standard changes made to the bibliographic file
3. **Matching:** Access point matching against authority records
4. **Output:** Bibliographic & authority file distribution
5. **Reports:** Format and layout options for reports
6. **Ongoing:** Master authority file updates and new bib processing

At the end of this condensed version, we also list a few of our optional services which may be of interest to you.

ONLINE PROFILE SUPPORT

As you look through the planning guide and read over the profile steps, you may have questions. We remain available to assist you as you fill out the online profile.

ILS SUPPORT

Your ILS vendor representative may be a valuable source to consult in conjunction with these specific steps in the profile guide:

- Step 1.1 - Record format (MARC-8 vs UTF-8)
- Step 4.1 - All bibs in one file or chunks of records instead
- Step 4.3 - Matching authorities in one file or separated by type (LC, NLC, etc)
- Step 4.4 - Authorities combined or separated by usage (name, subject, etc)

Notes



Step 1: Database

1.1 - RECORDS UPLOADED TO BACKSTAGE WIKI

Nowadays files come in many different flavors: text, CSV, MARC, MARC XML, ONIX, etc. Our Authority Control system can convert these types of files to your desired final format.

Typically, we process & output in MARC format, but we also realize that not every library or ILS can necessarily export records in MARC. Let us know if you would prefer we output in something other than MARC format.

Sometimes files are also comprised of mixed-formats: MARC-8 and UTF-8. MARS 2.0 can process mixed files and return in a singular file format instead, be it MARC-8 or UTF-8, without loss of important information (e.g., diacritics, etc).

If no preference is given, our system will output records in **decomposed UTF-8** format, though we can change this to whatever format works best with your ILS.

The default is to send the records back in the same format as how they arrived.

1.2 - RECORDS DELIVERED BY BACKSTAGE WIKI

<http://ac.bslw.com/mars>

Our website offers our clients a way to interact directly with their files and profiles. In fact, profiles can be filled out entirely online and updated at anytime, while also allowing for specific customizations in key areas of the profile.

In addition to the online profile, clients can directly upload & retrieve files through the **website interface**. Each file uploaded becomes a **job** at Backstage. Each job is then tracked from start (file upload) to finish (file retrieval) and remains online for at least one year.

This ensures files are available for any potential troubleshooting issues, as well as letting clients choose the time to download the results.

However, Backstage also recognizes that some libraries already have automated scripts in place to handle file upload/retrieval. Therefore, we can set each client up with a specific FTP server location to perform these automated actions, upon request.

The default is to use the website as the file upload / retrieval mechanism.

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Notes

Step 2: Cleanup

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Notes

OVERVIEW

[WIKI](#)

MARS 2.0 makes changes in over **100 different MARC fields** within your bib record. Our cleanup service updates many elements in MARC bib records to conform with current MARC21 standards and AACR2 formatting, providing increased consistency within your bib records.

The level of MARC update is entirely configurable by you and your staff. By default, we perform all of the updates to your MARC bib records. Or, we can only perform the updates you specify. In the end, the update processed is tailored to your expectations of what you would like to see happen within your bib records.

The default is to send the records back in the same format as how they arrived.

2.1 - VALIDATE 010, 020, 022, 034 FIELDS

[WIKI](#)

MARC fields that are incorrectly formatted often cause user searches to fail and prevent items in the collection from being included in the system indexes. MARS 2.0 can clean up **spacing, hyphens, prefixes, and suffixes** of the 010, 020, 022, and 034 fields.

2.2 - LEADER & FIXED FIELD UPDATES

[WIKI](#)

MARS 2.0 provides a variety of updates and corrections to values in the Leader and Fixed fields (006, 007, 008). These updates mainly consist of changing one value to another based on the **type of record format** (book, map, etc.).

2.3 - FIELD UPDATES & DELETES

[WIKI](#)

Changes to the MARC21 communications format have made many fields obsolete. If one field has been replaced by another, the update changes the tag number. If the field has been made obsolete without being replaced, the field is simply deleted from the bib record. There are **22 fields that are changed** to another field; **16 fields are removed** from the bib record: 009, 011, 087, 091, 241, 302-304, 359, 517, 582, 652, 680-681, 683, 851.

2.4 - SUBFIELD UPDATES & DELETES

[WIKI](#)

Many subfields are no longer valid within certain fields and so the subfield marker is changed from one (invalid) to another (valid). There are also a number of subfields which no longer have any corresponding use in the bib record and these are removed as part of the MARS 2.0 cleanup. **Relator term entries are included in this step.** There are **15 subfields changed** to another subfield, with **24 fields** that have obsolete subfields removed altogether.



Step 2: Cleanup

2.5 - INDICATOR VALUES WIKI

In order to bring the indicators (both first & second) in line with current MARC21 standards, many fields in this step have their indicators changed from one value (invalid) to another (valid). There are **32 fields with the first indicator** updated and **26 fields with the second indicator** updated.

2.6 - FIELD CONVERSIONS & ADDITIONS WIKI

A number of MARC conversions are complex than simply changing a tag or subfield code to the current value. Some fields, such as 007, often need to be added to a record based on other data values within the record itself.

Step 2.6 adds missing format data, missing subfield data, and makes complex field conversions. There are **12 fields** in this step that are affected.

2.7 - INITIAL ARTICLES & FILING INDICATORS WIKI

MARS 2.0 processing supports the standard practice of omitting most initial articles even if a non-filing character indicator has been defined for this field. Initial articles are retained, and the filing indicator correctly set, for **245 and 440 fields**.

You can also choose to have corporate heading fields checked for initial articles. This applies to **X10 \$t fields**.

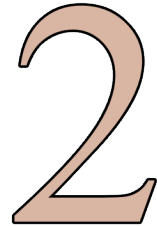
There is also an extensive list of each initial article with its associated filing indicator, sorted by language.

2.8 - GMD STANDARDIZATION WIKI

MARS 2.0 also updates obsolete General Material Designations (GMD) to the current authorized form, and corrects most incorrectly spelled GMD variants. If brackets are missing, these can also be added in this step.

The **AACR2 Standard Terms Table** (Level 1) is used by default in this step. However, either the **Common Practice Terms Table** (Level 2) and / or a custom GMD list may also be used, depending on the preference of you and your staff.

Our separate RDA enrichment profile also addresses further options for GMDs, namely adding corresponding 336 (Content), 337 (Media), and 338 (Carrier) fields. The same kind of customization and personalized settings are available for those profile options as well.



Notes

Horizontal lines for taking notes.



Step 3: Matching

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Notes

OVERVIEW

[WIKI](#)

The first phase of MARS 2.0 comprises a battery of routines that update and correct individual and contiguous pairs of subfields. **These corrections are based on a number of subfield update tables**, maintained by Backstage authority librarians.

MARS 2.0 uses a number of subfield correction tables to correct common errors in LC subfields. Direct-to-indirect geographic & chronological conversion, obsolete subdivision deletion, as well as numerous field punctuation cleanup is done in this step.

3.1 - GENERIC NAME HEADINGS

[WIKI](#)

Name headings are defined as bib tags 100 (along with 240/243), 600, 700, and 800. Death date and other information in the bib heading date will always be considered. A name heading **with a death date will not match** against an authority heading **without one**. A generic name heading is a see-reference (400) that is comprised of **only \$a**.

When **multiple matches occur** on personal name headings, the bib heading **will not be replaced** with any of the matches as the program cannot know which match to take over the others. It will, however, end up on one of our standard reports (Near Match, Un-matched Headings, etc).

The default is to match & flip generic name headings when found.

3.2 - TAG FLIPPING

[WIKI](#)

Sometimes bib records have been generated with the information appearing in the wrong tag (e.g., **650 \$a Italy** instead of **651 \$a Italy**). There are a number of tag-flipping rules that the program takes into account during this step.

The default is to match & flip 6XX fields between each other.

3.3 - PARTIAL MATCHES

[WIKI](#)

Partial matches are found for subject headings in which not all of the heading has been authorized. Frequently, enough of the subject heading has been validated to warrant **changing the 2nd indicator to reflect the matching database found**.

The default is to flip 2nd indicators for partial matches.



Step 3: Matching

3.4 - SPLIT HEADINGS

WIKI

When a heading splits and becomes two or more headings, MARS 2.0 can either replace the obsolete heading in the bib record with all of the new headings, or leave the old heading in the record.

Many libraries find that patrons have difficulty distinguishing between the new variants of a split heading and **often search for the concept under the incorrect term**. Therefore, most libraries choose to have all split headings inserted into the bib record.

The default is to split headings when possible.

3.5 - SERIES PROCESSING

WIKI

Standard MARS 2.0 series processing can either:

1. **Current:** convert all series to 490-1/8xx or 490-0 fields, leaving no 440 fields
2. **Former:** convert all series to 490-1/8xx, 490-0, or revert back to 440 fields

Current expands all series headings to either **490-1/8xx** pair for series that are different / identical, or **490-0** for series that are untraced.

Former creates **490-1/8xx** pairs for series that differ, **490-0** for series that are untraced, and reverts back to **440** for series that are identical.

Copy-all will add a corresponding 8xx field for every series 4xx found in the bib record. So, a 410 would have an 810 added, while a 490-0 would have an 830 added. **Custom** series processing can accommodate a large number of different scenarios for your series headings, depending on your expectations & instructions.

The default is to convert 4xx to 490-1/830 or 490-0, leaving no 440 fields.

3.6 - SUBDIVISION UPDATES

WIKI

When a heading in a bib record matches an authority, MARS 2.0 can change **\$x** to **\$v** as part of the matching process. **Existing \$v codes can also be preserved**, if desired.

The default is to both protect existing \$v and convert \$x to \$v when found.

3.7 - CHILDRENS SUBJECT MATCHING

WIKI

MARS 2.0 can match your Childrens headings (6xx 2nd indicator 1) against either LC Child, LC Adult, or both databases, **in the order you specify**. Childrens headings can also be ignored or removed entirely.

There are just over **1,000** Childrens authorities, which are updated weekly by LC.

The default is to ignore Childrens headings during matching.



Notes



Step 3: Matching

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3.8 - MESH MATCHING

WIKI

MARS 2.0 can match your MeSH headings (6xx 2nd indicator 2) against either MeSH, LC, or both databases, **in the order you specify**. MeSH headings can also either be ignored or removed entirely.

There are over **580,000** MeSH authorities, which are updated annually by NLM.

The default is to ignore MeSH headings during matching.

3.9 - CANADIAN MATCHING

WIKI

MARS 2.0 can match your Canadian headings (6xx 2nd indicator 5) against either Canadian, LC, or both databases, **in the order you specify**. Canadian headings can also either be ignored or removed entirely.

There are over **630,000** Canadian authorities, which are updated monthly by NLC.

The default is to ignore Canadian headings during matching.

3.10 - LOCAL BIB SUBJECT MATCHING

WIKI

MARS 2.0 can match local bib headings against (1xx, 4xx) headings in **any national authority file**. Typically, these local bib headings are 6xx with 2nd indicator 4 or 69X fields. Local headings can also either be ignored or removed entirely.

The default is to ignore Local Bib headings during matching.

3.11 - GENRE FORM MATCHING

WIKI

MARS 2.0 can match your form/genre headings (655 fields) against a variety of genre authority files: LCGFT (800 records); GSAFD (160 records); AAT (35,000 records); MESH (616,000 records); RBMS (1,600 records); TGM (7,900 records).

The default is to process LCGFT headings during matching.

3.12 - LOCAL NOTES FIELDS IN AUTHORITY RECORDS

WIKI

MARS 2.0 can retain local notes with \$5 for authority records submitted by the Library.

The default is to not retain local authority notes.

3.13 - LOCAL AUTHORITY MASTER

WIKI

Sometimes a library has local authority records with local rules governing their relationship to the bib record, where the library **prefers their version instead of the LC version**. A heading that matches the library's version will not flip to the LC version. Please provide Backstage with a copy of these local authority records.

The default is to not retain local authority notes.



Step 4: Output

4.1 - BIBLIOGRAPHIC FILE OUTPUT WIKI

Choose to receive **all** or **changed only** bibliographic records once processing is complete.

The default is return all bibliographic records upon completion of project.

4.2 - BACKSTAGE CHANGE STAMP WIKI

MARS 2.0 can stamp each bib record in order to designate which records have either gone through Backstage or been changed / updated during processing. Choose whether to apply to **all** or **changed** records only: 040 \$d UtOrBLW, 005, 9xx MARS, etc.

The default is to add 040 to all records and add 005 field on changed records.

4.3 - AUTHORITY SEGMENTATION BY TYPE WIKI

Determine, with the help of your ILS representative, whether to receive your authority files **separated** or **combined** into one file: LC, NLC, MeSH, Childrens, etc.

The default is determined after consulting with your ILS representative.

4.4 - AUTHORITY SEGMENTATION BY USAGE WIKI

Determine how to receive your **usage authorities**: 2 files (names, subjects); 3 files (names, subjects, series); or some other combination that makes sense for your system.

The default is determined after consulting with your ILS representative.

4.5 - AUTHORITY RECORD SELECTION CRITERIA WIKI

Choose whether to receive all matching authority records or only **interesting** authorities. MARS 2.0 defines authorities as interesting if one or more of the following fields exist: 260, 360, 4xx, 5xx, 64x, 66x, 678, 680-682, or 688.

The default is to supply all authority records that match your bib headings.

4.6 - HIERARCHY WIKI

Authorities can be delivered that represent **each level of hierarchy** or **full headings only**. Some systems will not index authorities unless it is the full heading authority.

The default is to supply all levels of hierarchy for authority matches.

4.7 - AUTHORITY RECORD CLEANUP WIKI

Library of Congress continues to make updates to its authority records, including **punctuation** and **indicator changes**. However, not all of the LC authority records have been updated yet and fields such as **local LC notes** (9xx) or **obsolete 2nd indicators** may cause loading or indexing problems for your ILS.

The default is to not clean up the authority records prior to delivery.



Notes

Horizontal lines for taking notes.



Step 5: Reports

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Notes

OVERVIEW

WIKI

MARS 2.0 provides a number of default or standard reports that are part of the process and **do not incur any additional cost**:

R00	Near Match
R01	Statistical Summary
R06	Partially Matched Headings
R07	Unmatched Headings
R09	Possible Invalid Tags
R10	Heading Matches Multiple Authorities
R11	Heading Usage Not Authorized
R13	Suspicious Filing Indicators
R14	Possible Leading Articles
R17	Split Headings, Left Unchanged
R25	Unrecognized \$z
R31	Split Headings
R32	Tags Flipped

In addition, there are over 45 optional reports to choose from (some of which are shown on the next page). There is an additional cost involved for running each optional report, depending on the number of optional reports chosen.

Reports are distributed in both HTM and XLS formats. The Excel versions of the reports are relatively new, though they typically include editing, sorting, and modification capabilities that the HTM reports may lack.

The Near Match report, in particular can be very useful for your review. The report lists the original unmatched heading plus the two nearest matches our algorithm could find. The XLS version establishes a threshold of 75% that must be met before a near match will be displayed, helpfully screening out potential headings that may not be worth your time investigating further.

The default is to deliver all standard reports listed above.

5.1 - REPORT FORMAT

WIKI

Reports can be listed with each individual bib control number as a reference (**expanded**) or with only the number of records associated with that heading (**collapsed**):

Expanded

oem47933106 650_0 \$a Keith, Millie (Fictitious character)

Collapsed

8 records 650_0 \$a Keith, Millie (Fictitious character)

The default is to display the bib ID as a reference in the reports (expanded).



Step 5: Reports

5.2 - OPTIONAL BIB REPORTS WIKI

Some libraries are interested in specific kinds of reports, which MARS 2.0 offers, but are considered more exact in their reporting. Libraries can choose up to 3 additional optional reports at no extra cost, though any number after that will incur **an added cost per report per run**.

Here is an example of some of the more popular optional reports:

- R30 Updated Headings
- R33 Subdivisions Flipped
- R35 Minor Headings Changed
- R36 Leading Article Deleted
- R37 Filing Indicator Changed
- R39 Subfield Code Changed from \$x to \$v
- R86 Linked Field in \$6 Changed Heading
- R87 Music Uniform Title \$t Match

If you find you are curious as to what these optional reports may look like prior to committing to receiving 3 or more, please contact your Backstage project manager. We can include the optional reports you are interested in either on your next sample run or your next scheduled regular processing so you can see whether they will be a good fit going forward.

The default is to not provide any optional reports.

5.3 - AUTHORITY CHANGE REPORTS WIKI

Authority change reports provide side-by-side views of national authority records which have been updated, replaced, or deleted. The older version is shown on the **left** and the updated record (if any) is shown on the **right**.

If any byte within an authority record has changed due to updates from the national agency, that record will be included as part of the set of change reports returned. This includes changes in **punctuation, diacritics, and indicators**.

MARS 2.0 also offers the option to exclude these kinds of insignificant changes, upon request. While the changes would be excluded from the delivered reports, the authorities with these insignificant changes would still be delivered to you.

Backstage has also recently created an XLS version for the change report which lists only the 010 (LCCN) and 1xx heading. This may be useful during times when your change report contains many hundreds or thousands of entries.

The default is to include all changed authorities in the change reports.



Notes



Step 6: Ongoing - Authorities

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OVERVIEW

WIKI

MARS 2.0 Authority Notification Service keeps your authority files up to date by notifying you when authority records have been updated, replaced, or deleted, and supplying you with the updated records for overlay into your system.

New authorities represent either matches on previously unmatched bib headings, or replacements for existing authorities already received.

Changed authorities should already exist in your catalog, but will need to be replaced by the authorities we deliver.

Deleted authorities should be removed from your catalog, in order to prevent the possibility of blind references appearing in your system.

6.1 - AUTHORITY UPDATE FREQUENCY

WIKI

The frequency of running Notification Services should be based on the following:

Frequency

How often does your authority file need to be updated?
Update frequencies: weekly, monthly, quarterly, semi- or annually

Resources

Can staff retrieve & load authorities at the frequency you choose?
Can change reports be delegated to staff for further review?

Cost

Does it make financial sense to switch to more frequent updates?

The default frequency is determined by the Library.

6.2 - NEW & CHANGED AUTHORITIES

WIKI

Determine how your organization prefers MARS 2.0 to distribute the new and changed authorities that are created during the **Notification** service.

Combined groups both new and changed authorities into one file.

Separated delivers new authorities in one file and changed in a separate file.

The default is determined by the Library.



Step 6: Ongoing - Authorities

6.3 - DELETED AUTHORITY RECORDS WIKI

Authority updating often identifies a small number of authority records which have been removed from a national authority file by the appropriate national library. These are usually records that have been **replaced by a different record**.

The most appropriate distribution of these records depends on the capabilities of your local system.

MARS 2.0 can provide a MARC record as well as a report of the deleted authority records. The record status is set to **d** (LDR-05) for all deleted authority records.

The default is determined by the Library.

6.4 - OLDER FORMS OF HEADINGS WIKI

MARS 2.0 can update authorities where **the older form of the heading** is no longer included as a 4XX. As national authority files are updated, it becomes increasingly likely that older, unmatched bib headings will now find a matching authority against which to update.

Processing can also hide the older form of the heading from patrons and exclude generic names from being included.

The default is to add older forms of headings to delivered authorities.

6.5 - LIBRARY COLLECTION, ADDS & DELETES WIKI

Sometimes you and your staff may download individual authority records related to a bibliographic record in your catalog. You may also remove bib records, which in turn could mean **the last authority tied to that deleted bib record** is no longer linked to any other bib heading in your catalog.

When you send us a copy of these added or deleted authority records, we can apply them to our copy of your master authority file. This ensures that any updates we send out will reflect the authorities that currently exist in your authority file.

If possible, it is also a good idea to delineate how the adds or deletes should be applied (e.g., name.del will tell us to delete only the name usage of an existing authority that we have a copy of in our database.)

The default is to apply any authority adds or deletes that are submitted.

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Step 6: Ongoing - Bibs

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Notes

OVERVIEW

WIKI

The focus of the Current Cataloging Service is to incorporate Authority Control for your new bibliographic records into your regular cataloging workflow. There are two components to this service:

- Delivery of bib records upgraded by MARS 2.0 Authority Control
- Delivery of new authority records not previously distributed to you that match headings in the bib records

MARS 2.0 will perform the same (unless otherwise instructed) processing on your new bibs as requested for the original (fuller) file. All files can be **submitted, tracked, and returned via our website interface.**

6.6 - NEW BIB UPDATE FREQUENCY

WIKI

Often a library is uncertain how often to send new bibs for processing. A good measurement for determining the frequency is to define how often your library creates or brings in **5,000** records.

If you are generating 5,000 new records a quarter, then we would suggest to send us your records quarterly. If you are producing 5,000 new records every month, then you may wish to send us your records more frequently, such as monthly or weekly.

The default frequency is determined by the Library.

6.7 - NEW & CHANGED AUTHORITIES

WIKI

Determine how your organization prefers MARS 2.0 to distribute the new and changed authorities that are created during the **Current Cataloging** service.

Combined groups both new and changed authorities into one file.

Separated delivers new authorities in one file and changed in a separate file.

The default frequency is determined by the Library.



OPTIONAL SERVICES

AUTHORITY REMASTER WIKI

To remaster an existing authority file, MARS 2.0 will match your file against the latest national authority files and return the updated authority records to the Library. This will bring your entire authority database up to current national standards and **allow Backstage to perform ongoing Authority Control** work on your catalog.

MANUAL REVIEW WIKI

MARS 2.0 Manual Review is performed by experienced backstage staff librarians and technicians. It results in a catalog of records with **fewer errors and inconsistencies** than machine processing alone may be able to provide.

TABLE OF CONTENTS ENRICHMENT WIKI

Backstage has partnered with both **YBP** and **Bowker** (separately) to provide enriched content service to your bib records. YBP’s TOC database contains imprints dating back to 1991, with contents of 40,000 titles added annually. Bowker’s database provides an opportunity to perhaps match against this first, then supplement the remainder against YBP’s more comprehensive service.

BIBLIOGRAPHIC UPDATE SERVICE WIKI

When Notification Services run on your database, our Bibliographic Record Update Service will also run. Backstage will **update or reconcile** your bibliographic database at the same time as we update your authority file, delivering updated bibs and new authority files.

RDA ENRICHMENT WIKI

Backstage was originally part of the RDA testing phase back in late 2010. Since then, we have taken the initiative to build out a separate profile and set of options dedicated to enriching (pre) AACR2 bib records with RDA elements and validating existing RDA bib records.

Similar to this profile, each part of the RDA profile can be customized to perform as little or as much as you desire to see within your catalog. MARS 2.0 utilizes **over 600 rules** for addressing GMD to CMC conversions, so that the most specific set of 336, 337, and 338 fields are added that correspond with 245 \$h GMD data within your records.

Moreover, we provide conversions from **260 to 264**, **\$e** relator terms to **\$4** relator codes, as well as **\$4** relator codes to **\$e** relator terms. Updates & abbreviations are addressed separately for descriptive fields vs access points.

For more information about RDA enrichment processing, please contact your Backstage project manager.

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