

Cataloging/Metadata Team Authority Control Subgroup Report – Nov. 29, 2016

Authority Control Subgroup Members

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Navigating this report

Because this report contains much of the data collected in addition to recommendations with their supporting text, links can help you navigate the report. Choosing an item from the Outline column on the left side of the screen will let you jump to that section. If you right click on one of the blue links in the Contents section below, and then choose Open Link, you will also move to the selected section of the report.

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Introduction

The Authority Control Subgroup was charged on September 16, 2016 with making recommendations related to ongoing authority control as the University System of Georgia

(USG) moves to Alma and Primo as its new library platform. The Subgroup members were then selected, and they both evaluated current authority control functionality in Alma and compared that functionality with the services provided by authority control vendors Backstage Library Works, MARCIVE, Inc., and Library Technologies, Inc. (LTI). This approach helped the Subgroup see in what areas Alma adequately supports authority control maintenance and where Alma currently falls short of expectations.

As mentioned, this report is focused on ongoing authority control, covering maintenance of access points after resources are cataloged. Issues of researching, assigning, and linking the correct access points during the cataloging of a resource are not covered in this report. In addition, this report does not identify specific day-to-day authority control workflows.

Recommendations in this report are intended to identify the best options open to the USG and to optimize automated and manual authority control work within our new collaborative consortium environment. Each recommendation is supplemented by an analysis and/or presentation of the data points that led to the recommendation. In one case, alternative recommendations are presented.

Summary of Subgroup Activity

Data was collected by reading through available Alma, Backstage, MARCIVE, and LTI documentation, authority control related postings from Alma-L, and the Orbis Cascade Alliance Authority Control Subgroup Phase 1 and 1B reports. The subgroup members also contacted vendors directly to fill in knowledge gaps, contacted libraries using Alma in conjunction with one or the other named vendors with relevant questions, and contacted libraries who are relying entirely on Alma and varied tools for managing authority data with questions relating to working within the Alma platform. In addition, a short survey of GIL Libraries institutions was conducted to gather information about member expectations in the area of authority control in Alma.

To facilitate data comparison and evaluation, the Subgroup compiled a detailed spreadsheet covering 79 questions about authority control capabilities. The spreadsheet includes comments by and conclusions of the Subgroup members on each topic and is included as Appendix B.

Executive Summary

The Authority Control Subgroup recommends that:

1. the GIL Libraries hire a Network Zone level Authority Control Coordinator with whom member institutions will collaborate;
2. the bibliographic records migrated to Alma be sent to a vendor for backfile processing;
3. the consortium could rely entirely on Alma authority control functionality or contract with an outside vendor to support ongoing processing;

4. GIL Libraries run both the Link BIB headings and Preferred Term Correction batch jobs available in Alma;
5. GIL Libraries define listed authority thesauri for Alma implementation;
6. GIL Libraries request ExLibris to configure and activate local authority capabilities for interested institutions;
7. the Georgia NACO Funnel should continue to be supported;
8. a general overview of Alma authority control functionality and problems be composed for the information of GIL Libraries staff;
9. the Cataloging Team investigate “Publishing headings enrichment data to Primo” an October 2016 release.

Recommendations and Body of the Report

Recommendation 1. Network Zone level staffing needs:

A. Authority Control Coordinator. GIL Libraries should create and fund a full time librarian level position tasked solely with coordinating and conducting Network Zone authority control activities and ensuring related metadata integrity.

B. Individuals from GIL Libraries member institutions should be designated to work in collaboration with the Authority Control Coordinator in a consortium-wide approach to performing efficient, ongoing authority control.

Authorities and access points are the catalog’s linked data and provide the structure that helps users search effectively and efficiently even when they are doing keyword searches. Individual USG libraries were never able to effectively keep up with MARCIVE authority control reports and other authority control changes in Voyager such as the global change queue. With very limited staff support, each institution’s library was responsible for making changes in their own local catalog.

Alma has a Network Zone we will all share, and authority changes made once in the Network Zone will benefit all of GIL Libraries. However, identifying what authority changes need to be made in our very large Network Zone and by whom will put an even larger strain on individual consortium libraries unless someone is in place to identify and set priorities and further coordinate activities. Centralizing many aspects of authority control in Alma will promote statewide efficiencies, both minimizing the time spent by individual member institutions performing authority control and allowing most libraries to eliminate this element from their workflow. **Without this position, our consortium cannot hope to effectively manage authority control functions in Alma and would necessarily revert to a piecemeal approach to access**

point maintenance. This holds true even if we were to choose to work with an outside vendor.

Related Member Survey Responses

Those taking the survey sounded common themes supporting a Network Zone level focus for authority control and some institution or person responsible for most access point maintenance. Here are a few representative comments.

“Since most of our records will come from the NZ, I'm wondering if it would be a good idea to handle authority control at the NZ level.”

“It seems reasonable to me that most routine access point maintenance might be handled at the network level. Institutions would need a means to report incorrectly matched access points or other issues.”

“It would be good to have an Authorities coordinator (with an understanding of authorities and bibliographic records) who could also do some programming to run batch jobs.”

“Some of us don't have the time or staff for time consuming authority updates.”

“I'd be very happy for individual institutions to have less responsibility doing routine AAP maintenance as long as we can report any issues we might find.”

Needs that justify an Authority Control Coordinator

Authority reports in Alma are currently unwieldy, containing much duplication and also extraneous information. Options for filtering data from the reports within Alma are limited. The Authority Control Coordinator will identify priority access point problems at the Network Zone level, using Excel or other tools to break down data into more useful categories as needed and distribute newly created reports in such a way that the same headings are not being reviewed by multiple people. This would enable designated individuals within GIL Libraries to collaboratively review problematic and unmatched headings once and only once.

In addition, gaps and limitations in Alma's automated authority control processing leave many needed changes either unaddressed or only partially completed. The Coordinator can monitor the database looking for access points that fall into known problem categories, fixing such problems as time and priorities allow.

Using normalization rules, application program interfaces, and other tools such as MarcEdit and Excel, the Authority Control Coordinator will identify other existing problems in the database and use batch processing to make global changes as needed. Also, in addition to current access point changes, legacy data migrated from Voyager will have unresolved authority problems, even if the consortium back files are processed.

Alma's two automated authority control jobs can be either set to run each day or turned off. The Coordinator would have the perspective to understand problem situations which might arise that would necessitate turning off the jobs for a period of time and be able to take charge of informing member institutions of the reasons for such delays in daily processing.

The Authority Control Coordinator would be able to proactively test new Alma functionality in the premium sandbox, evaluating what enhancements actually accomplish and which can be used safely and effectively in our Network Zone.

The Coordinator would also be able to evaluate the need for outside vendor support if ExLibris does not make expected and necessary progress toward robust authority control or if serious problems develop with existing functionality. If ExLibris does continue to improve, the Coordinator's experience will be crucial to making a final decision to rely entirely on Alma and GIL Libraries institution support.

The position would also serve as a resource for the entire consortium in the area of authority control. In that role, the Coordinator could accept suggestions for changes, and GIL Libraries would have a central person to whom problems could be reported. The Coordinator could post questions to the Alma listserv and consult with other Alma institutions on behalf of our consortium. The position would facilitate statewide solutions to problems, give individual advice, create ExLibris salesforce cases, and develop authority control enhancement requests. The Coordinator can also follow listservs such as Persname-L, Series-L, PCCLIST, and Alma-L to keep informed about general and specific access point issues on behalf of GIL Libraries.

In addition, the Authority Control Coordinator could be a channel for NACO and SACO requests. Individuals could route suggestions for names, corporate bodies, and series that it would be especially helpful to have established to the Coordinator who could keep a database of these requests. USG librarians trained to create authority records within the NACO and SACO program would then have a central point for information on requests and would not be overwhelmed by individual requests. Individual library's staffing levels will necessarily limit NACO and SACO contributions, but central coordination together with the Georgia NACO Funnel will enhance GIL Libraries ability to contribute new authority records.

Support

It must be recognized that authority control will be a full time and ongoing commitment for the Coordinator. Our Network Zone will be changing all of the time, and authority control is an catalog maintenance activity which is never completed. In addition, the ALMA platform and our Network Zone data comprise a new and challenging environment in which to work. The Authority Control Coordinator should be provided with opportunities for ongoing training and with additional support from individuals from GIL Libraries member institutions.

Basic Skills Desired

- Cataloging experience which includes assigning subject headings and providing name and series access. NACO experience preferred.
- Experience working with database management as it relates to authority control.
- Experience manipulating data with Excel, MarcEdit, and other tools.
- Experience with batch processing.
- Facility in problem solving and communicating clearly with others.

Recommendation 2. Back file processing:

When the GIL Libraries Network Zone has been created after our final migration, Network Zone records should be processed by an authorities vendor to improve access to our legacy data as much as possible. Consider having the chosen vendor add \$0 originating system ID for a specific authority record to our access points.

The Subgroup highly recommends authority control processing of our newly migrated Network Zone records to improve the percentage of Alma matching on our legacy records' access points. Though all access points may not be matched and/or corrected in the authority vendor processing, this processing would give the catalog and access point maintenance a fresh start, providing 100 percent of our consortium's bibliographic records with the most accurate access points possible as we begin working in Alma.

Also, vendor processing can add a \$0 originating system ID for a specific authority record to bibliographic access points. The Alma Link BIB Headings job can then use that specific information to update records, rather than relying on matching text strings. Even if we do not choose to activate \$0 matching in Alma at this time, linking of this type is one of the improvements in authority control that holds a great deal of promise for future access development.

Before the move to Voyager, the USG allowed system library records to be processed by MARCIVE to improve database quality. And, while we have continued to utilize the services of MARCIVE to process current cataloging, many changes to access points have occurred that may not have been fixed in our individual institution catalogs. Data reports supplied by MARCIVE require time consuming, intensive manual intervention in Voyager. And Voyager's global change queue has significant limitations, again requiring intensive intervention. There is no doubt that Network Zone records would benefit from a new round of processing.

In addition, during migration there are no bibliographic access point changes made from variant, invalid access point forms to the preferred, valid access point. Such changes will only be made if the record with the variant access point is saved again in Alma in the future. If we relied on this method, records would inevitably only be updated in a haphazard manner, if at all.

If GIL Libraries does not send our Network Zone records for vendor processing, resolving issues arising from out of date legacy access points will be an immense burden for the Authority Control Coordinator and member institution staff. Moving forward in Alma will claim enough time without having to look back and isolate problems of our past one at a time.

Member survey comments

Respondents are anxious about the quality of our access points, and hope that matching, linking, and updates of access point and authority records in Alma are “accurate, reliable, proper, timely, and correct.” This emphasis on the integrity of our data is the chief concern of most respondents to the question “What are your chief Alma authority-related concerns?” Vendor backfile processing would address some part of this concern while the choice made in Recommendation 3, below, will also be important.

Recommendation 3. One of the following options should be chosen.

1. GIL Libraries should rely entirely on Alma authority control functionality, evaluating this choice after working within the system and determining if outside vendor assistance is required after all. If ExLibris does not make expected and necessary progress toward robust authority control or if serious problems develop with existing functionality, contracting with an outside vendor will remain an option.

2. GIL Libraries should supplement Alma authority control by contracting with another vendor. At the end of a year or other adequate period of time, the Authority Control Coordinator, in conjunction with a small committee of additional catalogers, should evaluate the progress which ExLibris has made enhancing authority control functionality. The consortium should retain outside vendor support as long as it is necessary to the smooth maintenance of access points in Alma.

Compilation, comparison, and analysis of data concerning authority control functionality in Alma and provided by MARCIVE, Backstage, and LTI have uncovered areas of concern. The following group of Alma authority control functionality gaps and limitations clearly indicate that Alma does not yet have a comprehensive and effective approach to maintaining current, accurate access points.

Alma Gaps and Limitations - Including Subgroup Comments

1. Synchronization of vendor authority file and actual authority files from sources is not optimal. The University of Minnesota notes that Alma is not as quick to load new and updated authorities as some other agencies. In their experience there is a delay of two weeks or so from when the source file is updated. Comments: New and revised authority records do get loaded so that desired matching can occur, so this is not a serious flaw. There may be some temporary mixups if more up to date authority vendor updates do not find matches in the Community Zone authority files. Providing GIL Libraries institutions with information about this timing issue will help mitigate short term effects related to delayed linking and possible short term errors in linking.

2. The percentage of records matched/linked to authority records will be less than that of vendor matching, which is much more sophisticated. Among other things, authority control vendors normalize authority and bibliographic access points before matching, use various methods to deconstruct access points, develop their own cross-references to facilitate matching, and use the 781 field in geographic authority records to validate geographic subdivisions. Alma does nothing like this to improve matching. Comments: We will not have as many active hotlinks in Primo for patrons. An outside vendor would be able to fix/adjust access points, but they can't improve the actual linking on text strings within Alma; however, if the vendor has added the \$0 information with the originating system ID for a specific authority record in our bibliographic records, the Alma Link BIB Headings job can use that specific information to update records, rather than relying on matching text strings. Matching and linking would be improved.

3. During migration, only exact bibliographic text string matches to authority records are made. During migration there are no bibliographic access point changes from variant forms to the preferred access point. Such changes will only be made if the record with the variant access point is saved again in the future. Comments: Either of two approaches would help here. Automated outside vendor processing of backfiles after migration to Alma would fix the problem. Bibliographic record access points represented in authority records as a variant form would be changed to the 1xx preferred term values for 100% of consortium resources and those updated access points would then be available for matching through the Link BIB headings job. Another approach would involve running the Voyager batch job number 6. 'See' References with linked bib records report for the largest institution databases. Then manual changes would be made after migration based on the information generated. This approach would be exceptionally time consuming and would not address holdings unique to other member institutions in our consortium.

4. Alma is not able to match and link to authority records for all types of access points in the catalog. In particular, Alma does not match/link when the access point is:

- A 440 series field. This field is obsolete but valid older practice. Comments: There are options here too. An outside vendor could flip 440 fields to 490/8XX fields to resolve this. Or the Authority Control Coordinator could identify records with 440s for either manual or batch intervention. Or we could enter a salesforce case with Alma.

- A numbered series. When a series has numbering, the update process alters the spacing and punctuation preceding the number, resulting in links being broken or not matching to SARs. Comments: Data is corrupted by this punctuation manipulation. The University of Minnesota has an open salesforce case for this issue with a status set to pending release March 2017. If upgrade is made as predicted, this problem will be eliminated.
- Name/title split between the 1XX and 240 fields. Comments: Voyager wasn't able to link these either, so we are not losing access.
- Name/title which includes a subfield i indicating the relationship of the information in the field to the resource being cataloged. Comments: The University of Minnesota librarian consulted, said he would be filing a salesforce case. The Orbis Cascade Alliance has asked for clarification about this in case #00240866
- A personal name in a name/title access point when the full name/title access point is not represented by a NAR.
- 651 geographic subject field. While some matches are made, it appears that Alma does not look for matches to 651 place names in the LC Name Authority File, where many place names are established. By only searching in the LC Subject Authority File, many possible matches are necessarily missed. Comments: Long term we would gradually have invalid geographic headings. We could spot some instances through Alma reports and track some down through PCC/NACO sources. Would require manual intervention to address in Alma. Outside vendor would not be able to help since this relates entirely to Alma's current matching strategy. Could file a salesforce case.

5. Alma sometimes matches 490:0 series statements with authority records. This is always an error, as the 490 field merely shows how the series appears on the piece and is not intended as an access point. Comments: Since Alma currently doesn't change tags and indicators, the Authority Control Coordinator could identify 490:0s for manual correction. Some 490s may not have matching series authority records. UGA does establish SARs and could very gradually work on any 490:0s routed to that institution.

6. Alma automated authority control processes do not detect and change access point MARC tags, indicators, and subfields when needed. This means that all automated changes have to be reviewed to find cases where such changes, which can affect indexing and searching, need to be

made manually. Alma does provide a before and after access point record which facilitates the manual review. Problem areas include:

- Topical subject access points changing to name access points. This currently is very common as fictional, mythical, animal, etc. subjects are being converted to personal names. Example: “150 Eros (Greek deity)” changing to “100 0 Eros ꞑc (Greek deity)”
- Changes from direct to indirect (and visa versa) corporate access points. Example: Change from indirect access through the larger corporate body “110 1 Philippines. ꞑb Department of Agriculture. ꞑb Agricultural Machinery Testing and Evaluation Center” to direct access without the larger body “110 2 Agricultural Machinery Testing and Evaluation Center (Philippines)”

Comments: Outside vendor processing could be done for any bibliographic record sent for processing, but later changes in access points made after vendor processing would not be caught. Manual review and intervention would need to follow each Alma job.

7. Alma’s matching/linking of bibliographic access points is not optimal when the full text string is not represented by a full matching string in an authority record. Instead of removing one subdivision at a time and attempting to match the access point at each level, Alma removes all subdivisions at once and makes only one further attempt to match against the authority file.

Comments: Metadata is still fine; linking just isn’t as full as it could be. The Orbis Cascade Alliance has asked for clarification of this problem in case #00240866.

8. Related to number 7, the visual indication of what has been matched and linked is misleading. If only the subfield \$a for the basic access point without subdivisions is matched, the entire string appears to be matched. One has to follow the link to see what the actual valid part of the access point truly is. Comments: Alma and Primo linking would be misleading.

9. Alma is not able to validate subject subdivision usage separately from the entire access point string. Generally Alma does not match parts of a controllable string to authorities except for the first part--it may match and show a link to a topical authority for a "650 \$a topic \$z place" string, but Alma will only extend the match to include \$z if it finds a full matching "150 \$a \$z" string in the authority file. Sample issues include:

- Geographic subdivisions. Alma does not use the 781 field in place name authority records to recognize and validate subdivision usage in bibliographic records

- \$x - General subdivisions and \$v - Form subdivisions. Some of these subject subdivisions terms exist only in one way, as either \$x or as \$v. So you would expect those to be fixed if presented in the access point incorrectly. In other cases a subject term can be used both as \$x and as \$v, the \$x expressing “about-ness” or the subject nature of the term and the \$y indicating the form of the resource being cataloged. In this second case, the other vendors examine other parts of the bibliographic record to determine, if they can, the correct subdivision usage. Alma attempts no changes.

Comments: Vendor would fix or report. Might sometimes turn up incidentally in Alma reports.

10. Alma processing does not take usage codes into account. Usage codes appear in the fixed field of authority records and indicate if the authorized access point can be used in a name field, a subject field, or a series field. If an access point is used and tagged incorrectly in a bibliographic record, Alma does not recognize the problem in any way. Comments: Our usage errors would remain. Outside vendors all look at the usage codes and would fix some of our inputting errors.

11. Alma has some problems with punctuation during the matching process. Some affect access, and some do not. Examples we know about: The concluding period after author access points in bibliographic records is removed. Also when a series is numbered, the spacing and punctuation preceding that numbering is altered, preventing a match to the authority record. Comments: Series example is University of Minnesota salesforce case with a status set to pending release March 2017. If upgrade is made as predicted, this problem will be eliminated. Some problems won't be access problems or metadata integrity problems. Catalogers would need to keep an eye open for instances which do affect access.

12. If an automated Alma access point change results in the same access point occurring more than once in the resulting version of the bibliographic record, Alma does not “de-dup” and fix the problem. This does not impact access, however, and simply results in the redundant use of an access point. Comments: No access point degradation. Vendors would fix this IF the record was returned to them for some reason.

13. If a change is made to a Romanized access point, no changes are made to the related JACKPHY access point (Japanese, Arabic, Chinese, Korean, Persian, Hebrew, Yiddish) appearing in an 880 field. Alma is not alone on this point, as only one of the other three vendors makes

changes to 880 fields. Comments: Only Backstage attempts anything in this area. Since even they would not fix the entire 880 access point, there is no point in sending to them. Maybe some manual changes could be made based on review or custom reports in Alma.

14. Filtering or sorting of report data within Alma appears to be somewhat limited. For instance, Alma documentation says that the Authority Control Task List lists can be filtered by date or by the type of action/change. No mention is made of sorting by MMS ID, MARC field, thesaurus, or alphabetically, all of which would be useful methods. Comments: The Authority Control Coordinator could export to Excel to manipulate data as needed.

15. Reports also include duplicate entries, speculatively caused by multiple saves to any one bibliographic record. Minor changes such as those to ending punctuation and spacing are also included in the reports, making them more cumbersome to manage and obscuring more important changes that need to be manually reviewed. Comments: The Authority Control Coordinator could export to Excel to manipulate data as needed.

16. Browsing capabilities are limited but improving. Being able to do an extended browse of access points with direct access to both bibliographic and authority records is an important tool for finding and fixing errors as well as for highlighting inconsistencies in practice. Strong browsing is a fundamental, expected, and necessary element of catalog functionality. Comments: The Phase B1 Orbis Cascade Alliance report points out several problems with the Browse feature. Access points can display incorrectly as the subfields are displayed in alphabetical order. The series browse includes both 490 and 830 fields in the same list, and the \$v does not sort very well. When a record is deleted in Alma, the access points associated with that record still appear in the browse file.

Because these problems are known, they can be monitored, and as the subgroup member comments show, the gaps and limitations can be mitigated through a variety of approaches. Contracting with an outside vendor would solve some, but not all, of these problems. Whichever option is chosen, the role of the Authority Control Coordinator will be central to GIL Libraries' success.

The Cataloging Team is also discussing using OCLC's Collection Manager services, which would send GIL Libraries regular updates in spreadsheet form to OCLC bibliographic records which

have holdings for any USG member library. If this approach were implemented, some access point problems would be corrected in a piecemeal fashion.

Pros and Cons of the Two Options

While neither option will completely solve Alma authority control functionality problems, a choice must be made. In addition to the comments above, here are a few points that should be considered.

- If we choose that GIL Libraries rely entirely on Alma authority control functionality, fixes to groups of materials will be more time consuming and occur in stages over a lengthy period of time. Here are a few examples: Because Alma's matching is unable to isolate and validate or invalidate subdivisions in subject access points, such validation review will have to be accomplished manually or through involved programming methods. Alma's lack of facility with geographic access points will result in many access points becoming inaccurate over time. Again, manual review will be absolutely necessary to tackle this limitation. The fact that field tags, indicators, and subfields are not changed during processing will require daily intervention as each report of Alma action taken is reviewed.

Against this substantial negative are the following positive points.

- We will likely be more engaged with the product and able to contribute more to its future development. ExLibris has shown great promise in their aggressive product update approach. The ability to report and have problems resolved as well as enhancements implemented in a timely fashion has improved substantially. ExLibris is still in the development stage with Alma and Primo and appears to be very responsive to customer concerns.
- Initially, at the very least, we would not incur the further expense involved in a vendor
- If we choose that GIL Libraries should supplement Alma authority control by contracting with another vendor, the flip side of the points outlined above will be the case.
 - On the positive front, many changes will be made automatically by the vendor and will not need manual review in Alma to resolve.
 - On the negative side, as we will have both Alma and vendor reports to review we will be somewhat less engaged with Alma product functionality.

- Someone in the consortium must be designated to develop a method to send bibliographic records to the vendor and then integrate them back into the Network Zone. And someone must monitor that ongoing process.
- And, of course, the vendor services will require a monetary outlay.

In the case of each option, evaluation of ongoing authority control functionality and problems will be essential. The consortium will need to react to either improve access by adding an outside vendor if the Alma environment does not improve as expected, or it will need to gauge when to deem Alma functionality robust enough to stand on its own.

Recommendation 4. GIL Libraries should run both the Link BIB headings and Preferred Term batch jobs available in Alma, taking advantage of the various reports generated to conduct further batch and manual updates within the Network Zone.

The two Alma authority control related jobs automatically run once each day unless turned off. The Link BIB Headings batch job creates links between the valid bibliographic access point and its related authority record. The link created allows Alma users to see that the heading has been validated or perhaps only partially validated. In Primo, the link created allows patrons to jump to other books by the same author, on the same subject, in the same series, and so forth. Though the Alma matching/linking process does not make all the connections it should, it is still an invaluable and absolutely necessary component of catalog functionality.

The Preferred Term Correction batch job corrects bibliographic access points from variant forms to the preferred form so that the Link BIB headings job can then create the desired authority record match/link. In some areas this job makes incorrect changes. The University of Minnesota mentions that “Alma is fairly indiscriminating when it comes to matching bib strings with authorities. Acronyms appear as headings so rarely that they’re less of a problem, but unqualified personal names and, to a lesser extent, series titles do get matched to the wrong authority often enough that they are primary points of focus for us when we review the Preferred Term Corrections report. The report lists the old and new heading forms, so it’s fairly easy to spot the cases that need review. The cases of false match and erroneous changes are in the minority, but we see enough to warrant checking and see this task as not overly burdensome, given the many good corrections which the PTC job accomplishes.” The subgroup members agree with this assessment.

Recommendation 5. Alma provides sets of authority records that are updated and maintained regularly by Ex Libris in the Community Zone. Among those available vocabularies, GIL Libraries should define the following authority thesauri in its Alma implementation.

LC Subject (LCSH) – Library of Congress Subject Headings

LC Name (LCNAF) – Library of Congress Name Authority File
NLM MeSH – United States National Library of Medicine Medical Subject Headings
Library of Congress Medium of Performance Thesaurus for Music (LCMPT)
Library of Congress Genre/Form Terms thesaurus records (LCGFT)
FAST - Faceted Application of Subject Terminology

GIL Libraries also assigns and accepts other thesauri in its bibliographic and authority records even though they are not yet supported by Alma. When Alma adds support for additional thesauri, GIL Libraries should define those which are in the English language. Such thesauri include, but are not limited to:

LC subject headings for children's literature
LCDGT (Library of Congress Demographic Group Terms
National Aeronautics and Space Administration Thesaurus
Moving Image Materials Thesaurus
Art & Architecture Thesaurus
MLATI (Thematic Indexes Used in the Library of Congress/NACO Authority
Inter-university Consortium for Political and Social Research Thesaurus

The bibliographic integrity of the combined consortium catalog relies on data policies which are broad enough to serve all member libraries as they provide access to resources for GIL users. The designated language of cataloging is English. Accepting and assigning all English language thesauri provides users with the broadest and highest quality range of access points for finding the resources that they need. Eliminating any English language thesaurus artificially restricts user access to GIL resources.

ExLibris documentation says “metadata configuration lists for configuring cataloging are determined by the Active Registry/Registries set for your institution by Ex Libris,” and that the ability to control which “global authorities can be viewed and/or accessed in the MD Editor” are “specific to institutions that have had their authority usage policy configured for local authorities.” The current sandbox includes non-English language thesauri, so the Implementation Team should contact ExLibris to clarify the consortium’s ability to limit thesauri to a specific chosen group.

Recommendation 6: Request ExLibris to configure and activate local authority capabilities for those GIL Libraries member institutions which use local authority records to enhance access to their local collections. Those institutions should identify and create a file of local authority records from their current Voyager catalogs, so that the local files can be loaded into Alma once the local file functionality is available. Local authority records are given priority during matching, and the member institutions should be vigilant in reviewing local files to delete authority records that are later established in recognized thesauri.

Local authority records remain a valid method of improving access to material in local catalogs. As with other established authorities, local authority records allow materials to be accessed and hot-linked through the use of a standard, authorized access point. Libraries create local authority records rather than establishing them as part of the Library of Congress (LC) name or subject authority files for a number of practical reasons.

- The access point created is strictly local information. Examples of this would be local series collocating special collection materials donated by a single person, in a particular genre or form, or on a particular topic. For instance, while other libraries might follow LC practice and use a corporate style entry for local collections, UGA has created access points for the Sidney Samuel Thomas modern literature collection, the Fore-edge Collection, and the French Revolution Pamphlet Collection as local series. Another example would be creating local authority records for dissertation committee members, considering their role to be of strictly local interest.
- The access point is created to facilitate access to materials purchased as a package or collection. This is very similar to the first category, but in addition to grouping materials by topic, etc., this type of access point provides a reliable way to keep track of sets of material purchased without having to link each title to a single purchase order. An example of this would be the local authority record “Dissertations, Foreign” created to link materials UGA purchased as a set from the American Mathematical Society.
- There is simply not sufficient information in hand to create an authority record in a LC file.
- The cataloger does not have sufficient language expertise to create an authority record in a LC file.
- The cataloger is not trained or does not have the time to establish authority records in the LC files.

With the new Georgia NACO Funnel, some access points from the last two categories may be formally established in the future, but there will always be more access points needing an authority record than there is time to create those authority records. Catalogers should continue to have the option of local authority records to provide access for their patrons.

Institutions already identified as wanting the local authorities capabilities turned on are Augusta University, Georgia Southern University, Georgia State University, the University of Georgia, and Valdosta State University.

Member Survey

Questions 3 and 4 both elicited comments from GIL Libraries institutions who currently use and hope to continue using local authorities.

Recommendation 7. The USG should continue to support the Georgia NACO Funnel.

The Name Authority Cooperative Program (NACO) of the Program for Cooperative Cataloging (PCC) is an international effort aimed at uniquely identifying authorized names in databases through the contribution of authority records from member institutions. Some large institutions in Georgia, like the University of Georgia, are able to meet minimum contribution requirements on their own and are NACO partners in their own right. In the past, smaller institutions were not able to meet minimum contribution requirements and therefore were not members, but with the creation of the Georgia NACO Funnel in late 2014, these institutions now band together and submit name authority records to the Library of Congress Name Authority File under the auspices of the Funnel. Currently, the Georgia NACO Funnel has University System of Georgia members, like Valdosta State University and the University of West Georgia, and personnel associated with the Georgia Public Library Service.

The contributions of the Georgia NACO Funnel help to ensure that users of Georgian library materials are able to access the unique and special resources of the State of Georgia. As we rapidly transition to a more linked data environment, the establishment of authorities to ensure that authors, corporate bodies, titles, and events are disambiguated, which in turn lays the foundation for better identification of these bodies in our discovery systems, is ideal. The Georgia NACO Funnel plays a vital step in this research function by the creation of authorized access points and collocating resources together for these entities.

The Authority Control Subgroup recognizes the importance of the continuation of the Georgia NACO Funnel and recommends that the University System of Georgia continue to provide support for these efforts through further training of librarians at Funnel institutions, subscriptions to required cataloging products, and other support as needed.

Recommendation 8. A general overview of Alma authority control functionality and problems should be composed for the information of GIL Libraries staff.

A brief document explaining authority control functionality will assist everyone in their understanding of our new catalog. The overview should be widely disseminated so that staff in all areas of the library know what to expect in the area of authority control, what works, and what does not work. The explanation could be composed by a member of the Subgroup in conjunction with a member of the Cataloging Team prior to our May implementation.

Recommendation 9. The Cataloging Team or the Authority Control Coordinator should investigate “Publishing headings enrichment data to Primo” which was announced in the Alma October 2016 Release Highlights e-mail.

The Subgroup has not investigated this new functionality, and encourages the Cataloging Team to review documentation together with Systems and Primo counterparts. “Exporting Alma Records to Primo” documentation available at [https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/Alma_Online_Help_\(English\)/Alma-Primo_Integration/030Publishing_Alma_Data_to_Primo/010Exporting_Alma_Records](https://knowledge.exlibrisgroup.com/Alma/Product_Documentation/Alma_Online_Help_(English)/Alma-Primo_Integration/030Publishing_Alma_Data_to_Primo/010Exporting_Alma_Records)

[to_Primo#Publishing_Headings_Enrichment_to_Primo](#) indicates that the enrichment allows Primo to recognize variant (4XX) and related (5XX) access points from authority records to improve search capabilities and involves tailoring Primo normalization rules.

[Link to Orbis Cascade Alliance Authority Control Subgroup Phase 1 Report](#)

[Link to Orbis Cascade Alliance Authority Control Subgroup Phase 1B Report](#)

Appendix A – Member Survey

Each GIL Libraries institution was contacted for their comments about Alma and authority control. What follows are the survey questions and responses received.

Alma and Authority Control Survey

Hello GIL Catalogers,

We are seeking your input regarding authority control processes as we ready for Alma implementation. Please take a few moments to complete this survey. If there is someone else at your institution who should complete this form, please let us know.

Thanks,

Debra Skinner

Co-Chair, Cataloging Functional Project Team

Questions & Responses

1. What are your chief Alma authority-related concerns?
 - o None
 - o How Authorities are updated in the CZ
 - o Who will maintain the authority control in ALMA? The institutions or one of the larger universities (UGA, etc.)?
 - o "First in" library not doing authority work or adding useful tracings
 - o That they are correct and not time consuming. that we continue to have a reliable source for our updates.
 - o That lack of proper authority control will compromise the value of the OPAC and decrease findability for users.

- o Updating to new RDA standards, accuracy, and efficiency of authority updates
 - o I'm concerned about how well the automated authority control features work
 - o We need: 1. Browse indexing of name, subject, name/title, and title access point allowing searcher to access both the related bibliographic records and authority records for easy bib. access point maintenance. 2. Reporting that facilitates working on particular types of authority problems. 3. Ability to easily create a desired bibliographic record set and make global changes to an access point occurring in each of those bib. records.
 - o Making sure we keep up with changes and maintain accurate authority records
 - o Not clear direction or instruction how authority control would be handled
How would workload be shared among institutions
What options/roles does each institution have at the IZ and NZ levels?
Not easy way to find authorized access points in Alma
Who would communicate with ExLibris when there are concerns or issues related authority control
 - o Timely update of authorities and correct linking in the bibliographic records.
 - o Accuracy of the authority record.
2. What kind of role do you see authority control having at the Network Zone level? Tools needed?
- o Not sure - are we still using Marcive?
 - o Authority Control is a must so that people, places and things are differentiated. This is rapidly growing in importance as linked data and Bibframe implementation is on the horizon. When search for Creators in Primo, it would improve results lists and sorting by collocating what is a like from what is different.
 - o This should be a large role; however, I am not sure who should do it.
 - o Libraries need to be able to change/add headings to records so that they align with authority headings. Access to OCLC and LC Web Classification are essential.
 - o Uncertain
 - o Since most of our records will come from the NZ, I'm wondering if it would be a good idea to handle authority control at the NZ level. I thought Alma had a

built-in authority control tool and that we wouldn't need to pay for MARCIVE after the implementation, but maybe I'm wrong.

- o With the RACL call for increased efficiency-more group purchasing and pre-cataloging-especially for smaller institutions lacking cataloging departments/time and \$ for cataloging professional development
 - o It seems reasonable to me that most routine access point maintenance might be handled at the network level. Institutions would need a means to report incorrectly matched access points or other issues.
 - o I would like to see almost all authority work done at the NZ level. The only IZ authority control needed would be for local authority records created and maintained at the IZ level.
 - o It would be good to have an Authorities coordinator (with an understanding of authorities and bibliographic records) who could also do some programming to run batch jobs.
 - o Would we be able to link bibliographic headings in the NZ? I'm not sure what kind of Alma-based tools would be available in the NZ.
 - o Very important ensuring integrity of authority file and accuracy in authority linking.
3. What kind of role do you see authority record control having at your institution? What tools are need to achieve this?
- o Not sure
 - o It is extremely important; as a NACO participant I have a greater understanding of what that importance is, especially when one looks and the data expansion recorded in authority records. In short, this is a foundation for the future and discovery (Finding-Identifying-Selecting-Obtaining) in a non-MARC environment.
 - o Right now we maintain our authority file using Marcive. Will we still need Marcive to update our institutional files?
 - o To be able to add and modify local authority headings.
 - o Uncertain

- o Authority record control is very important in information literacy-explaining keyword searching and finding similar items-creating higher level search strategies for patrons/researchers. Catalogers and those involved in front-end information literacy instruction and research need to all engage for the best tools and results.
 - o I've had the Ga. NACO funnel training and would like to participate more in creating NARs, but have no time for it at present. Other than that, I think we'd want (at a minimum) a mechanism for reporting problems/questions about AAPs in the NZ; maybe the ability to change an AAP in the NZ if our record is the master record?; ability to create local authority records
 - o I expect my institution to participate in both NZ authority work and in maintaining our small local authority file.
 - o We have a lot of local authority records that our special collections areas use to assist patrons in locating collections. We would need someone to continue to coordinate that and maintain headings at our institution.
 - o Assume having a master record in the NZ would limit each institution from doing anything beyond the point of cataloging, I'm not sure what kind of roles are available at the institution level.
 - o Most done by Marcive
4. Does your institution use local authority records, and if so, for what purpose?
- o Not sure (whatever takes place between Voyager and Marcive)
 - o Teaching; searching; distinguishing
 - o No
 - o Yes, mostly for historical items.
 - o Uncertain
 - o No
 - o We use the Marcive global headings pull mainly with little to no extra local records.
 - o We have some. Most of them are for series that may not have been present in the authority file, and we needed a record to make note of local series practices.

- o Yes. We have local series authority records that fall into three categories. 1. Those for strictly in house special collections series. 2. Series for which we do not have enough information or language expertise to establish in the LC NAF. 3. Music series that we did not have the staff resources to establish in the LC NAF.
 - o Yes. We use them primarily for special collections to enable patrons and donors to locate certain materials.
 - o No
 - o A few
5. Ideally, what would be included in an ExLibris authority report?
- o Not sure
 - o New/changed heading; records impacted (even if false hits) with author title and subject
 - o Outdated authority headings
 - o Items not matched in an authority sweep, items that have changed headings, items that are "close matches" to existing headings.
 - o I want to be able to update the information easily.
 - o As far as I'm know, the same information would be needed as is included in MARCIVE reports.
 - o Number of changes, perhaps a sampling of changes, and,, if possible, 1 report needs to detail the % and number of records with the latest RDA standards. Also reports on usage of authority/subject heading links related to number of authority points and recency of update.
 - o I'm not sure, but I think reports of automated AAP changes, multiple matches, unrecognized AAPs would be helpful. I'm not knowledgeable enough yet about the existing Alma authority functionality to provide a good answer.
 - o Deleted authority records. Unrecognized geographic access points. Before and after listing of access points so that staff can review for problematic changes. Bibliographic and authority record id numbers for easy access to the records involved. List of access points that did not match an authority record.
 - o Incorrect headings, changes to headings, updates, discontinued headings

- o Access points that match or do not match authorized headings
 - Total number of records changed per heading
 - Total number of changes made per each report
 - Undifferentiated/conditionally authorized headings
 - o Update date/time, titles affected, new headings, deleted headings
6. How would information from authority records or authority reports be used at your institution?
- o None
 - o I would correct whatever I see in whatever Zones I have permission to tinker with
 - o To make sure that our authorities are current
 - o To modify originally and modified records in OCLC which will then populate the new and corrected record into the NZ.
 - o I update or correct our records
 - o To update, add, delete, correct authority records.
 - o Ideally, sampled reports of changes in authorities will be offered to information literacy instructors for help in the discussion of search terms, and other reports will be included for assessment purposes.
 - o I think we'd have to experiment with the available reports to see how we might use them (or not). Possibly checking for automated changes made in error, evaluating multi-matches, etc.
 - o For information on constructing appropriate access points during cataloging of resources. For searching for materials linked to particular authorized access points. For ongoing maintenance of access points in bibliographic records.
 - o We would use this information to maintain the catalog and in training of new catalogers
 - o To improve access
 - To participate in collaborative review of lists and correction of problematic headings
 - o Ensure correct linking, searching and statistic purpose
7. Any other concerns or comments?
- o Not at this time

- o Not having it
- o Let's not try to save money at the price of short changing our patrons and ourselves. Some of us don't have the time or staff for time consuming authority updates. Lets keep it simple!
- o Based on some conference presentations I've heard, I have the impression that Alma's authority control functionality isn't as robust as catalogers would like, or perhaps it's still under heavy development. But I don't have a solid understanding of the issues in this area yet. I'd be very happy for individual institutions to have less responsibility doing routine AAP maintenance as long as we can report any issues we might find.
- o I am concerned about how ongoing authority control is going to be coordinated by the consortium. We need to have clear guidelines on who is doing what so that there isn't any duplication of effort. I am also worried that current staff may lack the necessary programming skills to conduct some of the required tasks in Alma.
- o How are we going to approach to enhance master record? Are we going to have some kind of committee to work on authority related issues? If so, I would like to be part of the team/committee

[Appendix B – Spreadsheet comparing authority control functionality of Alma, MARCIVE, Backstage, and LTI](#)

Appendix C - Questions to Libraries using Alma without a separate authorities vendor

The following libraries were contacted and asked questions relating to authority control in Alma. Questions and responses follow.

Aberystwyth University (Wales), University of Minnesota (USA), and the Virginia Commonwealth University (USA)

General Comments:

University of Minnesota: We have not felt we needed an authority vendor with Alma for the sake of authorities; but that is conditioned by our decision not to maintain a local authority file and instead to do authority work we feel is important via NACO and SACO. That may not be the case for other libraries. Also, we have used Backstage to do other kinds of batch processing of our bib records (updates to RDA standard for a range of descriptive fields,

identification and correction of non-filing indicator and tagging errors, etc.) which Alma does not support.

In our view Alma still has problems to overcome, but it does many authority tasks correctly and has improved over time. We expect that to continue.

There are always things we let go, at least for now. We'd like to have the first indicator on personal names be correct, but if it's not, I'm not aware of any impact that would have on searching or display in Alma. We'd like to have our form subdivisions correctly coded, since when they are we can borrow them for the Genre facet, but I'd rather enhance records with 655s for that purpose. We'd like to see parallel 880 fields get updated (they're not) when Alma modifies the dates in a person's primary field, but I'd rather see the vernacular forms controlled by an appropriate authority file. We provisionally add [series statement] to 490s which have proven vulnerable to PTC change by Alma as a way of blocking its errant linking, but when a 490 is linked to the wrong authority but not changed, we consider it harmless and let it be in hopes that all the 490 links will go away eventually. The main goal is to ensure consistent access points; beyond that, we're pragmatic in our problem solving.

While I see limited need for vended authority control with Alma to assemble an authority file and update heading strings, other kinds of vended data maintenance are worth considering.

Aberystwyth University: Although our WHELF consortium does not yet have a Shared Network we are actively looking into setting one up, and this would definitely include a much more rigorous approach to authorities. If it happens and we can afford it we would like to have Backstage (or a similar company) improve our headings across the consortium and perhaps start contributing ourselves (only the National Library of Wales does this at the moment). It is quite difficult at an institution with one cataloguer for everything to find out about best authority control practice in a specific LMS environment.

Virginia Commonwealth University: In summary, I have witnessed significant improvement in CZ since we migrated to Alma three years ago but much needs to be done. I keep reminding myself that Alma is an evolving system and that authority control is not a lucrative field hence has a low priority for most ILS developers (this is my opinion only).

Question: Different posts on Alma-L have mentioned problems with Alma's authority files synchronizing with the source files. Records which have been deleted from the LC authority files, for example, still remain in Alma's version of the authority file in the CZ. Also, newly created authority records sometimes do not show up as you would expect them to in the weekly update of the CZ authority file for LC authority records. Is authority file synchronization still a problem?

Answers:

University of Minnesota: Alma is not as quick to load new and updated authorities as some other agencies. In our experience there's a delay of two weeks or so from when the source file is updated. In the past we have occasionally found records in the CZ that did not get updated. I wish there was more reporting and transparency about how EL manages the CZ

authority files, which is not a trivial task. All that said, the instances where we find problems with the CZ authority files we rely on are rare.

Aberystwyth University: Given time constraints I tend not to worry too deeply about the odd problem but do think it is getting better.

Virginia Commonwealth University: Authority file synchronization is not a serious problem on our end. I caught authority records slated for deletion that remained in the CZ but those were few and far between. It does bother me not to know when updated LC authority records got into the CZ. However, being a member of OCLC, we are relying on Worldshare updates to do the heavy lifting so I believe that most of our headings are up to date.

Question: Are you able to change the once a day schedule for running the Link BIB Headings and Preferred Term Correction jobs to some other frequency?

Answers:

University of Minnesota: The daily frequency of the Link BIB headings and Preferred Term Corrections jobs cannot be changed. It can only be turned on or off. Regarding failed runs of the PTC report--this has been an issue for us too at times. In some cases the preceding linking job runs long and blocks the PTC report, but that's usually resolved the next day with no loss of data. In other cases a single record which has an obscure coding problem blocks its cohort of 100 records from processing. The same record can block PTC reports day after day and can only be identified by Ex Libris staff. We'd like either the tools to identify the problem record or a prompter response when we report this problem.

Aberystwyth University: We haven't tried to change the job schedule but I had heard you can't.

Virginia Commonwealth University: I am on the user end so I do not know whether I can change the frequency of the preferred term correction report. Aside from the preferred term correction, I also run the authority task list twice a week to look for unauthorized headings. We stopped running the preferred term correction report for a few months when it kept showing errors. It seems to have run more smoothly since mid July of this year. Some days the report was empty, some day we ran reports that could have thousands of corrected headings. Our October 7 report displayed 36111 headings, including LC names, LCSH and MeSH. In spite of the length of the report, the overwhelming majority of edits dealt with the addition or removal of a punctuation mark like the removal of the comma before subfield e - which I think is wrong. We have a student check the Primo side to make sure that all headings were effectively updated in Alma. Sometimes we saw obsolete headings. These were on CZ records, so we went ahead and corrected them. We found the lack of the Alma system ID on the authority task list reports rather disappointing. It would have helped us identify quickly the problem heading. Hopefully, this will be fixed at the end of the year.

Question: Alma-L posts indicate that Alma has had difficulty with matching to a particular authority thesaurus. In other words, if the bibliographic access point is for a particular subject or name vocabulary, Alma is not able to recognize that and attempts to find a

match across a number of different thesauri. As a result, it often finds and reports multiple matches and does not create the correct link/match. Is this still the case? Does the matching only occur across thesauri the library has chosen to define for its database or does it occur across all of the thesauri supported by Alma?

Answers:

University of Minnesota: We have seen fewer cases of links to the wrong authority file over time. Alma has improved in this area, and now links reliably when choosing between LCSH and LCGFT headings for an identical term or between LCSH and FAST. We still see cases where we suspect that Alma is dithering between LCNAF and a different name authority file for a name heading, but that too appears to be relatively infrequent, much less than the overlap between national authority files would lead one to expect.

Aberystwyth University: We do deal with a few multi-matches but it isn't a major problem. To be honest I haven't even gotten our systems person to see if we can select only certain vocabularies.

Virginia Commonwealth University: I believe there are currently 14 thesauri in Alma. I got all of those in my reports but I used the filter feature in Excel to get to those headings that interest us.

Question: In addition to the two authority control jobs, does your library use MarcEdit or other tools to find and fix access points? Could you estimate the time involved with these other access point changes, and give an idea of the staff skill required to develop or use such tools?

Answers:

University of Minnesota: We use MARCEdit when the number of instances of a heading needing correction goes over 20 or so, based on an estimation of the time lost to exporting the records, loading them into MARCEdit, and then re-importing them into Alma vs. the longer editing time if the work is done in Alma. There's a new feature in MARCEdit which should make the re-import-to-Alma process a bit quicker and might bring down our estimated threshold. MARCEdit is a great piece of software, but staff using it do need to be adept at find/replace and willing to check work as they go; and they need authorization to run the export/import jobs in Alma, and enough cataloging experience to make the right changes. There are more advanced features of MARCEdit which would require more advanced skills (and which I don't use myself).

Aberystwyth University: We haven't used MarcEdit for this yet. In part because I want to understand the Authorities Task List properly before devising ways to deal with the problems and I'm not there yet. We're not a massive library so I'm wary of starting to export and move between programmes as time may not end up being saved.

Virginia Commonwealth University: I could easily devote my whole work week to just authority control activities. With the help of a student worker and 5 catalogers who work

with the Worldshare update files, which we upload daily, and a battery of tools (mainly Excel and LCSH monthly list), I would estimate about 20 to 30 hours per week are reserved to authority control. I use MarcEdit to do global changes.

What do you think of the new browse capabilities in Alma? Do you have the access you need regarding possible browse searches types (name, title, subject, name/title, etc.), access to authority records, access to bibliographic records, and displays?

University of Minnesota: The new browse capability in Alma is a welcome addition, though it's not fully fledged as a tool for maintenance yet. One should be able to find a set of records via browse and then edit them in Alma without losing the browse results with every record edited. That's the primary piece of missing browse functionality for us. Ex Libris has markedly improved the order of the browse results, which initially were re-sorted by subfield code (e.g., \$a \$d \$q; \$a \$v \$x \$y \$z; etc.)

Aberystwyth University: I haven't utilized the browse searches at all! I would echo Stephen though in that moving between sets of records is cumbersome.

Virginia Commonwealth University: I think the browse capabilities in both IZ and CZ have increased a great deal. At one point, the name/title browse search did not work well in the CZ (e.g. we could not find:"Proust, Marcel: Albertine disparue"), but now we can retrieve that name/ title without any problem. The linkage bib heading to authority file is also functioning properly.

We retain many 440s in our bibliographic records. It appears that Alma is not able to make successful authority record matches/links to 440 fields. Is this, in fact, the case? Have you found a way to change the 440s to 490/8XX fields within Alma?

University of Minnesota: We had Backstage change our 440s to 490 1/8XX pairs, so we see very few 440s. One unwanted bit of series-related functionality is Alma's insistence on controlling 490 fields with the bib linking/PTC process, at least intermittently, which should never happen. Ex Libris has promised to fix this, but it's not clear when. We provisionally add [series statement] to 490s which have proven vulnerable to PTC change by Alma as a way of blocking its errant linking, but when a 490 is linked to the wrong authority but not changed, we consider it harmless and let it be in hopes that all the 490 links will go away eventually.

Aberystwyth University: We don't retain any 440s, they were changed in Voyager to 490/830s before I started here. I haven't had a lot of experience with complex normalisation rule changes but I do quite like the options - could this be done through 2 normalisation rule jobs?

Virginia Commonwealth University: It is not "controlled" i.e. not linked to the authority record, hence no magnifying glass next to the heading but I was able to check for the presence of an established heading by pressing the "F3" key.

Documentation that we have seen so far does not talk about times when MARC field tags, indicators and subfields need to be changed during authority processing. How does Alma fare in this respect? Have you found any particular problems?

University of Minnesota: Alma is not adept at changing indicators. First indicators for X00, X10, X11 are not corrected to match the authority. Headings with tag or non-filing indicator errors tend not to match to authorities at all. One thing we've done with some one-time funds is have Backstage process our whole bib database (mainly to get RDA upgrades) through its error detection and resolution process, which identified and in many cases resolved problems beyond what Alma can fix automatically, things like indicator errors including non-filing indicator errors. We'd like to have the first indicator on personal names be correct, but if it's not, I'm not aware of any impact that would have on searching or display in Alma.

Aberystwyth University: Guess we do this manually when we are cataloguing and pick problems up in the task list - anything else we're not picking up on.

Virginia Commonwealth University: Alma does not fare well in changing indicators or subfields. That's why we rely on the Worldshare updates for more granular edits. As I mentioned earlier, we have to do manual edits of headings describing fictitious characters and which are now treated like real people (650 becoming 600)

Related to that, are changes to/from \$x and \$v completed accurately?

University of Minnesota: Alma does not change form subdivisions in \$x to \$v. That's a manual correction, at least for us.

Aberystwyth University: As above.

Virginia Commonwealth University: No, these changes are not completed accurately.

Does Alma authority processing recognize the 781 field in place/geographic authority records and apply geographic changes appropriately?

University of Minnesota: Alma does not make use of the 781 field. Generally Alma does not match parts of a controllable string to authorities except for the first part--it may match and show a link to a topical authority for a "650 \$a topic \$z place" string, but will only extend the match to include \$z if it finds a full matching "150 \$a \$z" string in the authority file. Many Alma headings with the authority link icon are only partially controlled, i.e., only on subfield \$a.

Alma has bigger issues with geographic headings. We often find 651 headings which are not matched to an authority, This may be because Alma does not look for matches to 651 place names in the LC Name Authority File, where many place names are established (e.g.,

checking just now, "651 Mississippi River" gets controlled by LCSAF but "651 Boston (Mass.)" does not get controlled by LCNAF).

Geographic heading control does need more attention. I spent a while recently using MARCEdit to update our subject headings involving Malaysian states, which Alma could not do for us. On the other hand, we've never had a local system which managed subfield \$z's for us, so maybe our expectations were lower. Geographic authorities present some difficult challenges for programmers given their presence in both LCNAF and LCSH and their use of both X51 and X10 1 tagging, so I'm not surprised that sophisticated management of these headings has been slower to arrive.

Aberystwyth University: We haven't used 781 fields before so don't miss it. Strings, and 651 strings in particular are hit and miss, and that is one aspect I am hoping EL will be working on - if the heading is there and available for us to see in LCSH I really feel we should be able to use it.

Virginia Commonwealth University: No, it does not.

Does Alma make use of the usage codes in the authority records in matching? In particular, we are wondering if Alma can recognize that a bibliographic access point is used incorrectly based on the usage codes.

University of Minnesota: To check this I tried using the 130 NAF authority for Beowulf (usage codes aab, not to be used as a series) to control an 830 series field. Alma controlled the field without any alert warnings. I also tried using the 130 NAF authority for Cinderella (usage codes abb, not to be used as a subject) to control a 630 00 field, with the same result. So no, Alma is not paying attention to the heading use codes yet. I plan to file a ticket about this.

Many authorized and variant access points are unqualified. How well does Alma processing handle matching in the case of unqualified personal names or instances when the same cross reference (often an acronym) appears on multiple authority records?

University of Minnesota: Alma is fairly indiscriminating when it comes to matching bib strings with authorities. Acronyms appear as headings so rarely that they're less of a problem, but unqualified personal names and to a lesser extent series titles do get matched to the wrong authority often enough that they are primary points of focus for us when we review the Preferred Term Corrections report. The report lists the old and new heading forms, so it's fairly easy to spot the cases that need review. The cases of false match and erroneous change are in the minority, but we see enough to warrant checking and see this task as not overly burdensome, given the many good corrections which the PTC job accomplishes.

Aberystwyth University: I haven't got much to add but as I am just correcting a name heading in a poor bib that was imported from Voyager - Smith, D. was authorised and I do

check for these simpler names (and warn people cataloguing to check them) as Alma seems happy to authorise them – it was actually Smith, Dodie, \$d 1896-1990.

Virginia Commonwealth University: I concur with the two previous respondents concerning Alma matching method. It is pretty good at matching character by character, including, punctuation marks. The results are false matches or the new value on the preferred term correction report differed from the old value because it has an extra comma or lacks a period. Overall, we are still happy with the automatic and global updates, although they occur only in subfield a. For instance, Mr Arnold Palmer's name was updated in our bib records just a day or two after he passed away.

Does your library use Alma's local authority file functionality? Does it work well? Do you run the Link BIB Headings and Preferred Correction jobs in individual Institution Zones as well as in the NZ?

University of Minnesota: We don't use local authorities in Alma, so I can't speak to this.

Aberystwyth University: In Voyager we used local headings and had weekly updates for new records only, from Marcive. We decided in the end to stop having local authorities and use Ex Libris' and although this is a lot more work for us currently (because we are not using Marcive) I hope that as EL improves the service in negotiation with the community, that this will ease.

Virginia Commonwealth University: We are working through our local authority database, deleting records that have matches in the Library of Congress authority file. The presence of those records will prevent eventual updates from LC as the local authority records take precedence in terms of linkage over the LC authorities in the CZ. A staff member is half way through cleaning up an authority database of 70,000 locally created authority records. We obtained full NACO membership two years ago, so we can create authority records directly in Connexion. We run the Preferred Term Correction report only in the CZ. We do not have a Networked Zone. In other words, we are mothballing our local authority database.

When a bibliographic record access point is already linked to an Alma authority record, will that bibliographic access point change if the authority record changes, regardless of whether there is a cross-reference from the old access point to the new one? For instance, if death dates are added, but no open date x-ref is in the authority record, will the bib. access point change?

University of Minnesota: This is how I've interpreted what I see. When a popular, authorized name get updated, we see many instances of the change on our PTC reports, and in some cases the authority does not include the older form in a 4XX. We assume that Alma is making the change based on an existing authority link rather than on matching the bib heading to a new 4XX. On the other hand, I'm not sure that the addition of a new authority to the CZ

prompts Alma to look for matches to it in our bib records. We do see cases where authorities are available but are not linked to all the bib headings to which they could be linked.

Virginia Commonwealth University: You would not need a cross-reference from a name with an open date reference.

How does Alma do with uniform title matches? Is the process able to match authority records not only when the name/title is all in the same MARC field, but also when the information is split between two fields?

University of Minnesota: Alma is not able to control uniform titles when they're split between 1XX and 240 fields. When an established name/title string occurs in a single bib field, Alma can control it.

Aberystwyth University: I haven't been focussing on it yet but we do have a lot of uniform name/title strings not being controlled so I suspect that is something I should look into as it is working for Minnesota.

Related to that, is Alma able to match bibliographic access point fields which include subfield i?

University of Minnesota: I tried adding a subfield \$i to a 700 name/title field. Alma could control the name/title without the subfield \$i but not with the subfield \$i. So, no.

Aberystwyth University: I've just left them in for now in the hope that new functionality comes in.

Has the Authority Control Task List been a big improvement in reporting? What are its good and bad points? In general, are you satisfied with the authority control reports available in Alma?

University of Minnesota: I haven't yet seen a role for the Authority Control Task List in my workflow, but then mine is not a cataloging workflow. I'd be interested to hear if others have found a good use for it. We find the daily PTC report a better tool for presenting authority control tasks in informative and manageable chunks.

Aberystwyth University: I think, with our minimal resources, the task list has been an easier way for me to get started than using the reports because in terms of scale, moving from Alma to excel and back again just wasn't worth it initially – and the task list is just there when you need it. I know I'll be missing the key issues in the PTC report though so envisage using both as and when we settle down. Ideally I just don't want to be too far behind as EL develop better authority functionality.

The Task List at the moment does throw up examples of poor records - especially series records - which is helpful (although more work) because it identifies collections of records I can prioritise to fix. For instance, I have 4 records in front of me that were matching incorrectly on an editor "Morgan, P" and the records had no headings and very little to identify the texts so I am improving the records. They appeared as "multiple matching" in the task list due to the "Morgan P" having 2 authority records I think, but sometimes things pop up because we are moving stock and people open and resave records too.

Since Alma supports a variety of authority thesauri, we can chose to define one or more of those available such as LCSH, LCNAF, MeSH, FAST, LoC Medium of Performance Thesaurus for Music, and the LoC Genre/Form Terms thesaurus records. Are there any negative implications to choosing multiple thesauri? And what exactly does defining the wished for thesauri accomplish regarding searching, display, matching, and reporting? I am assuming that we "define" the thesauri on the Metadata Configuration List page. Is that correct?

University of Minnesota: In our system Alma controls LCSH, LCNAF, LCGFT, FAST, MeSH, and GND terms without any obvious problems. I haven't seen Medium of Performance terms under control, but Alma has been adding new vocabularies, so it may be coming soon. The Preferred Term Correction report we use includes a column naming the source system for a term, so we could filter out the ones we don't care about when processing the report. Now we just skip over them when doing PTC review. Someone else here does the Metadata Configuration, so I can't answer that at this point.

Aberystwyth University: I don't think Alma has a problem with multiple vocabs – it is just more time consuming. I plan to leave FAST headings in, for example, but am not worrying about them for now and this seems ok.

Appendix D – Vendor representative's contact information

- MARCIVE, Inc., www.marcive.com
Ms. Ligia Groff MLS, Marketing Representative
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Business: (800) 531-7678
Mobile: (210) 473-6050
- Backstage Library Works, www.bslw.com
Beth Ann Goodwill, Account Representative Southern U.S.
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P: 800-288-1265
- Library Technologies, Inc., (800) 795-9504, www.authoritycontrol.com/
Tom Gilbert

TGilbert@LibraryTech.com

Marsha Hunt, for record specific information

mhunt@librarytech.com

Appendix E - Questions to Libraries using Alma and Backstage

The following libraries were contacted as references for Backstage and sources of information on how libraries use the vendor instead of or along with Alma authority control functionality.

- Kansas State University, an Alma installation, last processed its base file with Backstage in June 2014, and has approximately 3.0 million bibliographic records under authority control. In the two years since that date, the library has elected to process their new bibs on a monthly basis and update their authority records at a quarterly frequency.
- Emory University, an Alma installation, last processed its base file with Backstage in December 2013, and has approximately 3.1 million bibliographic records under authority control. In the three years since that date, the library has elected to process their new bibs on a weekly basis.
- University of Miami Libraries, an Alma installation, last processed its base file with Backstage in April 2016, and has approximately 3.2 million bibliographic records under authority control. In the six months since that date, the library has elected to not process their ongoing services with us at this time.

Was your library using Backstage for authority control before migrating to Alma?

Kansas State University Libraries: Yes. We have been Backstage customers since 2006.

Emory University: Yes.

University of Miami Libraries: No, we only used Backstage at point of migration. We contracted with Backstage to merge and dedupe our 3 bibliographic databases, and then run the merged database through authority and RDA processing. As context, when we used Backstage as part of our ILS merger and migration from 3 20+ year old Millennium ILS instances here at UM to a single Alma instance. Backstage was thus primarily a means of taking our 3 separate bib databases and merging them. We added in to that deduplication process RDA work and authority cleanup.

How do you manage the authority records supplied by Backstage? Are they accommodated by Alma's local authority file functionality?

Kansas State University Libraries: We do not. We altered our contract to no longer receive authority records from Backstage. We still use Backstage's monthly bibliographic cleanup service

and take advantage of the authority reports. The change headings reports and the deleted headings reports are the most useful to us.

Part of the reason we no longer load authority records supplied by Backstage is it would require more space in the cloud from ExLibris for duplicates. The majority of the authorities would duplicate what is in the community zone. It would also add a lot of additional, unneeded maintenance.

Emory University: We don't do anything with the authority records from Backstage - we do not load them into Alma, but instead link to the authority records in Alma maintained by Ex Libris. However, the way I understand authorities to work in Alma, we could load and use Backstage authority records locally - we just don't need to, since the files in Alma meet our needs.

University of Miami Libraries: We do not receive ongoing authority records/updates from Backstage. We don't currently use Alma's local authority file functionality at this time, but we will be soon. We handled local notes and series decisions differently in our old ILS, and we plan to transfer that information back into local authority records soon.

What staffing levels work on database cleanup based on Backstage reports?

Kansas State University Libraries: We receive quarterly notification reports and five staff work through those. Four of the five individuals are Copy Catalogers who have been trained to work on the reports. Most of the Copy Catalogers had worked on the same reports prior to our migration to Alma. Before Alma, we were a Voyager customer who used many of Gary Strawn's tools. Monthly reports are handled by one individual, the Metadata Librarian who leads our authority control.

Emory University: 2 librarians and 2 staff members monitor and clean up 12 reports on a weekly basis.

University of Miami Libraries: During the migration process, itself, a group of 4 reviewed Backstage processing reports, but with more of an eye toward deduplication of our bibliographic data, as we were merging 3 bibliographic databases as part of our migration. We should have started as early as possible with Backstage and their reports since we didn't get thru all of the database cleanup that we had wanted to.

Do you include local notes/fields in authority records maintained by Backstage?

Kansas State University Libraries: We imported approximately 10,000 local authorities into Alma from Voyager. Some of the authorities contain our local decisions on national authorities. Other authority records are entirely locally created. Our local authorities are primarily names and series. At this time, we are in conversations with Backstage on how they can help us maintain our local authorities.

Emory University: I think we might have in the past, but we no longer do.

University of Miami Libraries: No.

How satisfied are you with Backstage processing, documentation/reports, and staff engagement?

Kansas State University Libraries: We are very satisfied with our work with Backstage. Had we not been, we would have re-evaluated the service.

Emory University: Very satisfied. The reports in particular are very helpful, although there are so many that it can be overwhelming. BSLW staff is very knowledgeable (particularly Nate), helpful, responsive, and easy to work with.

University of Miami Libraries: We were very satisfied, particularly to their response to issues when identified in test runs.

Do you also use Backstage for other bibliographic record processing connected with RDA?

Kansas State University Libraries: Yes. Before we migrated to Alma, we worked on a very tight timeline to convert all of our bibliographic records to RDA hybrids from AACR2 and earlier content standards (AACR, ISBD). We still use this service with our monthly processing.

Emory University: Yes.

University of Miami Libraries: We did, yes, during our merger and migration processing.

Do you also run the Alma linking jobs Link BIB Headings and/or Preferred Term Correction?

Kansas State University Libraries: Yes. At this time, we are not doing much with the reports, but it is under review.

Emory University: We run the Link Bib Headings job daily, but do not run Preferred Term Correction at all.

University of Miami Libraries: Yes. Link Bib Headings and Preferred Term Correction are automatically run each day.

Do you work with Alma's Authority Control Task List?

Kansas State University Libraries: Yes, but we are still reviewing the usefulness of this list. For example, we do use the list to catch some typos in records. Beyond that, we are still exploring. It is unfortunate that you are unable to sort the list's columns. You also cannot clear problems out easily. You can only search against mms ID. We would rather sort by headings, etc. The dismiss action is also an all or nothing deal, it needs more nuances. In our opinion, the entire authority control task list needs more granularity. We really wish, too, that we could control what vocabularies or thesauri came back on the report.

Emory University: Not yet, but the intent is to explore working with it.

University of Miami Libraries: Yes, though as we are only a few months post "Go Live" we should likely do more than time currently allows.

Do you use Alma's normalization rules or other functionality to conduct database changes such as adding death dates to access points when the prior open date access point is not included in the NAR?

Kansas State University Libraries: No. Our error reports are small enough that our Copy Catalogers use copy and paste to repair the errors. Tag changes and large errors are being

handled by our Metadata Librarian using MarcEdit or whatever tool seems most appropriate for the repair. One example we are handling manually is to flip any fictitious characters from subject headings to personal name headings (e.g., any deities, animals, etc.). In addition, any headings with \$i do not get updated through the Alma jobs.

Emory University: Yes.

University of Miami Libraries: Yes, all of the time.

Do you anticipate only using Alma functionality in the future?

Kansas State University Libraries: Not in the immediate future. Alma needs to enhance the displays and reporting capabilities in order for us to only utilize their services.

Emory University: We're not sure yet. We're going to experiment in the near future with using WorldShare Collection Manager to send Alma updates to records, including updates to authorized access points, to address our need for changes to bibs triggered by headings changes. Right now we're thinking that this could complement our current BSLW service, which just addresses new and modified records, but this approach may change in the future.

University of Miami Libraries: We currently only use Alma's Community Zone authority linking.

Do you have any specific advice relating to authority control that you would like to share with us?

Kansas State University Libraries: One thing you may have already seen in the Sandbox/Production is that headings are displayed in subfield order NOT the correct order found in an authority or bibliographic heading. Name/title entries are particularly problematic.

Emory University: If you're willing to share it, I'd love to hear about the feedback you get from other respondents, or what your group learns or decides to do regarding authority work.

University of Miami Libraries: No, not at this time.

Appendix F - Questions to Libraries using Alma and MARCIVE

General comment from MARCIVE when asked for references: MARCIVE mostly has back file projects and few ongoing customers with Alma because most are using Alma alone--despite being not totally satisfied with its authority functionality.

Was your library using MARCIVE for authority control before migrating to Alma?

University of Wisconsin-Madison Libraries: Univ. of Wisconsin System used MARCIVE for a 1-time database remediation project -- to convert existing headings in our merged statewide database to the current LC authorized forms (and do RDA upgrade at the same time) -- but we do not use MARCIVE for ongoing authority control and we do not receive any authority records from MARCIVE.

Fort Hays State University: Yes. I was not here when the Voyager to ALMA migration occurred in 2012. At that time, evidently there was either a problem or choice that lead to not migrating authority control records from Voyager to ALMA. We had been an authority control library since 1989-90. We currently use MARCIVE solely for GPO BIB record imports and are not currently engaged in any authority work in Alma.

LSE Library Services, The London School of Economics and Political Science, London: Yes. Prior to migrating to Alma we used MARCIVE for overnight authority processing and the notification service. A few months after migration, and once we had been able to assess Alma's authority control capabilities, we stopped using the notification service and now only use overnight authority processing.

How do you manage the authority records supplied by MARCIVE? Are they accommodated by Alma's local authority file functionality?

LSE Library Services, The London School of Economics and Political Science, London: Since migrating to Alma we have stopped receiving authority records supplied by MARCIVE. We do not use a local authority file and use only the community zone authority records in Alma for LC authorities. Name headings that don't have an LC authority are uncontrolled. Prior to migrating to Alma we also only used LC authorities.

What staffing levels work on database cleanup based on MARCIVE reports?

LSE Library Services, The London School of Economics and Political Science, London: 1 member of staff reviews the multi-matches and unmatched headings reports. This is several hours work each month. Checking the reports associated with authority control can be time consuming and as a routine task it's easy to build up a backlog. As we don't attempt to control names for which there is no LC authority the unmatched headings report includes lots of names that are correctly entered but which we don't expect to match.

Do you include local notes/fields in authority records maintained by MARCIVE?

LSE Library Services, The London School of Economics and Political Science, London: We no longer have authority records maintained by MARCIVE.

How satisfied are you with MARCIVE processing, documentation/reports, and staff engagement?

University of Wisconsin-Madison Libraries: We were satisfied with MARCIVE's work for that 1-time project, but it sounds like you are looking into ongoing authority control (?)

LSE Library Services, The London School of Economics and Political Science, London: Completely satisfied.

Do you also use MARCIVE for other bibliographic record processing connected with RDA?

LSE Library Services, The London School of Economics and Political Science, London: No.

Do you also run the Alma linking jobs Link BIB Headings and/or Preferred Term Correction?

University of Wisconsin-Madison Libraries: We do use Alma' authority jobs – if you have specific questions about those please contact our Authorities Librarian Betsy Robbins

Fort Hays State University: We are not currently engaged in any authority work in Alma.

LSE Library Services, The London School of Economics and Political Science, London: Yes. We're using the preferred term correction to replace the MARCIVE notification service. A member of staff reviews the reports for possible erroneous changes. We run the job daily and the reports vary in length considerably depending on whether an update to the community zone authorities has been loaded. We run the link bib headings job but our initial assessment found that the reports were not in a useful format for reviewing unmatched headings so we don't do anything with the reports and use MARCIVE instead. This assessment was done before the authority control tasklist function was available.

Do you work with Alma's Authority Control Task List?

Fort Hays State University: We are not currently engaged in any authority work in Alma.

LSE Library Services, The London School of Economics and Political Science, London: Not yet. This is new since we migrated to Alma so wasn't part of our initial review of the authority control functions. We're intending to review this function in the near future.

Do you use Alma's normalization rules or other functionality to conduct database changes such as adding death dates to access points when the prior open date access point is not included in the NAR?

University of Wisconsin-Madison Libraries: We have used Alma norm rules for Bib record (but not Authority record) clean-up; e.g. when our records contained 007 fields for the accompanying material but not the main work the MARCIVE remediation process sometimes created 33X fields to match the 007 rather than the Leader 06/07. If you can isolate the set of records that contains this error then you can craft norm rules to correct it.

Fort Hays State University: We are not currently engaged in any authority work in Alma.

LSE Library Services, The London School of Economics and Political Science, London: We occasionally use normalisation rules to correct a heading across multiple records if it hasn't been picked up by automated changes. This is particularly the case when a batch of ebook records has been supplied and loaded with an incorrect heading. We also use the normalisation rules for lots of metadata cleanup work unrelated to authority control.

Do you anticipate only using Alma functionality in the future?

LSE Library Services, The London School of Economics and Political Science, London: We hope to, but we'll only do that when we feel that the Alma authority control functions match what we get from MARCIVE. We'll reconsider that when we've reviewed the authority control task list.

Do you have any specific advice relating to authority control that you would like to share with us?

LSE Library Services, The London School of Economics and Political Science, London: If you haven't already done so it's worth reviewing some of the discussions related to authority control on the ALMA-L mailing list but do bear in mind that Alma functionality will almost certainly have changed since older messages were sent.