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KBART Phase III: Changes and Unresolved Questions

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Knowledge Bases and Related Tools (KBART) is one of the most successful National Information Standards Organization (NISO) recommended practices. Formally supported by over eighty organizations across all stakeholder groups, it enables a standardized transfer of data between content providers and knowledgebases. The KBART Standing Committee has begun work on Phase III of KBART, which was last updated in 2014. In this NASIG 2021 session, three members of the KBART Standing Committee provided an overview of plans around Phase III of KBART, reviewing progress to date and highlighting efforts to resolve issues around KBART files for which there are no easy answers, such as the challenges of supporting additional content types beyond serials and monographs, how best to handle gap coverage for serials, and how to communicate Open Access content. The audience was asked to provide input on their use of KBART files, how they would like to use KBART that is not possible today, their thoughts on support for additional content types, and their opinions on proposed changes to KBART around the treatment of gap coverage and the handling of Open Access content.

KEYWORDS Knowledge Bases and Related Tools (KBART), National Information Standards Organization (NISO), e-resources management

BODY OF PAPER

Introduction and background

KBART: Knowledge Bases and Related Tools Recommended Practice (KBART) is a recommended practice (RP) of the National Information Standards Organization (NISO).¹ KBART covers how to communicate holdings and title list information for packages of e-journals and e-books from publishers and other content providers to knowledgebase suppliers. Very simply, the recommended practice specifies file format and naming conventions, fields to include with guidance on their use, and delivery mechanisms for KBART files. Currently, KBART covers serials and monographs only. KBART files are simple text files that can be opened in any spreadsheet software program.

KBART Phase I was released in 2010 as a joint project of a joint NISO/UKSG working group with the goal of enhancing the data supplied to knowledgebases and link resolvers to improve OpenURL linking for journals. In 2014, Phase II of KBART was published. It expanded KBART to include e-books and conference proceedings and addressed Open Access content and metadata for consortia collections. With the release of KBART Phase II, the management of KBART was turned over to the NISO KBART Standing Committee. Separate from the KBART RP, in 2019 *KBART Automation: Automated Retrieval of Customer Electronic Holdings* was published.² This is a companion to KBART that supports the automatic transfer and retrieval of library-specific KBART-formatted holdings reports between content providers and knowledgebases via an application programming interface (API).

The KBART Standing Committee represents a cross-section of the information industry, comprising librarians who work for libraries and consortia and individuals who work for publishers and knowledgebase suppliers. Membership is global; current committee members are based in the United States, Canada, the United Kingdom, and Germany.

KBART Phase III work items

The KBART Standing Committee started work on Phase III of KBART in March 2020 with the intention of releasing an initial draft in late 2021 or early 2022 for a thirty-day comment period. Feedback received during that time will be incorporated into the final KBART Phase III recommendations before publication.

The Phase III revision of KBART was grouped into a number of work items. The first work item, which is complete, is to clarify the current recommendations. Many components of KBART will remain the same in Phase III, but the committee has simplified the language, provided additional examples, and clarified sections that had caused confusion. Some of the changes related to how to handle gap coverage for serials, titles that are no longer available for purchase but to which some libraries retain access, and Open Access content.

Another work item is to update the endorsement process. This will likely result in tiers of endorsement to encourage greater adoption of KBART by content providers who are not currently able to meet all of the recommendations, while rewarding those content providers that do.

A significant change in KBART Phase III will be support for additional content types beyond books, journals, and conference proceedings. Additional content types supported by KBART may include textual content such as blogs, transcripts, websites, manuscripts, and datasets and will likely include non-textual content such as video, audio, and images. Phase III of KBART will better support global content by identifying translations of items and allowing representation of author names and titles in multiple languages.

As part of KBART Phase III, the KBART Standing Committee has prepared recommendations for a file manifest that will serve as a guide to the KBART files produced by content providers in order to reduce confusion among libraries and knowledgebase suppliers as

files are added, removed, or changed. The file manifest will include a list of the KBART files being delivered, what packages they correspond to, how many titles each contains, and an indication of changes since the last time the file was updated. In addition, new licensing language will be available in Phase III that libraries can incorporate into their licenses with content providers to support KBART-compliance.

For KBART Phase III, the KBART Standing Committee is going to investigate new file format options. One of the strengths of KBART is its simple text file format which allows anyone with spreadsheet software to read and manipulate the files. The requirement to produce text KBART files will remain; however, the committee is considering including options for additional formats such as JSON or XML. This could better support KBART Automation, a NISO Recommended Practice that addresses the automatic transfer and retrieval of library-specific KBART holdings data between content providers and knowledgebases, and the retrieval of KBART files via an API. Another area of investigation in Phase III will be article- and chapter-level data. KBART files only communicate holdings data at the journal and book level; KBART files do not list individual articles in journals or individual chapters in books. This is an issue due to the fact that some content providers are beginning to sell curated packages of content, often around a topic, that contain selected articles and chapters. Hybrid Open Access is also, by definition, at the article level. With this in mind, the committee will address the question of how library holdings can be communicated at a more granular level. It is unlikely that this issue will be solved in KBART Phase III, but the KBART Standing Committee plans to create a roadmap for examining this issue further and developing solutions.

Finally, as part of the KBART Phase III revision, the KBART mission statement was updated to recognize that KBART is used by many different user groups for a number of

different purposes. In addition to improving the efficiency and effectiveness of OpenURL linking, KBART files are used by discovery systems to indicate institutional holdings, by content providers to communicate their available holdings to customers and their package title lists internally, and by libraries and library consortia to manage their e-resources and track their holdings. Also, KBART Automation uses KBART-formatted files to create holdings reports at the institutional level. It is worth noting, however, that the KBART RP is not intended to provide descriptive bibliographic data. The information contained in KBART files is sufficient to allow knowledgebases to correctly identify what titles and holdings are in the file, but more robust bibliographic data must come from Machine-Readable Cataloging (MARC), Online Information Exchange (ONIX), or other bibliographic metadata feeds that KBART does not replace.

NISO Plus feedback on KBART Phase III

Members of the KBART Standing Committee presented on KBART Phase III in the “NISO Update” session at the NISO Plus 2021 online conference in February 2021.³ During this session, they sought feedback from attendees about their use of KBART and changes they would like to see from KBART as it evolves. The committee heard from platforms providing KBART files on demand for libraries, publishers sharing KBART files with subscribers, and libraries using KBART files to check content coverage and verify metadata, to auto-load holdings into library management systems, and to update holdings in OCLC WorldCat.

NISO Plus attendees indicated that they would like to see KBART support increased automation. They saw a benefit in additional identifier fields and in having crosswalks between KBART and other metadata schema such as MARC or Dublin Core. Additional content types they desired included audio-visual materials, images, archival materials, standards, and simulations. Suggested fields to support these additional content types included content type,

duration, additional contributors, any relevant identifiers, and accessibility compliance. Another suggestion was to create separate KBART files for any new content types.

NASIG 2021 feedback on KBART Phase III

Through an interactive EasyRetro board, the presenters requested feedback from NASIG 2021 session attendees on their use of KBART in general, on the need for KBART to support additional content types, and on two proposed changes in KBART Phase III. Of approximately seventy-six session attendees, twenty-four participated in providing feedback.

Use of KBART

The session attendees, who were primarily librarians, said that they used KBART files to update holdings in knowledgebases, to pull holdings from knowledgebases, to cross-check holdings against what is represented in library systems, to review how content providers are representing serial title changes, and, in the case of a publisher, to distribute content lists to customers.

Desired Use of KBART

Attendees agreed that there is a need to communicate holdings at the article and chapter levels, and they wanted KBART files to identify hybrid journals. Respondents called for more consistency among content providers in how they produce their KBART files and desired better support for matching KBART files to Project COUNTER usage data. A small, non-profit consortium wished to retrieve KBART files from content providers via an API. Responses also addressed the institution-specific KBART files used by KBART Automation; librarians wanted separate files for consortia and member library holdings as well as an indication in KBART files of which of a library's entitlements were acquired in a perpetual access model.

Additional Content Types and Related Fields

Responses on the EasyRetro board indicated that attendees overwhelmingly wanted KBART files to support streaming video content. Support for image content was also desired. The fields that would be helpful in describing these new content types included length of video and production company.

KBART Phase III: gap coverage

In the current KBART RP, content providers are instructed to list a serial title twice in their KBART files if there is a gap in coverage of greater than twelve months. However, the RP also states that “greater granularity in reporting data coverage gaps is desirable and should be agreed upon with the knowledgebase link resolver supplier if it can be supported.”⁴ The KBART Standing Committee became aware of instances where content providers created a new line in their KBART files for gaps in holdings as small as a single issue. This weighed down the KBART file and made holdings less readable. As a compromise, in Phase III, KBART will request that content providers list a title twice if there is a gap in coverage of greater than six months while removing the language that greater granularity in reporting coverage gaps is desirable. When asked for their feedback on this change, session attendees overwhelmingly supported it while cautioning that they would like to know how it would impact link resolving.

KBART Phase III: Open Access content

As noted above, KBART files communicate title level information and do not provide holdings information at the article and chapter levels. Because of this, KBART files are not able to support hybrid Open Access, defined as Open Access that applies only to some articles in a journal issue and some chapters within a book. To identify freely available content, KBART relies on three elements: the KBART file, the coverage statement for a title, and the “access

type” field. In KBART Phase III, if a subset of a content provider’s content is available fully Open Access, a separate KBART file should be created for that content, listing only the coverage that is Open Access. This will result in knowledgebase collections such as “Wiley Online Library Open Access” and “Cambridge Books – Open Access” and will allow librarians to select in their knowledgebases, at the collection level, all the content from a provider that is free. In addition to the two values of “P” for paid and “F” for free for the “access type” field in the current KBART RP, KBART Phase III adds a third value, “M,” for mixed content. This will accommodate hybrid Open Access content at the title level. Session participants enthusiastically supported the idea of this “mixed” access type, given the growing number of hybrid Open Access journals, and they appreciated the ability to select only the Open Access content from a provider in their knowledgebases. One participant noted that while they liked the idea of the “M” access type, many paid titles will likely be designated as “M” if they have any Open Access content at all.

The speakers encouraged session attendees to stay involved with the KBART Phase III revision process by contacting the KBART Standing Committee by email at kbart@niso.org, by joining the KBART Interest Group mailing list at https://groups.niso.org/lists/kbart_interest/, and by offering input on the KBART Phase III draft during the public feedback period.

NOTES

1. National Information Standards Organization, “NISO RP-9-2014, KBART: Knowledge Bases and Related Tools Recommended Practice,” (Baltimore: National Information Standards Organization, March 17, 2014), <http://www.niso.org/standards-committees/kbart> (accessed January 4, 2022).

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3. National Information Standards Organization, “NISO Plus 2021 Program,” (Baltimore: National Information Standards Organization, 2021), <https://nisoplus21.sched.com/> (accessed July 12, 2021).
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CONTRIBUTOR NOTES

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