“Six Impossible Things”: Moving KBART into the next decade

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Remember: We have 40 minutes, including any audience discussion we want to have. (No intros: we'll introduce ourselves before we speak.)
KBART - a short overview

● KBART = Knowledgebases And Related Tools
  ○ Format for the transfer of (global) title lists from a content provider to a KnowledgeBase

● KBART Automation
  ○ Automatic transfer of KBART formatted holdings files from a content provider to a KnowledgeBase on behalf of a specific institution
KBART recommends best practices for the communication of electronic resource title list and coverage data from content providers to knowledge base (KB) developers. KBART specifies file format, delivery mechanisms, and fields to include, and it applies to both serials and monographs.

Knowledge bases are used to provide data for OpenURL link resolvers and to populate library discovery systems with an institution’s e-resource holdings data. Many libraries also use knowledge base data in library catalogs, for e-journal title lists, in electronic resource management systems (ERMs), and in other tools. If a knowledge base contains inaccurate information or is not updated regularly, these discovery and management tools will fail. By providing a recommended practice for communicating information from content providers to knowledge base developers, KBART helps ensure the integrity and functionality of knowledge bases.

81 organizations formally endorsed; 51 have joined KBART Registry.
KBART Automation: Process for the automatic transfer of title holdings lists from content provider to KnowledgeBase

KBART Automation in the information landscape
KBART Automation: The flow in detail

1. Institutional Token
2. Institutional Token
3. Request
4. File
5. Upload
6. Update KB content

Content provider → API → Frontend → KnowledgeBase

One time activity
Scheduled activity

Institution/Library
– KBART in short

Goal:

KBART: To increase accuracy of KB content to reflect accurate title list and package/collection offerings of content providers

KBART Automation: To allow the automatic localization of KBs by transferring KBART formatted holdings files from content providers to institutional KnowledgeBases

Status:

KBART Phase 2 published in 2014 - Proposal in phase 3 in approval process
KBART automation published in 2019
Some of the changes in our information landscape

- Granularity of level where items become available increases—from title to item level, e.g. hybrid open access journals
- More material becomes available and needs to be managed: From hundred thousands to millions
- Many more material types become available: From journals and books, to book chapters, audio material, images, films, manuscripts, maps .......
- New business models appear and need to be managed

How can KBART help?
Recommended Practice Phase III

1. Draft Phase III proposal
2. Seek approval from NISO Information Discovery & Interchange Topic Cmte.
3. Identify working areas and needed subgroups
4. Identify areas of expertise needed and recruit new members
5. Review/Outline Period
   a. Research new recommendations with emphasis on what providers currently send and what KBs can utilize
   b. Subgroups to create outline of new recommendations
6. Complete initial draft
7. Circulation of draft for 30-day comment period
8. Marketing and education
9. Incorporate requests from public comments and complete final draft for publication

Status and explanation of proposal process
Noah
2 minutes

Since the publication of the revised KBART Phase II Recommended Practice in 2014, the KBART Standing Committee has identified both needed clarifications and revisions to the KBART RP and substantial additions and new areas of work to cover [which we don’t need to summarize here because they’re throughout the presentation].
Low-hanging fruit (10 min.), Robert

In the more than 5 years since KBART Phase II was released, additional needs have been identified. Some of these needs are relatively straightforward to address. In addition, we’ve learned that certain areas of the KBART RP would benefit from additional clarification, even if they remain unchanged. We’re calling these straightforward updates and clarifications “low-hanging fruit.”
Phase III: Low-hanging fruit
More guidance and examples

Content providers that are new to KBART sometimes struggle to get started with bringing their files into compliance.

=> Expanded guidance on what files to create and what metadata to include

=> Clarifications and additional information on data fields as identified by content providers, librarians, and the KBART Automation Working Group

=> More examples of correct implementation of the KBART Recommended Practice, preferably for every field or recommendation

ROBERT
The lowest-hanging fruit:

What files to create: For example, whether to create separate ALL TITLES files for serials and monographs, criteria on when to create a new file/package, etc.

Clarifications/additional information: For example, current recommendations for representing title histories (5.2, 6.6.2) might not work for content providers that don’t have a unique identifier for preceding titles; maybe we need more than one recommendation depending on the situation.

More examples --
- What to do when an issue or volume number is combined, e.g. 3/4.
- How to represent issues that are supplements, which often have different titles than the mother publication but share an ISSN.
- Whether to require end date when a journal is significantly behind in publication
Phase III: Low-hanging fruit
Guide to provider files available

Many content providers have an extensive catalog of content for sale (by content type, subject, geographic region, consortia, etc.). This results in a separate KBART file for each offering.

As content packages change, KB vendors and librarians cannot easily keep track of what has been added, removed, or changed.

=> Content providers create a document that serves as a guide to their KBART files
=> Version history / Addition of add-delete-delta files to flag changes
   ● Would also be useful in supporting KBART Automation

ROBERT
Providers could create a file manifest/guide to their files, collection names & info., etc. Include:

- Names of files delivered
- Collection name that the file represents
- Unique code for collection
- Description of collection
- Number of records in collection
- Date created / updated
Phase III: Low-hanging fruit
Handling of withdrawn content

Content sold to libraries sometimes is withdrawn from publisher packages.

Usually, current KBART files for packages do not contain content no longer available for purchase.

Libraries that previously purchased content often retain grandfathered access, but content becomes invisible to their link resolvers and disappears from discovery systems because it was dropped from the KB package.

=> Version history / Addition of add-delete-delta files to flag changes

ROBERT
A related issue is withdrawn content that some customers can still access.

Usually, current KBART files for packages do not contain content no longer available for purchase. However, customers may have grandfathered access to titles, with no way for KBART files to represent this.

KBART Automation, which relies on entitlement snapshots for individual subscribers, gets around this problem. But how to handle in regular KBART files?

KB vendors could develop solutions around these files, e.g. separate collections for withdrawn content?
Phase III: Low-hanging fruit
Additional content types

KBART Phase II only provides metadata for serials and monographs.

Content providers with multimedia and non-book/non-journal formats have no recommended way to communicate these holdings.

=> Support for additional content types:

<table>
<thead>
<tr>
<th>Textual</th>
<th>Non-textual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blogs</td>
<td>Audio</td>
</tr>
<tr>
<td>Transcripts</td>
<td>Video</td>
</tr>
<tr>
<td>Websites</td>
<td>Images</td>
</tr>
<tr>
<td>Manuscripts</td>
<td>Etc.</td>
</tr>
<tr>
<td>Datasets</td>
<td></td>
</tr>
<tr>
<td>Etc.</td>
<td></td>
</tr>
</tbody>
</table>

ROBERT
The current KBART Phase II recommendation only provides for serials and monographs. Since the last KBART RP revision, there has been an increase in popularity of non-textual content and textual content that doesn't fit the traditional serial and monograph formats that the KBART Recommended Practice assumes. Content providers who need to include multimedia and other non-book/non-journal formats (videos, databases, blogs, websites, etc.) are forced to add a field to the end of their KBART file to identify such content, with no published recommendation on how to communicate this. At best this causes confusion; at worst content providers eliminate valuable data from their KBART title lists.
Phase III: Low-hanging fruit
Support for global content

Global content has little support in KBART Phase II.
KBART metadata does not identify translations of items or represent author names or titles in multiple languages.

=> Improved support for global content

● Content with non-Latin characters
● Translated titles
● Transliterated titles
● Names of authors and editors (expand field to include full name?)
● Language of content

ANDREE

Changes in the marketplace since Phase II
Needs not met by current RP
Growing prevalence of non-English and non-Latin alphabet content
Phase III: Low-hanging fruit
Endorsement process overhaul

KBART Phase II endorsement process has only one tier for content providers. It is not currently clear if knowledgebase vendors can apply for endorsement or what standards should apply to them.

=> Varying levels of endorsement?
- Reward content providers who achieve a “Gold Standard”
- Make endorsement easier for content providers unable to attain 100% compliance
- Endorsement of KB vendors — what does this mean?
- How/if to communicate endorsed providers for earlier versions of RP?

=> Branding and focus of program?
=> Role of KBART Registry in process and its structure/presentation?

ANDREE

Currently the endorsement process only has one tier for content providers. The lack of a multitiered approach causes several issues:
1. Content providers who do achieve a “Gold Standard” should be rewarded, for which there is no provision in KBART Phase II.
2. Content providers who are unable to attain 100% compliance due to technical limitations (such as inability to provide a journal’s title history) may be dissuaded from attempting endorsement, even though the KBART Standing Committee may have been willing to issue an endorsement.
3. It is not currently clear if knowledge base vendors can apply for endorsement or what standards should apply to them.

We also want to look at the branding and the focus of the endorsement process as well as the role of the KBART Registry in regard to communicating endorsement.
Phase III: Low-hanging fruit
Model license language

The Licensor will make available to third-party knowledge base providers an itemized holdings report that specifies the titles included in the Licensed Materials. The Licensor will use reasonable efforts to update itemized holdings reports as soon as is practicable when holdings information changes and will provide this information to knowledge base providers in a timely manner and to the Licensee on request. If the Licensed Materials include content covered by the NISO “Knowledge Bases and Related Tools (KBART) Recommended Practice”, the Licensor will provide itemized holdings reports for the Licensed Materials in KBART-compliant format.

In addition, the Licensor will make available to third-party knowledge base vendors and Subscribing Institutions institution-specific holdings reports. If the Licensed Materials include content covered by the NISO “Knowledge Bases and Related Tools (KBART) Recommended Practice”, the Licensor will make such holdings reports available for automated retrieving via an API that adheres to the requirements in the NISO “KBART Automation: Automated Retrieval of Customer Electronic Holdings” Recommended Practice.

ANDREE

Current RP: Only mentions that the KBART Working Group has collaborated with consortia to provide guidance on statements within licenses and contracts relating to KBART compliance. [2.2.3]

A number of current model licenses in existence that mentioned KBART:

- California Digital Library model license (2016)
- LIBLICENSE model license (2015)
- Canadian Research Knowledge Network (CKRN) model license (2016)
- Jisc model license (2018)

Section 5.1 of KBART Automation (2019) has model license language, which we could possibly incorporate.

This is a DRAFT of model language that would support KBART files and KBART automation.
Phase III: Tough questions

- The appropriate scope and purpose of KBART today
- Granularity of metadata covered versus maintaining the Recommended Practice’s simplicity

Tough questions (12 min.), Noah & Christine

Noah
All of these questions are legitimate: The question is whether they fall within KBART’s scope.
Phase III: Tough questions
Purpose of KBART

Reasons for expanding KBART’s purpose

- KBART was originally created to support accuracy in OpenURL linking.
- Now it is used to display library holdings in discovery systems and ERMs.
- With KBART Automation, linking and identifying institutional holdings becomes a central focus of KBART.
- The KBART Recommended Practice needs to support KBART Automation.

What is the role and importance of KBART in today’s e-resource ecosystem?

=> Revise KBART mission statement to reflect the current use of the Recommended Practice.

KBART originated as a recommendation for providing standardized data to OpenURL link resolvers in support of reliable citation-to-full-text linking.

Now, KBART is being used in unintended ways not anticipated when KBART was first drafted almost a decade ago. This is due to the natural growth and adoption of KBART over the years.

Knowledge bases built with KBART data are used by librarians to populate library discovery systems and catalogs, for e-journal title lists, in electronic resource management systems (ERMs), and in other tools. Librarians also use KBART lists in other ways, for example to understand what they have purchased, to conduct overlap analysis between print and electronic holdings, and to compare publisher packages when considering purchases.

We want to revise the KBART mission statement to reflect the current use of the Recommended Practice.

Updating the mission statement will also affect decisions about the data fields themselves.

For example, the current RP (6.4.6) suggests creating a new line for a title if there is a coverage gap greater than or equal to 12 months, with greater granularity desired. This is the best recommendation for supporting OpenURL linking. But if using KBART data for holdings statements in library discovery systems is now of equal importance,
perhaps greater granularity is not desirable due to long and confusing holdings statements that are created as a result.

Similarly, currently KBART does not recommend that journals that have suspended publication include an end date for the last available issue (since the publication has not ceased). But librarians and their end-users might desire such information in their discovery tools.
As more content providers consider business models for selling content at a more granular level than the journal issue or book, and as archival primary source databases incorporate content that can also be quite granular, how can this holdings information be communicated using KBART?

Should it be?

Is article and chapter level access a role for discovery systems or knowledge bases?

INCLUDE HYBRID OPEN ACCESS AS A SUBPOINT HERE
Phase III: Tough questions
XML support

Problem statement:
- KBART files can be rather large. Especially for automation the adoption of XML might provide
- Should KBART recommend the use of XML as an optional file type (in addition to required tab-delimited text files)?

Pros
- Could be easier for Database ingestion
- Allows content providers flexibility in how they provide KBART if they choose this option

Cons
- KB providers already support txt and it works, why changing it?
- Does this really justify the additional burden for KBs?
Discussion

Feedback on proposed items presented

The need for Article/Chapter Level? Other formats (ie XML) of KBART?

Other suggestions for Phase III consideration

Relative priority of the proposed items

Ideas for addressing items?

Existing solutions that could be adopted as part of KBART?

Feedback about the process?

10 minutes. Everyone, plus Nettie taking notes.
Ways you can get involved

Fill out the survey!
Contact us now to inform the scope of work
  ● kbart@niso.org
Respond during public feedback period
Join the standing committee
Join the interest group mailing list
  ● https://groups.niso.org/lists/kbart_interest/

1 minute, or just leave up slide