Agenda

1. Developer Network
2. Alma
3. Primo
4. Summon
5. Rosetta
Goals of the Interoperability Working Group

• Ex Libris believes strongly in an open platform and interoperability.

• We support the Interoperability Working Group and look to it to provide valuable feedback from the community on issues of standards and system openness and integration.

• In addition, we hope the working group can provide another vehicle to support and encourage sharing among members of the community.
Active Forum

Developer Network

<table>
<thead>
<tr>
<th>Forum Type</th>
<th>Description</th>
<th>Threads</th>
<th>Date</th>
<th>Username</th>
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<td>General</td>
<td>A forum for discussing issues that are not product-specific</td>
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<td>15/08/2018 07:24:39</td>
<td>ottk</td>
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Removing minor changes to headings in Authority Control Task List report
Sarah Johnston
August 7th, 2018
The Authority Control Task List in Alma can be exported to an Excel file for advanced data manipulation. Carleton and St. Olaf Colleges recently turned on the Preferred Term Correction job, and as part of the cleanup, wanted to remove entries from the...
Read More

Nilde and Alma
fabiano petrone (Università degli Studi di Udine)
August 5th, 2018
A detailed article about the Alma - Nilde integration can be found here. It describes the required configuration in Alma and in Nilde, in order to allow the integration. If you have any question, you can ask in a comment here.
Read More
Ex Libris maintains a presence on Github to share integration demos, code samples, plugins, and collaborative projects.

Notable examples:
- Primo new UI toolkit
- Rosetta plugins
- Alma migration tools
- Alma/Blacklight sample integration
- Tableau Web Data Connector
Standards Dashboard

- Lays out the Ex Libris approach to standards
- Highlights standards compliance by our products
- Lists standards bodies in which Ex Libris takes an active role

https://developers.exlibrisgroup.com/standards
Standards Support at Ex Libris

Josh Weisman on October 23rd, 2017

As a part of our open collaboration with customers, Ex Libris engages with the IGeLU/ELUNA Interoperability Special Interest Working Group (SIWG) to encourage use of our platform, support a community of developers, and receive input on the APIs and integrations road maps.

The working group published a position paper in 2017 in which it recommended that Ex Libris adopt open standards. The adoption of open standards allows for systems to work together while minimizing the amount of custom integration work needed for each implementation. We at Ex Libris agree with this position, and as a result of the discussion with the working group we embarked on an effort to better surface support for standards across our products.

IGeLU/ELUNA Interoperability SIWG - Open Standards

Position paper 2017

One of the five current (2016) Key Goals of the IGeLU/ELUNA Interoperability SIWG (http://gelu.org/special-interests/interoperability-siwg) is about open standards.

Establish “open platform using open standards”, including open data standards, as an integral design principle.

In this position paper the Interoperability SIWG clarifies what is meant with the concepts “open platform”, “open standards” and “open data standards” and how they relate to interoperability as in the Ex Libris products and tools landscape.

Interoperability

Ex the Interoperability SIWG draft paper (http://gelu.org/special-interests/interoperability)

Interoperability is described as follows:

Standards versus REST APIs

Standards allow for turnkey integration between systems without custom development. The adoption of

https://developers.exlibrisgroup.com/blog/Standards-Support-at-Ex-Libris
Alma Interoperability Update
Recently Released

- Webhooks
  - Logs
  - Loans & Requests
  - BIBs & Item Updates
- Cataloging APIs
  - Normalize / Validate BIB record
  - Cataloger level, stale version check
  - Warnings and override
  - Link / unlink to network zone record
- Reminders
  - Full CRUD
  - Full CRUD for BIB reminders
- Portfolio APIs
  - Full CRUD
  - Stand-alone from BIB
- License APIs
  - Full CRUD
- Discovery APIs
  - Request options for BIBs/items
  - Loan Policy
  - Get/filter ALL items
  - Calculated summary holding
  - General electronic services
- Linked Data
  - Publishing for RDA/RDF
  - API/Publishing for BIBFRAME
- Other
  - Analytics Paths API
  - Combine Sets API
  - Create lending resource sharing request
  - Delete holding record
  - Get individual fund
  - Manage users in fulfillment network
Coming Soon

• Fund APIs

• Invoice APIs

• Open ID Connect for authentication

• Webhooks for collections, portfolios, holdings updates
Discovery-Optimized APIs

• Enable API-driven integration with open source discovery systems such as Blacklight and VuFind

• Supporting active development by institutions such as University of Pennsylvania and Temple
VuFind Alma Integration

- VuFind 5.0 released in July 2018

- Supports an Alma ILS driver
  - Open source contribution which leverages the Alma APIs

- In production at institution in Austria
Blacklight Reference Implementation

https://blacklight-apis.exldevnetwork.net

https://github.com/jweisman/alma-blacklight
Linked Data

• Alma automatically enriches records with linked data URIs for known entities

• Enriched records are available via publishing and APIs in various linked data standards

• Linked data URIs are published to Primo for use in discovery

https://developers.exlibrisgroup.com/alma/integrations/linked_data

“Linked-Open-Data-BVMC” is licensed under CC BY-SA 4.0
# Linked Data Endpoints in Alma

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<tr>
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<th>Publishing</th>
<th>View in Alma</th>
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<tr>
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</tr>
<tr>
<td>BIBFRAME</td>
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<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
Linked Data in Alma

• This means that 750M+ bibliographic records stored in Alma institutions can now be exposed in linked data formats!

• Get involved in the Linked Data Working Group

https://developers.exlibrisgroup.com/blog/Journey-to-Linked-Open-Data-Support-Update
Primo Interoperability Update
Making Library Catalog visible on the Web

- Library Records from new UI can be visible on the web
  - Sitemap Tool generates per given search scope deep links to relevant records, creating robots.txt for search engines crawlers
  - **Making new UI deep links also available** for search engines crawlers
  - Read More on [The Generate Sitemap Tool](#)
Making Library Catalog visible on the Web

- Expose library records in common schemas for structured data markup on web pages, such as schema.org, to be indexed by Internet search engines

- First phase of Linked data using schema.org is structured representation: mapping PNX fields to the corresponding Schema.org fields

```json
{
    @context: "http://schema.org",
    @type: "Book",
    @type: "Periodical"
}
```

schema.org
JSON-LD format
Making Library Catalogue Visible on the Web

- Next phase of Linked Data is to create relations among resources
- Records with connections and availability should be ranked higher by search engine
- Linking
  - Author/Creator/Contributor
  - Subjects
  - IDs
  - customized link fields
- Availability
- Search Context
- Primo Central Resources Graph
**Enhanced Primo REST API Suite – Primo February release**

- **Enhanced Primo REST API Suite**
The Primo REST API Suite provides library developers to access to search capabilities and enriched results as used by new Primo interface. It contains: Primo Search API, Primo Configuration API and Primo Translations API. API Documentation can be found in [Primo Developer Network](#) with options to use "Try it now" to call the API and start using code samples.

May release we have added option for cloud customers to use Search and Favorites APIS for signed in users.
Enhanced Primo REST API Suite – Primo May release

• Continuing the effort of exposing Primo APIs as being used by the new UI, we enhanced Primo REST API Suite to include capabilities for signed in user, adding the following:

• User JWT – service that returns a user indicator that can be used when triggering a call to search API to get search results for the given user or a call to Favorites API to get the saved records. This service is available only for Primo cloud customers.

• Favorites – service returns a list of items that a user has saved in his or her favorites list.

• Documentation is available in the Developer Network
Primo Studio - The next level of customization and community collaboration
Creating Your Own Primo Experience is Easy as...

1. Select your own color theme

2. Upload your logo and icons

3. Add features and widgets from the Primo community
Leveraging the Power of the Primo Community

- GitHub repository – developed and maintained by the Primo community
- New add-ons, services, APIs
- Leveraging the Primo Open Discovery Framework –
  - Enabling developers to ‘manipulate’ every element in the application
  - Manageable upgrades
  - Immediate display of changes
API Improvements

Recent Enhancements:

Availability for API

Ability for API users to display availability information for content an institution has rights to

Topics for API

Provide access to the necessary fields to create the topic explorer pane
Should provide institution the ability to create a topic explorer with the same contents: Reference resource, suggested librarian, Recommended topics, Recommended Research Guides

Coming Soon:

Linked Data

• Improved exploration by connecting the discovery interface and external linked data sources
• Display links, data, and services based on harvested URIs, enriching the discovered content to make use of linked data
Summon Over Alma – Seamless Activation of Resources

- Increased Frequency of Right Updates and Increased Frequency of Catalog Updates scheduled for second half of 2018
Will be adding articles on the blog highlighting uses of the API and hot-to articles.
Rosetta Interoperability Update
Highlights – Released Versions

• Version 5.4 (December 2017)
  • Extended SRU Capabilities
  • New out of the box tools for format verification, metadata extraction and content migration, such as VeraPDF, MediaInfo and FFMPEG.

• Version 5.5 (April 2018)
  • HANDLE Persistent Identifier Support
Highlights – Road Map

• Version 6.0 (December 2018)
  • SAML - support for additional unique ID.
  • SRU Request on the file level
THANK YOU

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