Interoperability SIWG Update

IGELU 2017 | St. Petersburg, Russia

Josh Weisman | VP Development, Resources Management
Agenda

• Developer Network
• Alma
• Primo
• Summon
• Rosetta
Developer Network
Ex Libris Developer Network

- Documentation
- Blog
- Forum
- Dashboard
Active Forum

Product Forums

- **General**: A forum for discussing issues that are not product-specific
- **Alma**: A forum for Alma developer community support
- **Primo**: A forum for Primo developer community support
Remaining APIs Header

• We've added a new header which will be returned for each API request with the up-to-date number of remaining requests.

• The header's value is the number of requests left until midnight according to the Institution's Account Plan.

X-Exl-Api-Remaining: 49999

https://developers.exlibrisgroup.com/blog/Advanced-API-Usage-Reports-Now-Available
DNX update by a repository task plugin
Timothy Leacuey
August 30th, 2017
This post is intended as a kind of tutorial on creating repository task plugins to modify DNX metadata in batch. This plugin was created to correct ILEs where a Handle identifier was created in the wrong place. It was added to the InternalIdentifier.
Read More

Passing Parameters from App Builder Tile Configuration to an AEK Screen
Ido Peled
August 30th, 2017
The aim of this blog is to give a step-by-step guide on how to pass useful values (like a color or a page title) through to any AEK integration, via a homepage tile, using the App Builder. This topic assumes you’re already familiar with: How to create and
Read More

Clio and Alma: Together at Last
Stephen Gladwin
August 28th, 2017
The cloud-based Clio system integrates tightly with Alma through NISO Circulation Interchange Protocol, which is a protocol that enables, among other things, interoperability between stand-alone interlibrary loan systems such as Clio or ILLiad.
Read More

Use an External Viewer with the Digital Delivery Service
Josh Weisman
August 13th, 2017
In a previous post, we showed how to use the IAv Book Reader with digital content managed in Alma. Our example used the BB and file APIs to retrieve the information necessary to display our content in the viewer. Several recent improvements to Alma.
Read More

Sharing Your AEK Code
Ido Peled
August 31st, 2017
Sharing code with the campusM developer community can be done in two ways: Share your code on GitHub, like we do here (recommended), or share it in the NPM. This post will explain the process of how to share your code with the campusM developer community.
Read More

AEK Weather Tile
Ido Peled
August 31st, 2017
This code base allows AEK developers to see what the final end result will be if you are following the training video: https://knowledge.exlibrisgroup.com/campusM/Training/AEK_Application_Extension_KIT. This will allow developers to look at the code.
Read More

Simple QR Reader
Ido Peled
August 31st, 2017
This project allow you to work with QR codes to launch links to information for students and other directly from a campusM app. This can be especially useful during an open day/open house or in buildings around campus. A user can scan a QR code with
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.
Tableau Web Data Connector

• Tableau provides a way to visualize data from various sources
  • Many customers are already using Tableau
• Can aggregate and display data from various sources
  • How can we include library data as well?
• Tableau’s “Web Data Connector” technology can be used to import data from APIs

Announcing an Ex Libris web data connector for use by all Ex Libris customers! The connector is open source and available for everyone.
Tableau Web Data Connector

https://developers.exlibrisgroup.com/blog/Tableau-Web-Data-Connector-for-Ex-Libris-Analytics
Alma Interoperability Update
Recently Released

- Set management
  - Electronic
- Create/delete itemized set
- Create itemized set from job
- Transform logical to itemized
- Create logical set
- Add/remove itemized set members
  - Also by “other” IDs
- Process Orchestration
  - Run scheduled jobs
  - MD Import job details
- Electronic
  - CRUD e-collections, e-services, portfolios
- CRUD Collections
- BIBs/Users
  - Update loan due date
  - Create fine/fee
  - Delete BIB
  - Validate/Normalize BIB

“Unlocking Your Library with the Alma Open Platform”

Tuesday 12 Sep.
14:30-15:15
Coming Soon

• Linked Data
  • BIBFRAME: Publishing, Export, View record
  • JSON/LD updates
  • Updated documentation

• Reminders APIs
• License APIs
• Resource Sharing CRUD
• Combine Sets API

• Analytics Report List API
• Discovery Optimized APIs
• Delete Holding record API
Multi-Lingual Support for REST APIs

• New querystring parameter supported - lang

• Descriptions, error messages, etc. will be returned in specified language

• Applies to (almost) all fields which contain desc (XML) or value/desc (JSON) attributes

https://developers.exlibrisgroup.com/blog/Alma-APIs-Multilingual-Support
Multi-Lingual Support for REST APIs

GET /almaws/v1/bibs/9.../items/23212...1?lang=de

```
"holding_data": {
  "holding_id": "2221229930000561",
  "call_number_type": {
    "value": "0",
    "desc": "Library of Congress - Klassifikation"
  },
  "call_number": "ISSN RECORD",
  "accession_number": "",
  "copy_id": "",
  "in_temp_location": false,
  "temp_library": {
    "value": "MAIN",
    "desc": "Hauptbibliothek"
  }
}
```
Login via Email

- Users are registered in Alma with an email address by the circulation desk (or by the REST APIs).
- When users wish to login to Primo, they select the “login via email” option and provide their registered email address.
Login via Email

• An email with a “magic link” is sent to the user. The user can click the link within 30 minutes and is automatically logged in to Primo. No password required.

• The link is cryptographically signed to prevent spoofing
Alma Webhook

• Alternative to “polling”- push rather than pull

• Respond to events in the system. When they occur Alma calls out to a customer’s REST endpoint with a defined payload

• Asynchronous architecture

• Reduce API calls

Source: http://www.webhooks.org
Alma Webhook Support

- Job End
- Notifications
- User update – **NEW** in June 2017
- Webhook Log – **NEW** in Sept 2017
- Others coming soon – Events, BIB Updates

[https://developers.exlibrisgroup.com/blog/tag/Webhooks](https://developers.exlibrisgroup.com/blog/tag/Webhooks)
# Webhook Log

## Webhooks Logs List

<table>
<thead>
<tr>
<th>Profile Code</th>
<th>Create Date</th>
<th>Action Time</th>
<th>Action Type</th>
<th>Attempt</th>
<th>Request Body</th>
<th>Request Headers</th>
<th>Response Body</th>
<th>Response Status</th>
<th>Response Time</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notifications-WH</td>
<td>12/05/2017 06.07.33 CDT</td>
<td>12/05/2017 04.06.56 CDT</td>
<td>JOB_END</td>
<td>3</td>
<td>{'id': '28712...'}</td>
<td>-</td>
<td>-</td>
<td>500</td>
<td>7870</td>
<td><a href="http://alma.../notifications">http://alma.../notifications</a></td>
</tr>
<tr>
<td>Notifications-WH</td>
<td>12/05/2017 05.07.22 CDT</td>
<td>12/05/2017 04.06.56 CDT</td>
<td>JOB_END</td>
<td>2</td>
<td>{'id': '28712...'}</td>
<td>-</td>
<td>-</td>
<td>500</td>
<td>9223</td>
<td><a href="http://alma.../notifications">http://alma.../notifications</a></td>
</tr>
<tr>
<td>Notifications-WH</td>
<td>12/05/2017 04.07.10 CDT</td>
<td>12/05/2017 04.06.56 CDT</td>
<td>JOB_END</td>
<td>1</td>
<td>{'id': '28712...'}</td>
<td>-</td>
<td>-</td>
<td>500</td>
<td>8136</td>
<td><a href="http://alma.../notifications">http://alma.../notifications</a></td>
</tr>
<tr>
<td>Notifications-WH</td>
<td>11/05/2017 06.16.20 CDT</td>
<td>11/05/2017 04.15.55 CDT</td>
<td>JOB_END</td>
<td>3</td>
<td>{'id': '28711...'}</td>
<td>-</td>
<td>-</td>
<td>500</td>
<td>8006</td>
<td><a href="http://alma.../notifications">http://alma.../notifications</a></td>
</tr>
<tr>
<td>Notifications-WH</td>
<td>11/05/2017 05.16.10 CDT</td>
<td>11/05/2017 04.15.55 CDT</td>
<td>JOB_END</td>
<td>2</td>
<td>{'id': '28711...'}</td>
<td>-</td>
<td>-</td>
<td>500</td>
<td>8067</td>
<td><a href="http://alma.../notifications">http://alma.../notifications</a></td>
</tr>
</tbody>
</table>
IIIF Support

• International Image Interoperability Framework
  • Series of APIs intended to allow easy integration among digital repositories

• Alma will support the IIIF presentation API (manifest) and bundle the Universal Viewer

• Adds support for TIF files

New Feature
August 2017
```json
{
    "@context": "http://iiif.io/api/presentation/2/context.json",
    "@id": "https://na01.alma.exlibrisgroup.com/view/delivery/TR_INTEGRATION_INST/1288029980000561",
    "@type": "sc:Manifest",
    "metadata": [
        {
            "label": "Title",
            "value": "NASA Space Images"
        },
        {
            "label": "Author",
            "value": "NASA"
        }
    ],
    "label": "NASA Space Images",
    "description": ",",
    "viewingDirection": "left-to-right",
    "viewingHint": "individuals",
    "sequences": [
        {
            "@type": "sc:Sequence",
            "canvases": [
                {
                    "@id": "1388029970000561",
                    "@type": "sc:Canvas",
                    "label": "Galaxy Abell 1689's "Gravitational Lens" Magnifies Light of Distant Galaxies",
                    "width": 3853,
                    "height": 4000,
                    "images": [
```
IIIF Support – Universal Viewer
Primo Interoperability Update
Primo Discovery: Extend and Share Innovations with the Community

Primo Open Discovery Framework
- Embed external services
- Develop new services
- Add components
- Leverage linked data

Share with the Primo Community
- Implement out-of-the-box discovery
- Tailor brand & design
- Expand services & functionality

Development Customization Package
Development Environment
Primo Open Discovery Essentials

- Customize, Develop & Collaborate
- Immediate display of changes
- Manageable upgrades
- Simple way to display default ‘factory’ UI
- Share with the community
Techies Paradise Playground

Customize and develop on your local server

With no affect to your production
Open Discovery Framework

https://github.com/ExLibrisGroup/primo-explore-devenv
Road Map - schema.org

• Expose library records in structured data markup on web pages (ie schema.org) so they can be made searchable by Internet search engines
Road Map – REST APIs

- Primo Rest API as used today by the Primo New Interface
  - Well documented in Primo developer network
  - Works with Ex Libris API Gateway

- Search API
- Full record page
- Favorites
- Push to Actions
- Get View Configurations
- Permalinks

- Personal settings
- Resource Recommender
- Citations Trails
- Tags
- Time cited
- More …
Summon Interoperability Update
API Improvements

Recent Enhancements:

• Faceting by Content Provider and Database
• Search by Discipline
• HTTPS Support
• Open Access Filter: Faceting by Open Access
• Addition of the API documentation to the Developers Network

Coming Soon:

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
Summon Over Alma – Seamless Activation of Resources

- Activating resources in Alma powers discovery rights for Summon
- Automated holdings updates for some collections (such as ebooks)

Going live in May 2017
Search API

Overview

The Summon Search API is a service that exposes all of the search capabilities of Summon. The API is an HTTP-based service and supports requests via the HTTP GET and POST methods. Currently there are two available response formats: XML and JSON. All requests to the API require authentication via private-key digest. The API receives requests and returns responses encoded in UTF-8. The data that can be retrieved from the Search API include meta documents, facet counts and spelling suggestions.

In addition to the traditional parameter-based query system, the Search API includes a new command-based query system that can be used standalone, or in conjunction with parameters. Commands provide some unique benefits over raw parameters, since they can provide additional information to the API about the action being performed. When the API knows about actions being performed by the client it can execute common search logic, such as paging and did you mean, on the client’s behalf. This can greatly simplify the ease and speed of client implementation. For more specific information on the command system, see Commands.

There are four parts to making a Search API request:

1. Build the URL query string:
2. Build the HTTP request headers:
3. Build an authentication digest based on the query string and headers; and
4. Parse the response and handle any errors.

Query String
Rosetta Interoperability Update
Highlights – Released Versions

• Version 5.2 (March 2017)
  • Support for BagIt Deposit
  • SAML Authentication built-in to Rosetta
  • Alma Remote Repository Integration Plugin - allows creation/deletion of digital inventory
  • Alma Remote Repository Access Rights Check - allows Primo (via Alma) to display access for digital resources stored in Rosetta

• Version 5.3 (August 2017)
  • IIIF Support
  • Integration with figshare
Highlights – Road Map

• 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.
THANK YOU

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