Agenda

• Principals
• Advantages
• Where we are?
• Linked Data Roadmap
• Infrastructure
• Ex Libris Linked Data Ecosystem
• Questions and challenges
Linked Data principals

**Prime**
Cataloging of new record by using linked data formats

**Side by side**
Existing records in various formats will continue to be managed side by side with Linked Data records

**Eco system**
Provide ability to managed URI for all records across institutions in Ex Libris platform as part of global eco system

**Navigation**
Leveraging the relationship between linked records. For example: Display, navigation, and data processing
## Linked Data advantages examples

<table>
<thead>
<tr>
<th><strong>Authority control</strong></th>
<th><strong>Enhanced searches</strong></th>
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</thead>
<tbody>
<tr>
<td>Authority control will be online by using variety of international sources</td>
<td>Displaying results that users were not aware of previously</td>
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<table>
<thead>
<tr>
<th><strong>Awareness</strong></th>
<th><strong>Library collections exposure</strong></th>
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<tbody>
<tr>
<td>Awareness</td>
<td>Complementary additional enriched data during the cataloging process</td>
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<td></td>
<td>Allowing applications that to use and create links to library info</td>
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<th><strong>Metadata</strong></th>
<th><strong>Two-way interchange</strong></th>
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<td>Metadata</td>
<td>By catalogers, suppliers and publishers will be an integral part of library workflows</td>
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<td></td>
<td>Two-way interchange between library systems and non-library systems on an as-needed and real-time basis.</td>
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Linked Data – Where we are?

**Display in search**
in result and record view
(also as BIBFRAME)

**API endpoints**
in: BIBFRAME, RDA/RDF
and JSON-LD

**Records enrichment**
automatically with URIs for
language, identifiers, names, and subjects

**Publish**
entire catalog:
BIBFRAME, RDA/RDF

**Discovery**
of the underlying metadata
and access to it via URIs

Ex Libris: Journey to Linked Open Data Support – An Update
Linked Data Roadmap – Cataloging and technical services

2019 Q4
POC of Search index

2020 H1
Support search indexing of prime linked data records

2020 H2
Supporting prime cataloging of new resources as Linked Data

The Future
• BIBFRAME / RDA-RDF, JSON-LD, ontology and formats
• Identifying based on URIs
• Loading of prime Linked Data (Graph structure) bibliographic records from other systems

• Enriched data displayed in routine workflows
• Local Authorities as URI
• URI Management in Alma as a source for URI and Reconciliation

• Ability to control how URI are being searched across different sources
• OpenURL Resolving
• Resource Sharing / ILL
• ...
Linked Data Roadmap – Discovery and Delivery

Underlying Metadata
Discovery of the underlying metadata and access to it via URIs

Non-Library
Use of linked data by non-library applications

Search Platform
Improving discoverability by general search platforms (i.e. Google) by embedding schema.org in discovery pages

API
The use of RESTful APIs to provide support for applications based on linked data

Interface
The discovery system as the key interface to make data accessible to people and computers.
Linked Data - infrastructural foundations

Search indexes

More ...

Enrich Display
with entity data using the URI and external resources. e.g. showing all author info when

Caching
of descriptions for URI
Linked Data - Ex Libris ecosystem

Ex Libris Primo

Ex Libris Alma

Central Index

Prime Cataloging

Caching

Management Services

Export / Import

URI

API

URI Endpoint

Publishers

NISO

ONIX

OCLC

WIKIDATA

casalini1library

BF

Library of Congress

BIBFRAME
Questions and challenges

- Which format will use primarily? BIBFRAME? simplified? other?
- Will current formats and Linked Data records can be linked with each other?
- How to keep name spacing for RDF? (External, Ex Libris Cloud Platform)
- Multi lingual support
- Linked Data at scale
- Reconciliation beyond the Ex Libris Cloud platform