“Behind the Scenes at Rosetta Development”

... or ....

“How we make the sausage”
AGENDA

• Rosetta Development
• Development Process
• Activities
• Summing up
Rosetta Development

“Who are you?”
### Who we are

- Business analysts
- Developers
- Quality assurance engineers
- DBAs
- Performance architects

### What we do

- Requirements analysis
- Functional specifications
- Detailed technical designs
- Development
- Quality assurance
- Performance testing
- 3rd line support
### Dedicated Technical Team

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>Performance lab environment</th>
<th>Database monitoring tool</th>
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| • Monthly security scans  
• Performance  
• Infrastructure  
• Database | • Weekly performance benchmarking | • Logs slow UI responsiveness and queries  
• Deployed to customer’s environment on request |
Performance Lab

- Three all-in-one application servers
- 24 CPUs, 32G RAM / server
- 3.5 Terabytes shared storage
- 13 million records in permanent

Files by Classifications:

- Image (…)
- Other
- PDF
- Text (M…)

Total: 11,649,418
Under the hood

• By the numbers....
  • ~10,000 code files
  • ~2M lines of code

• Technology stack
  • Java 8/Spring
  • Tomcat
  • Oracle
  • Solr
Development Process
“How do you make this thing”
Development Process

- Requirements
- Scope
- Coding
- Design
- QA
Agile Monthly Sprints

Design ➔ Sprint 1 ➔ Coding ➔ Sprint 2 ➔ QA ➔ Sprint 3
Toolset

- Task Management
  - Jira

- Build Management
  - Jenkins

- Test Management
  - TestRail

- Test Automation
  - Selenium
More than 30 servers support the various development and testing functions performed as a part of building Rosetta.
Test Rail manages the QA process: writing test cases, execution, tracking, reporting.
Nightly Automated Tests

730 tests nightly on 5 topologies

OS / DB
- Linux / Solaris
- Oracle 12 vs Oracle 11

Topologies
- Distributed (5 servers)
- Load balancer

Scenarios
- Rollback
- Authentication types (PDS, local, SAML)
New User Interface

- Investment in user interface and experience
- Work closely with the ProQuest UX team
- Collaborate with internal Ex Libris teams
- Continual effort-dedicated investment per sprint
Activities
“What else do you do?”
Developer Network

Heavy investment in the Developer Network

Monthly blog posts since last RAG

Documentation for

- SDK
- Viewers
- Plugins
- APIs
Tech Blog

Publishing Full text From Rosetta to Primo

Keren Fux

In this post we will show how to publish full-text content from Rosetta to Primo that is supported from version 5.2 of Rosetta. If you are new to the publishing process, here is a great place to start: https://knowledge.exlibrisgroup.com/Cross-Product/integrations/Rosetta-Primo

Publishing full-text will allow searching the content of our files in Primo, improving our search capabilities immensely. The flow is described by the following diagram:
42 results for repositories matching rosetta

**Rosetta.OAIPMH-Harvesting**
Configuration for Rosetta OAI-PMH Harvesting from various sources
- XSLT ★ 2 ✽ 3 Updated on Jul 19, 2016

**Rosetta.dps-sdk-projects**
Rosetta SDK projects
- Java ★ 2 ✽ 2 Updated on Mar 28

**Rosetta.RestApiLoaderApplication**
Rosetta.RestApiLoaderApplication
- Java ★ 2 Updated on Aug 31, 2015
Preserving Digitized Alma Content with Rosetta

Opher Kutner

Alma digitization flows can be configured to result in adding digital inventory to an existing bibliographic record. If the digitized content is considered worthy of preservation, libraries can choose to ingest content into Rosetta and manage in Alma as remote representations rather than ingesting into Alma. This process can be done manually, with Alma staff adding a remote representation as a fulfillment of the digitization request. However, in larger scale digitization projects, manual flows are insufficient.

To address such a need, libraries can use the Rosetta Alma Submission Application. The application is to be used as part of a larger workflow, described in the Alma-Rosetta Integration Guide, whereby Rosetta automatically creates digital inventory in Alma for content submitted to Rosetta by the Rosetta Alma Submission Application. This flow is described by the following diagram:
Ex Libris Github – Storage Plugins

4 results for repositories matching rosetta storage

**Rosetta.NFSInPlaceStoragePlugin**
- Java ★ 1 Updated on Dec 31, 2015

**Rosetta.NetAppStoragePlugin**
- Java ★ 1 Updated on Dec 30, 2015

**Rosetta.NFSPairTreeStoragePlugin**
- Java Updated on Dec 30, 2015

**Rosetta.S3StoragePlugin**
- Java ★ 1 Updated on Jul 21, 2016
6 results for repositories matching rosetta viewer

rosetta-IIImageVPP
Rosetta IIImage Viewer Pre-Processor Plugin
- HTML 2 Updated on May 11

Rosetta.IABookReaderViewer
- JavaScript 1 Updated on Dec 31, 2015

Rosetta.JWPlayerViewer
- Java 1 Updated on Sep 4, 2016

Rosetta.IABookReaderAltoViewer
- Java 1 Updated on Dec 31, 2015

Rosetta.BookReaderViewerPreProcessorPlugin
- Java Updated on Dec 31, 2015

Rosetta.BookReaderViewerPreProcessorAltoPlugin
- Java Updated on Nov 8, 2016
ROSETTA TEAM IN THE JHOVE ONLINE HACK DAY!

Many of you involved in digital preservation are familiar with JHOVE, the widely-used open source digital preservation tool used for digital files format identification, validation and characterization. Rosetta, the Ex Libris digital asset management and preservation solution, uses various tools and plug-ins to identify formats and extract technical metadata from them as part of its validation stack, and JHOVE plays a major role in this process. Metadata coming from JHOVE is stored as part of the object and is used as part of the preservation planning in conjunction with the Rosetta’s extensive Format Library knowledge base.

The Open Preservation Foundation holds JHOVE Online Hack Days to improve JHOVE and to enhance digital preservation community knowledge about JHOVE… and today is JHOVE Online Hack Day Spring
Four Rosetta technical sessions over 2 days

- Alma-Rosetta, Can the Two Walk Together?
- Rosetta Ingest Methods - What's the Right Path to Take?
- Ongoing Content Management Using Plug-ins and APIs
- How to Create and Configure Your Own Rosetta Viewer

Webinars planned in the near future
Summing up
Rosetta is....

- a large product
- developed and maintained by a dedicated, professional staff
- in a complex development environment
- backed by solid development procedures
THANK YOU

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