2015-09-25 - Fedora API Extensions Meeting

Dial In Details

Date: Friday September 25, 2pm EDT (-4 UTC)

- U.S.A/Canada toll free: 866-740-1260, participant code: 2257295
- International toll free: http://www.readytalk.com/intl
- Use the above link and input 2257295 and the country you are calling from to get your country's toll-free dial-in number
- Once on the call, enter participant code 2257295

Meeting Goals

Updates on new use cases and discussion

Close loop on the AIC Use Case: Content and Structural Validation

Define the information that we want to extract from each use case

Attendees

- Aaron Birkland
- Unknown User (acoburn)
- Stefano Cossu
- Daniel Davis
- Ruth Duerr
- Rosie Le Faive
- Elliot Metsger
- Nick Ruest
- Bethany Seeger

Agenda

- 1. Summary of activity
 - a. New use case contributions
 - i. Amherst use cases from Unknown User (acoburn)
 - 1. Amherst: template rendering service,
 - 2. Amherst: binary derivative generation,
 - 3. Amherst: ID service,
 - 4. Amherst: embargo handling,
 - 5. Amherst: JSON-LD compaction service,
 - Amherst: async digital preservation to external storage
 - 7. Amherst: Render fedora metadata resources as MODS/XML
 - ii. Transactional use case from Justin Coyne
 - 1. Use case: ore:aggregation locking
 - iii. Refined validation use cases from Stefano Cossu
 - 1. Enforce validation across repository
 - Optional validation
 - 3. Validation only for selected resources
 - b. New discussion on:
 - i. Amherst: embargo handling
 - ii. Use case: ore:aggregation locking
- 2. Next Steps
 - a. Close the loop, or come full circle on the AIC Use Case: Content and Structural Validation use cases
 - i. Do the new use cases adequately represent the comment thread? Anything else to do with these particular use cases at the moment?
 - b. Updating Use Cases Summary API Extension Architecture
 - i. Too early? Wrong format?
 - c. Review initial list of "what to distill from use cases".
 - d. Continue review
- 3. Any Other Business
 - a. Elliot away: 9/28 10/28

Related Resources

Design Page (with use cases outline)

Use Cases Parent Page

Previous meeting agenda, including minutes

Minutes

- Unknown User (acoburn) discusses Amherst use cases
 - o Currently, they use Fedora 3. Are in the process of wrapping items they currently do, or have always wanted to do, as web services
 - Have implemented roughly half of the use cases submitted on the use cases page
 - ID Service was motivated by decoupling business IDs from repository IDs
 - For Fedora 3, they currently have a tight coupling between Fedora PIDs and fronted IDs. This is brittle
 - Fedora 4 doesn't have PIDs, but at times object URIs become long and unwieldy.
 - Has been in touch with Unknown User (daniel-dqi), as this service could address similar needs in Islandora
 - Architecturally, this is a registry and a resolver service
 - · Camel routes listen for events, scan for particular RDF predicate whose associated value is an ID.
 - Mapping between Repository URI and ID are stored in RDBMS
 - API-X may be useful in exposing the resolver service, i.e. expose friendly URIs based on IDs, redirect to Fedora resources
 - Embargo handling attracted a few comments
 - WebAC working group has mentioned using WebACs as a mechanism of enforcing embargo.
 - API-X may not be the most appropriate mechanism to update WebACs according to embargo policy
 - It's just as important to specify where API-X may not be appropriate in support of use cases
 - Exposing details about the nature of the embargo may be a task for API-X
 - JSON-LD use case was motivated by desire to use JSON-native infra such as riak or MongoDB
 - Is this equivalent to template rendering?
 - No, but Amherst's use cases for template rendering involve accessing JSON-LD representation from the JSON-LD service
- Discussion on composition or chaining of extensions
 - Can API-X be seen as a pipeline of services on requests on Fedora?
 - This was thought about and briefly mentioned in the original proposal (see: Composability of API Extensions)
 - The need to compose, pipeline, or chain extensions seems implicit in the design
 - Amherst use case implementations explicitly make use of one another
 - This is one reason why Camel makes an attractive implementation
 - Similar patterns used in Smithsonian infrastructure
 - JAX-RS, Camel, and OSGi+Karaf play very nicely together
 - The term "chaining" is limiting, think "composition"
 - There should be an explicit use case related to composition
 - Unknown User (acoburn) to take initial stab at this, based on Amherst's experience
- Discussion of transactions, motivated by ORE aggregation locking submitted by Justin Coyne (not present)
 - This use case seems to highlight problems with using many Fedora objects to represent ordering of resources via ore:proxies.
 - Essentially, it creates a linked list with Fedora objects as nodes. Certain changes to this list may involve updates to several objects
 - Transactions via REST can be problematic
 - $^{\circ}\,$ Probably best for extensions not to use API-X to expose additional transaction semantics
 - An essential pattern that will be seen all the time is for API-X to expose atomic operations to outside world which, implemented underneath, may involve transactions between extension as repository
 - Extension is an actor in transaction, not outside client
- Action item: Everybody read and comment on Use Case Evaluation, we'll discuss at next meeting.