2016-02-05 Fedora API Extensions Meeting

Date: Friday February 05, 2pm EST (-5 UTC)

- Dial-in Number: (712) 775-7035
 - o Participant Code: 479307#
 - International numbers: Conference Call Information
 - You may also call in using the VoIP dialer from a web browser, or Android/iOS apps
- IRC:
- Join the #fcrepo chat room via Freenode Web IRC (enter a unique nick)
- Or point your IRC client to #fcrepo on irc.freenode.net

Meeting Goals

- 1. Move forward on architecture/design discussions
- 2. Understand proof-of-concept process

Attendees

- Aaron Birkland
- Daniel Davis
- Ruth Duerr
- Elliot Metsger
- Bethany Seeger
- A. Soroka
- Joshua Westgard
- Stefano Cossu
- Randall Floyd (Indiana University)
- William G. Cowan
- Jared Whiklo
- · Kevin S. Clarke
- Yinlin Chen

Agenda

(see last meeting's minutes)

- 1. PoC implementation (carried over from last week)
 - a. Unknown User (acoburn) wrote a wireframe POC demonstrating service discovery, binding, and proxying (git repo, discussion on irc)
- 2. Review initial workflow graphs
 - a. Provenance stream
 - b. Validation (async)
 - c. Validation (sync)
- 3. Revisit Service Discovery & Binding
 - a. "descriptive binding" beyond rdf:type
 - b. SSWAP
- 4. OR '16 submission

Minutes

- POC implementation
 - O Please look at Unknown User (acoburn)'s repository. Not many people on call have had a chance to do so
 - If we agree in broad terms to the initial workflow graphs, we could start implementing proof of concepts graphs will be a concrete starting point.
 - o Josh: Code & diagrams are helpful for putting these abstract conversations into concrete, understandable terms
 - Which one(s) we implement first would depend on development time
 - Diagrams from Stefano have broad interest and applicability
 - $^{\circ}$ Elliot: Agree with the approach of code & diagrams. At this point diagrams have been most helpful
 - Proposes a discoverability workflow diagram, maybe based on Aaron C's POC
 - Shall we put diagram source(s) and code in github? Has been a good pattern for PCDM effort
 Shall we use personal/institutional repos, or request a repo in fcrepo-labs?
 - Broad agreement that fcrepo-labs make sense
 - · Action item: Aaron Birkland to contact Andrew Woods, see what's necessary to make this happen
 - Use this github repo for POC code and diagrams
- Review initial workflow graphs
 - API-X would establish which extensions apply to a given request, then determine which conditions apply
 - Stefano: Could be based on payload of request (e.g. headers), URI, object properties
 - Discussion of "validation pass" workflow in API-X core column
 - Stefano: Ideally, business logic in an extension would be enacted mostly through configuration, specialized code in validation service
 - Therefore, SD&B should describe response from validation service, which API-X core can then interpret for pass/fail

- Elliot: Other option on the table is for validation extension to make the decision.
 - Do we really want API-X core to understand a domain-specific response?
- Aaron: Focusing on this specific area of workflow would make sense as an activity in the next couple weeks, to understand and weigh consequences of the two approaches
 - Maybe write some code and/or create illustrations of what kind of information SD&B may provide, and how API-X would use it
- Stefano: The two approaches may not be that different fundamentally
- Dan: May be able to list how each approach conceptualizes the services in the core (router, means to execute services, etc)
- · Elliot: It would be useful to depict representations of incoming requests, like essential parts of URIs and HTTP bodies
- Aaron: We should also focus on diagramming contents of "verify conditions" box
 - This will touch upon how "descriptive binding" discussed on the last call will play into the big picture
- Jared: We have similar use cases, like the concrete examples and diagrams to understand how API-X works
- Activities for the next two weeks:
 - Exploration into "validation pass," illustrate the two approaches discussed to help further discission
 - Be more explicit about contents of requests
 - Diagram contents of "verify conditions" box
- Revisit SD&B
 - Activities identified from "review initial workflow graphs" will touch upon this topic
 - On "Find, bind, and execute", can't discuss find and bind without execute
 - SSWAP defines invocation model, describes input and output types
 - Aaron: SSWAP may be relevant to the "validation pass" option where API-X core introspects into validation response. where S D&B would need to describe responses so that API-X can act on them in some way
 - the other option doesn't necessarily have API-X core needing to understand response at all
 - · Activities for next two weeks will help make needs more concrete
- OR '16 Aaron Birkland to incorporate comments, submit API-X entry

Next meeting

Fri. Feb 19, same time (in two weeks)