2019-08-08 - Fedora Tech Meeting

Time/Place

This meeting is a hybrid teleconference and slack chat. Anyone is welcome to join...here's the info:

- Time: 11:00am Eastern Daylight Time US (UTC-4)
- Audio/Video Conference Link: https://lyrasis.zoom.us/my/fedora
  - Dial-in:
    +1 408 638 0968
    +1 646 876 9923
    +1 669 900 6833
    Meeting ID:
    812 835 3771
- Join fedora-project.slack.com on the "tech" channel

Attendees

Part 1:

1. Danny Bernstein
2. Andrew Woods
3. Peter Winckles
4. Ben Cail ⭐
5. Aaron Birkland
6. Ben Pennell
7. Paul Cummins
8. Bethany Seeger
9. Jared Whiklo
10. Yinlin Chen

Part 2:

1. Danny Bernstein
2. Andrew Woods ⭐
3. Peter Winckles
4. Ben Cail
5. Aaron Birkland
6. Ben Pennell
7. Jared Whiklo

Agenda

1. Announcements
   a. #sprints channel
   b. #github channel?
   c. kubernetes support in Deployment Tooling
   d. #general channel community issue
2. fcrepo-upgrade-utils
   a. Minimal 4 5 migration needs testing and code review:
      i. https://github.com/fcrepo4-exts/fcrepo-upgrade-utils/pull/17
3. Update on Fedora 6 Pilots (NLM, Docuteam, UWM)
   a. migration-utils PRs
4. Java 11: When?
5. Sprint Planning
   a. 6.0 Architecture Review
   b. Transaction Sidecar Spec Update
   c. OCFL community feedback on OCFL client with Database as authoritative metadata source
   d. https://github.com/pwinckles/ocfl-java-parent
   e. Problems requiring design
      i. Tombstone Support in 6.0.0
      ii. Caching/indexing strategy
         1. What caches and indexes do we need(ie in what layer(s)?)
            a. OCFL client
            b. Persistence Implementation (OCFL)
            c. Kernel Implementation
         2. Physical location of the cache (assuming we want to plan for horizontal scalability support)
            a. Cache per instance?
               i. synchronizing changes across instance
            b. 1 Global cache/index?
6. Your topic here...

Tickets

1. In Review

type	key	summary	assignee	reporter	priority	status	resolution	created	updated	due

> Unable to locate Jira server for this macro. It may be due to Application Link configuration.

2. Please squash a bug!

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution

> Unable to locate Jira server for this macro. It may be due to Application Link configuration.

3. Tickets resolved this week:

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution

> Unable to locate Jira server for this macro. It may be due to Application Link configuration.

4. Tickets created this week:

key	summary	type	created	updated	due	assignee	reporter	priority	status	resolution

> Unable to locate Jira server for this macro. It may be due to Application Link configuration.

Notes

1. Announcements
   a. sprints channel open & participants invited
   b. #github - Slack integration with github for PRs, ... - Jared will create the new #github channel.
      i. What should we do with GitHub issues?
   c. fcrepo4-docker - has kubernetes support now: Deployment Tooling
   d. #general channel - issue with simple file persistence error. Size is wrong.
      i. point Islandora to mysql or postgres for default configuration.
      ii. look at updating documentation.
         1. The hyrax setup instructions (https://github.com/samvera/hyrax/wiki/Production-Installation-Overview)
            links to Deploying Fedora 4 Complete Guide
            which says to use https://github.com/fcrepo4/fcrepo4/blob/4.7-maintenance/fcrepo-configs/src/main/resources/config/file-simple/repository.json
            which uses the simple file system persistence approach
2. fcrepo-upgrade-utils
   a. should work for basic setups. People should try it out. Doesn't work with ACLs yet, but that's next.
3. Fedora 6 pilots
   a. OCFL client (https://github.com/pwinckles/ocfl-java-parent) - implements most of the spec.
      i. API - put/get at object level, read/update for individual files. Automatically commits (in single version) at the end of the object update changes.

    ii. Doesn't handle multiple clients writing at the same time (& Go client doesn't currently support that, either).
        1. OCFL spec talks about deposit directory for staging content, but defines content at rest, not content in motion.
        2. Aaron suggested OCFL RFCs repo - implementation patterns, definitions, clarifications, ...
        3. What functionality should an OCFL client have? It should be written up.

4. Java 11
    a. Peter's code uses 11. Should make a decision at some point and switch everything.
    b. Ideal scenario: all fedora eco-system tooling (fcrepo4, fcrepo-came-toolbox, fcrepo-import-export, fcrepo-upgrade-utils) will compile Java 11 source.
        i. bytecode compatibility ? Should that go to 11 as well?
    c. Draft JVM policy re-wording https://docs.google.com/document/d/1ulXLOF2dL-vEUKhUFjkL8UG97wjXJ-9dbmytKVwzDMM/edit
    d. Current Oracle LTS is Java 11
    e. We should likely move to Java 11 this calendar year
    f. How hard is it for the community to move to Java 8

        i. Andrew to email to community list
        ii. What is our plan?

            1. LTS releases: 4.7
            2. Fedora 6 to use openjdk-11
            3. needs Java 11 to run

5. Sprint planning
    a. OCFL implementations
        • OCFL Community meeting next week, Wednesday
    b. Conversation to continue on Slack

        • Request for Aaron B to document thoughts
            ◦ Separation of concerns: what does Fedora need to know, what is internal to the OCFL client
        • Danny to update diagram (include 'deposit' space and 'versions')
    c. Transaction sidecar spec
        • https://github.com/fcrepo/fcrepo-specification-atomic-operations
        • Peter E is working on this
        • Interest in scoping transactions at the Archival-Group
    d. OCFL client with database as metadata store
        • https://wiki.duraspace.org/display/FF/Fedora+2019+Architectural+Diagrams#Fedora2019ArchitecturalDiagrams-OCFLClientwithpersistentdatabaseasauthoritativemetadatasource
            ◦ Diagram needs to be re-worked
        • Fedora transactions will need support from underlying OCFL client
            ◦ An OCFL client backed by a database may be able to support transactions that span multiple OCFL objects
        • Diagram details an OCFL interaction with transactions scoped to a single OCFL object
        • Todo: design how an OCFL client would support transactions over a single OCFL object
        • Todo: design how an OCFL client would support transactions over multiple OCFL objects
    e. Conversation to continue on Slack

        • Request for Aaron B to document thoughts
            ◦ Separation of concerns: what does Fedora need to know, what is internal to the OCFL client
        • Danny to update diagram (include 'deposit' space and 'versions')

Actions

- Danny Bernstein will reach out to Greg about DRASTIC test results
- Aaron Birkland to work with Andrew Woods to get the Go client working on travis.
- Aaron Birkland to look explore notion of OCFL client with database as authoritative metadata source + asynchronous writing of the inventory.json file
- Peter Eichman   and maybe Ben Pennell to make recommendations re transaction side car specification.
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