2014-08-13 - Fedora Technical WG Meeting

Time/Place

- Time: 12:00pm Eastern Daylight Time US (UTC-4)
- Place: Google-hangout, https://plus.google.com/hangouts/_/event/c1glu6soq43r1rr6ou17qtobug8

Attendees

- Andrew Woods
- Esme Cowles
- Chris Beer
- Daniel Davis ⭐
- Declan Fleming
- A. Soroka
- Benjamin Armintor
- ~~Zhiwu Xie~~
- Neil Jefferies
- Yinlin Chen

Agenda

1. Clarify objectives of this group (reference: charter)
2. Establish approach for addressing initial objectives
   a. Validate components and APIs
   b. Identify any questions or concerns about Fedora 4.0 architecture in the context of the project's goals, objectives, and use cases
   c. Assess core vs. modular features
3. Thought exercise: what would be the technical "risks" of releasing 4.0 Production *now*?

Discussion

Group objectives

1. Help figure out if Fedora 4 (as developed) is meeting user requirements
   a. i.e. Ensure F4 platform is situated to address community needs going forward
2. Summarize group's findings in a report
   - Note: term 3-months, mid-Aug - mid-Oct
   - Note2: it would be nice to have some tech continuity in making decisions

Approach

Items for team assessment

1. REST API
   - Are immediate updates required?
   - We should version the API independently
     a. This offers multiple backend implementations/optimizations
2. Performance
   a. Read
   b. Writes
      i. Many small files
      ii. Large files
      iii. High throughput
   c. Scalable serialization to disk
      - Need to measure scale of load that async serialization can meet
      - Need to clarify async approaches: messaging and sequencers
   d. Replication of objects to another repository instance
   e. Full re-indexing
   f. Full integrity checks
3. Multi-node / Clustered configurations
   a. High availability
   b. Bulk ingest
   c. High read loads
   - Note: generally need to define what clustering provides
4. ModeShape
   a. Assess persistence approach (i.e. bit-level object and datastream persistence)
5. Preservation-worthiness

Actions

For next week

1. ✅ All: bring expectations and goals (grounded in production use cases)
   - Not just performance but all qualities/functions
   - ... Goals that improve upon Fedora 3
   - ... And/Or goals that were supported by Fedora 3 and still need to be supported by Fedora 4
2. ✅ Esmé: update architecture diagram
3. ✅ Andrew: bring summary of performance tests/results to-date

Ongoing

1. Compare F3 and F4 ingest rates
2. Revisit basic principles: "Why repository? Why Fedora?"