# 2015-02-20 - Audit Service Planning Meeting

## Time/Place

- Time: 3:00pm Atlantic Standard Time US (UTC-4)
- · Call-in: DuraSpace conference line
  - o 1-209-647-1600, 117433#

## **Attendees**

- David Wilcox
- **Andrew Woods**
- Nick Ruest
- Mark Jordan
- John Doyle
- Doron Shalvi
- Susan Lafferty
- Unknown User (escowles@ucsd.edu)
- Peter Eichman
- Matt Critchlow
- Dr. Arif Shaon
- Charles Schoppet Joshua Westgard
- Yinlin Chen

## Agenda

- 1. Introduction and topic summary
  - a. Proposed Plan
    - i. Establish common understanding of function of Audit Service
    - ii. Brainstorm use-cases
    - iii. Compile initial requirements
    - iv. Summarize and Post use-cases and requirements
      - · Iterative meetings, as required
      - Set deadline for feedback
    - v. Create strawman design
      - Set deadline for feedback
    - vi. Confirm commitments
      - developer and stakeholders (verification)
    - vii. Sprint (Mar 23, Apr 13)
- 2. Use case discussion
  - a. Audit service should automatically record who updated which resource when and with which action.
  - b. Audit service should be able to include/import events that were performed external to the repository.
  - c. Audit service should be able to purge events.
  - d. Audit service should be RDF-based, and use PATCH semantics for updates.
  - e. PROV-O ontology may be better suited than PREMIS.
  - f. Audit service would ideally support map-reduce-style analytics.
  - g. Evidence of fixity checking on a "routine basis", and with logs "stored separately or protected separately from the AIPs themselves" should be available.
  - h. Fedora 4 REST API should support dissemination of event/audit information.
- 3. Workplan and timelines
- 4. Testing and validation
- Questions

## **Minutes**

#### What is an audit service?

- Fedora 3 audit log
  - Recording events that affect resources within the repository
    - Events may occur within or without the repository
      - Not everyone agrees that external events should be included
  - No particular structure or semantics
- · Fedora 4 audit service
  - Should at least have the minimal features provided by Fedora 3
  - o Information should be centrally accessible
  - o Information should be captured in RDF and should be query-able using SPARQL
    - Should be a REST-API endpoint
    - Need to collect a list of common queries

- O Supplementary information can be added to enrich event information
- Ontology to represent event types
- Purpose
  - o Problem-solving: find out when something went wrong and how to fix it
  - Demonstrates to external entities that you are taking care of their assets
    - Meeting ISO/TRAC specifications
  - Selecting repository content for archiving
  - ARL stats
- Internal vs. external events
  - o Is the scope of this audit service the repository or the resource?
  - This needs to be discussed further

#### **Use Cases**

- 1. Audit service should automatically record who updated which resource when and with which action.
- 2. Audit service should be able to include/import events that were performed external to the repository.
  - a. Migrate audit logs from F3 to F4 for example
- 3. Audit service should be able to purge events.
  - a. This could be problematic
  - b. Maybe just retaining the most recent version of a checksum for example
  - c. Perhaps certain events can be hidden from queries?
- 4. Audit service should be RDF-based, and use PATCH semantics for updates.
- 5. PROV-O ontology may be better suited than PREMIS.
  - a. Need to do a comparative analysis
- 6. Audit service would ideally support map-reduce-style analytics.
- 7. Evidence of fixity checking on a "routine basis", and with logs "stored separately or protected separately from the AIPs themselves" should be available.
- 8. Fedora 4 REST API should support dissemination of event/audit information.

#### **Next Steps**

- 1. Refine use cases
- 2. Compile a set of requirements
- 3. Get commitments for developers and stakeholders
  - a. Development
    - i. Mohamed Mohideen Abdul Rasheed
    - ii. Unknown User (escowles@ucsd.edu)
    - iii. Need at least one more developer
  - b. Testing/validation
    - i. Matt Critchlow
    - ii. Nick Ruest
    - iii. Joshua Westgard
    - iv. Mark Jordan
- 4. Will schedule another call after making some progress on use cases and requirements