Software Architecture Working Group     January 16, 2009
Minutes of January 15, 2009 Meeting

Agenda
1. Quick updates and Announcements
2. WMS update
3. Review of annotation spec
4. Review of NJEDL migration requirements
5. Discussion of relationship management layer
6. Signature Checker updates

Announcements and Quick Updates

- Refreshments to celebrate zero signature failures will be available in the Feb. 26 sw_arch meeting.
- A draft on RUcore performance results and performance methodology was distributed earlier in the week. Ron indicated that performance is erratic. Selection of a title from a summary results list can take as long as 10 or 11 seconds, other times as little as 2 or 3 seconds. Jeffery is exploring possibilities for reducing these numbers. Rhonda will ask the User Services group to identify transactions and target ranges for each transaction.
- Isaiah is working with SPCOL on a promising new collection – the Lautenberg video collection. Material is already available in uncompressed AVI. Rights are likely to be an issue. It was suggested that Jeanne Boyle be consulted on the rights issue.
- Ron pointed out that we are ingesting certain RU material (faculty deposits and ETDs) under the 1782.2 global registry, NJDH under 1782.3, and everything else under the 1782.1. In some earlier discussion, we had concluded (informally) that there was no need to use multiple registries and we should consolidate on one. This item will be place on the agenda for further discussion.

WMS Update
Yang reviewed the status of WMS for R5.0 indicating that he had “touched” all the areas, many of which are code complete. This section will point out major remaining issues:

- Java bridge is not yet tested on lefty64.
- METS export is working, however the FOXML export/ingest to Fedora is not yet working. Yang will work with Jeffery to get this piece working.
- WMS edit works for those objects that do not have multiple, repeated sections of metadata, e.g objects with two sets of descriptive metadata. Yang indicated that it would be difficult to meet the code complete date of January 23 if he is to get the edit capability working for this type of object. After discussion, the group’s decision on this issue is as follows: a) we will only support
the simple object (one instance of each section of metadata) in R5.0, b) we will support multiple sections in R5.1 along with the added enhancements required to properly present such an object in the results list, and c) the multiple section capability will be delivered as part of the WMS open source delivery since this capability does not require WMS edit.

• There was considerable discussion regarding the RARCH directory being writable by the web user. A sub-group was appointed to address this issue and has since produced a recommendation as follows: “The issue regarding the RARCH directory being writable by the web user was analyzed and discussed at length between Yang Yu, Ron Jantz, Isaiah Beard, Jeffery Triggs and Sho Nakagama. After looking into this issue, we've come to the determination that it is not best-solved by any sort of quick fix for the 5.0 release. This is not to say there is no potential security risk. In fact, we feel that a top-down security analysis is needed of the repository as a whole. Further, it's likely that significant, comprehensive changes in how all archival datastreams are handled by WMS and related software may be required in a future release. We recommend that this analysis be conducted in the not-too-distant future.”

Annotation Spec Review

We agreed to add two sections to the front of the annotation spec – a few representative scenarios and assumptions. We’ll run these sections by Grace via email and plan to review the spec again at the next sw_arch meetin. Possible assumptions and clarifications include the following:

• The annotation object will use the Flash datastream to create the appropriate time markers for viewing the annotated video. Since licensed/restricted videos will not have a Flash datastream, this approach implies that only those videos that are open to the public can have annotations. Note, however, that the annotations can be viewed with either Flash or QT.

• Note that in our first release of the annotation capability, only video objects can be annotated.

• There will be forward and backward pointers between the annotation object and the annotated object using the appropriate annotation ontology that is delivered with Fedora.

• Relationships will be represented with the Fedora rels-ext capability. We concluded that we will not need to implement a relationship management layer to support these relationships, in part because it is a very simple relationship (see next bullet also).

• Annotations will have states associated with them for which we need to have a well defined vocabulary. An “annotation in progress” (AIP) is one in which the person creating the annotation may work on it over a span of several days or even weeks. An AIP implies that that the annotation is not published. An annotation can also be published or unpublished. Once an annotation is complete, the author of the annotation may decide to publish it. As an example, an annotation may be public for
the duration of a single semester course and then the faculty member may decide to unpublish the annotation.

- We recommended that AIPs be ingested into Fedora and retrieved from Fedora for further work, as opposed to continuing the work in a WMS environment.
- The underlying mechanism for controlling AIPs and publish/unpublish can be the xacml policy datastream.
- We recommended that annotations be treated like other archived objects, i.e. they are not deleted from the repository. This approach preserves citation integrity and also minimizes management overhead and the risk of introducing a dangling rels-ext reference.

Other Items

- Release 5.0 code complete date was moved to January 23, 2009.
- Jeffery and Sho will provide to Dave the version numbers and compile options that are different from the previous release.

Pending for Next Meeting

- Finalize ETD spec
- Review of the updated Annotation spec
- Review of R5.1 schedule
- Review of NJEDL spec
- Global registry discussion
- Use of API/A
- Updates to Darwin spec (time interval)
- Relationship services
- Shibboleth configuration for mss3

rcj – 01/26/2009