Software Architecture Working Group

Minutes of March 26, 2009 Meeting

Agenda

1. Quick updates and Announcements
2. R5.0 testing status
3. Shibboleth configuration for R5.0
4. Final draft of R5.0 configuration and compile options
5. Mss2 objects required for testing

Announcements and Quick Updates

From an earlier CISC discussion, Ron reviewed a preliminary proposal to implement two parallel development lines, one which would continue to provide feature releases for RUcore, NJDH, and faculty deposit. The other line would be set up to develop the annotation/ru-analytic capability and the underlying architecture to support relationship services and compound objects. These lines would be merged in a new architectural release (tentatively designated R6.0). The main line of development would continue with releases R5.1, R5.2, etc. In particular, CISC indicated that it was important to provide support for licensed videos for NJVid by early Fall, 2009. Therefore, our objective in R5.1 is to scale it down so that we can meet an early Fall delivery. For WMS, requirements will need to focus on handling licensed videos and the associated xacml. In addition, we agreed on two urgent features for faculty submission (in addition to the portal capability): a) support for multiple authors and b) third party submission. The above will require more discussion in future sw_arch meetings.

R5.0 Status

In general, testing is progressing well. Video ingest and presentation appear to be working. Faculty deposit needs more testing – Jie and Rhonda will help with the testing aspect. We concluded during the meeting that we did not have an issue with the licensing of Lame for mp3 presentation. We got into an extended discussion of how to migrate from mss3 to lefty64 and how to handle the local databases (WMS, dlrcollections, etc). We decided that we would migrate all objects from mss3 and move these through lefty64 to mss2 and back to mss3. Jeffery will document the specific process for discussion in the next sw_arch meeting. The initial pull of all objects (minus archival masters) from the migration machine to lefty64 is targeted for April 13.

Compile and Configuration Requirements

Dave reviewed the items in his email and the group achieved a working understanding of how to handle all the items for R5.0. However, there still remain issues with the process for synchronizing development and production systems. We generally agreed that this synchronization is an important goal and will move in this direction with the following specific recommendations: a) source code should be
located on the development server so Dave can pick it up there rather than trying to find the source on the Web, b) as a standard part of requirements, we will review the config/compile document for each release with an emphasis on changes from the previous release, and c) all changes should be noted at software.libraries under a new category set up by Chad called "RUcore Software Configuration." Other related discussions regarding configuration and compile options are summarized below:

- WMS will be configured to not generate thumbnails in the object datastream for R5.0. This issue will be revisited in R5.1 in the context of the thumbnail specification (posted previously). Thumbnails will be generated in R5.0 using djvu (as in previous releases).
- WMS will continue to use imagemagick for the generation of WMS thumbnails.
- We briefly discussed the size of index files. For a test of approximately 6000 objects (double the size of the NJEDL collection), the index was approximately 3GB. The current size of the NJEDL index is about 1GB so there is considerable room for growth. Nevertheless, we still have a scalability issue which is likely to occur with ETDs (although probably several years out). Dave reported an issue that the same NJEDL test failed because of a file size limit of 2GB. This is an issue that should be investigated further and may be related to how Linux and Unix are configured.

Shibboleth for R5.0 on mss3

As a result of informal discussions regarding the complexity of configuring our servers (specifically mss2 and mss3), Ron proposed to Grace (via email) that we would not configure R5.0 on mss3 for shibboleth authentication. Isaiah has indicated that he can do testing of commercial videos on lefty64. When RUcore is delivered to NJIT, we would work with Chuck Hedrick and Sujay to configure their installation with shibboleth. Grace indicated that she was OK with this approach. Subsequently, Jeffery made changes to allow for shibboleth or “no shibboleth”. This approach should significantly expedite our delivery of R5.0.

Objects for mss2

In a brief discussion, Kalaivani indicated that she did not need any specific objects on mss2 and could work with the whole collection as migrated from mss3.

Pending for Next Meeting

- Migration process
- Continue discussion of ETD content model
- Second pass at WMS R5.1 requirements and licensed video scenario
- Review of requirements for increasing downloads