Software Architecture Working Group

Minutes of May 7, 2009 Meeting

Agenda
1. Quick updates and Announcements
2. Migration and testing status
3. Utility for licensed videos
4. WMS R5.1 requirements – 3rd party submission
5. R5.1 and R5.2 release schedules

Announcements and Quick Updates

A meeting was held with NJEDge to discuss the training and installation process for RUcore R5.0. This training process will not begin until the early part of July. For the May 21 sw_arch meeting, Ron will be at the OR conference in Atlanta. Chad will chair the meeting. Ron noted that an ad hoc working group will continue to meet in the afternoon to discuss how to implement a read-only system when we migrate R5.0 to mss3.

Migration and Testing Status

Kalaivani reported on testing of the migrated objects and the WMS database on lefty64. Regarding WMS, the collection and organization data appeared to migrate properly. New collections and resources were created successfully. WMS edit is working and is also blocking double ingest. Overall, the status looks pretty good although there will need to be a bit more testing of various resource objects. Our target is to complete migration testing on May 13 and be ready to package the code for delivery to Dave. Dave reported a major blocking issue, i.e he has been unable to recompile PHP5 on Solaris. Sho will do some research to see if he can shed light on this problem.

Utility for Licensed Videos

Jeffery, Jie, and Ron reported on the utility for ingesting policies (xacml) for the licensed video evaluation this summer. It was noted that this is a utility that will be run external to R5.0 (i.e. not under version control). The utility will be run on lefty64 and will ingest an xacml datastream into objects located on the NJVid installation. It was noted that we must verify the xacml and provide appropriate feedback messages to the user. This utility will be used by one person at NJEDge for the evaluation and the equivalent functionality will be integrated into WMS R5.1. After clarification of the above points, everyone seemed comfortable with the approach. The authors will seek input from Grace as to how to handle the rights event for commercial videos.

Release Summary

Ron reviewed a proposed release schedule for R5.1 with the objective of setting a code complete date. At this point, our estimates indicate that the enhanced partner portal and jpeg thumbnail capability
can be code complete by August 1. Specifications are also complete for these two features. We will review the requirements for 3rd party submission and the co-author capability (part of faculty submissions) in the next meeting. There is one more requirements document (WMS supporting xacml creation) that need to be developed for R5.1.

Proposal for a Read-only System

Dave, Jeffery, Sho, Isaiah, and Ron met in the afternoon and tentatively agreed to an approach for creating a read-only system. The approach has promise to drastically minimize downtime while we are preparing mss3 for R5.0. See Attachment 1 for the proposal.

Pending for Next Meeting

- Migration status
- Review/approval of read-only system proposal
- 3rd party submission and co-author capability in faculty submissions
- Extraction of PDF text for full text searching of ETDs
- Content models
- Continue discussion of ETD content model
Attachment One

A Modest Proposal

for Minimizing Actual or Apparent Downtime during the Migration

The following proposed scenario picks up the migration process after successful testing has been done with the full set of objects on the lefty64 server.

1. The Fedora 3.0 server will be set up on mss2 and a sample of objects from the migration box will be pulled into Fedora on mss2 so that Kalaivani can run tests there and create special test objects needed to verify the functioning of various aspects of the 5.0 release software.
2. Isaiah will prepare an email message for WMS users and repository portal users warning them that changes to the repository (e.g., ingests of new objects or edits of existing objects) and its displays (portal displays or configurations) will not be possible during our brief migration period.
3. At this point we will configure and sanity-test a Linux machine with 300 GBs of storage (known hereafter as “stuntbox”) to act as a read only server for RUcore. The stuntbox machine will be configured exactly like the current mss3, with the 4.5.2 release of the repository viewing software and Fedora 2.1. Functionality for WMS, dir/EDIT, and Faculty Deposit will be blocked on stuntbox. Chad will remove links to the Faculty Deposit page, and Apache will be configured with an error page explaining the temporary lack of editing functionality.
4. We will now move stuntbox to TAS. The full set of mss3 objects will be loaded onto stuntbox without archival master files. This will in effect create a “read only” system on stuntbox.
5. At this point we will switch the IP addresses of stuntbox and mss3, so that the repository URLs will point to stuntbox. The mss3 machine will become mss4 for the duration of the migration process.
6. We will now pull all real objects from mss4 to the migration box, filter them, and migrate them to Fedora 3.0.
7. Dave can now set to work reconfiguring mss4 itself while outside users can search and view objects on the read only system. (NB: We will ignore search statistics during this period.)
8. When mss4 (the real mss3) is configured, we will pull all the objects from the migration box to the new Fedora 3.0 installation on the real mss3.
9. At this point we will switch back the IP addresses so that the repository URLs point again to the real mss3.

We believe that the above scenario would produce the minimum amount of downtime to the public.
This above proposal is the result of a meeting of the “migration subcommittee” consisting of Isaiah Beard, Dave Hoover, Ron Jantz, Sho Nakagama, and Jeffery Triggs on the afternoon of May 7th.

JAT (May 7, 2009)