Software Architecture Working Group

Minutes of August 20, 2009 Meeting

Agenda

1. Updates and Announcements
2. Object filtering for transfer of objects to NJEDge
3. Performance of RUcore – slow response
4. Content Models
5. R5.1 and R5.2 review

Announcements and Quick Updates

NJEDge has made good progress with installation of RUcore software, having completed and tested dlr/EDIT. They are encountering some problems with the Handle server and will begin installation of WMS in the next week. Sho will begin evaluating Fedora 3.4 (and later versions), specifically from the upgrade perspective. We will also need to examine future releases to see how (or if) we should handle enhanced content models. We also decided to make some quick and easy changes to QT streaming and let the server make the decision about optimal aspect ratios. Isaiah has tested this approach and Jeffery will make the changes in R5.1. Ron summarized AY 09/10 goals and will route a summary to sw_arch.

Filtering for Video Objects

Videos from RUcore will be transferred to NJEDge after the software installation is complete. As a first step, NJEDge will need to create collection objects using WMS. (A meeting is planned to address the collection structure to be used.) After the foxml is exported, a filter will be run on the xml to update “rutgers-lib” to “njcore” and update collection IDs to reflect the collection objects ingested at NJEDge. Jeffery reviewed the draft specification for these and other filtering actions. We decided to pull all the object datastreams from mss3 and we will need to set up the corresponding directory structures (/rarch on the main server and video streams on the Darwin server). With these minor changes, we approved the filter specification and Jeffery will post the document on RUcore. When we actually do the transfer, we should be aware of the load placed on mss3. After an incremental test, we may want to do the object pull at night. Dave brought up the question of whether NJEDge will set up a staging server (similar to mss2) for future releases. This question will need to be addressed by NJEDge.

Performance of RUcore

We have a serious performance problem with RUcore R5.0 and one that apparently was not present in previous releases. For an initial search, it takes 10 to 12 seconds for the display of results to appear. This time delay is not associated with the size of the collection. This is a high priority item and we need to fix it in R5.1 (or earlier if possible). Jeffery and Chad will investigate the performance issue and report back in the Sept. 3 meeting.
Content Models

A major goal for 09/10 is to update our content model approach, taking into consideration compound objects and semantic relationships between simple objects. There are many technical issues to be addressed including:

- The ability to create new ontologies in addition to those currently supported in Fedora.
- Use of enhanced content models. The “view” object appears to be consistent with our definition of compound objects.
- Support for compound objects. Both ETDs and datasets will likely use compound objects.
- Determination of how to support search and display of compound objects.
- Integration with WMS. WMS would have to understand compound objects.
- Development of a software layer to support management of compound objects.
- Examination of OAI-ORE to determine its application and how it would integrate into Fedora and RUcore
- Etc, etc, etc.

There is major work to address the above. Ron will propose an ad hoc team that will begin work after we have released R5.1. These changes would be targeted for R6.0 (an architecture release) and probably scheduled for mid-2010.

Review of R5.1 and R5.2

Ron reviewed release schedules and content for R5.1 and R5.2. The code complete date for R5.1 will need to move out about two weeks in order to finish software development. This revised schedule is also necessary to investigate the performance issues in R5.0. In R5.2, we will not implement Shibboleth – this capability will be required in a later release, specifically when we integrate with OLE.

Agenda Items for the Next Meeting

- Review of performance
- ETDs – Delay of ETD content model
- R5.1 status
- Statistics update
- Submission to faculty survey/NIH & PubMed
- Flash streaming

rcj - 08/26/2009