Software Architecture Working Group   **September 28, 2009**

Minutes of September 17, 2009 Meeting

Agenda

1. Updates and Announcements
2. Review of bugfixes for R5.1
3. Status of R5.1 and start of system test
4. PECL ImageMagick for PHP (postponed to the next meeting)
5. Review of R5.0 performance issues

Announcements and Quick Updates

Updates and announcements include the following:

- Rhonda will finalize the faculty survey/NIH submission requirements and post to RUcore.

- The release summary for R5.1 and R5.2 is now available on RUcore and will be updated when the steering committee reviews and approves.

- In the recent CISC meeting, we concluded the following:

  o Flash streaming will be postponed and will be discussed further with NJVid.

  o As part of our next architecture release (R6.0), we will introduce SOLR/Lucene as an RUcore search engine.

  o Resolving R5.0 performance issues is a high priority.

  o We will update the specification on statistics and review in CISC.

- NJEDge has made great progress with installation of RUcore. They now have Shibboleth working and have created a collection object in WMS. However, they were not able to ingest the collection object since they had not installed java bridge. So, their next step is to install java bride. In a related meeting, we discussed the issues regarding collections structures. NJEDge now has the information necessary to set up their collection hierarchy.

Bugfixes for R5.1

Kalaivani reviewed the bugfix situation, noting that there are 41 bugs recorded, 16 of which have yet to be fixed. Of these, there are six critical WMS bugs and three critical dlr/EDIT bugs. One of these bugs that is affecting WMS, faculty deposit, and ingest is the handling of special characters (e.g. an ampersand). Yang may have fixed this bug and testing will be conducted soon. Yang, Jie, and Jeffery will coordinate the solution for this bug.

Regarding system test, Kalaivani will send out email as to assignments for various parts of the system. It is appropriate to begin testing soon on the more stable parts of the system. We will also introduce performance testing on lefty64 and mss2.

Status of R5.1

We reviewed the status of software development, specifically in relation to the code complete date of September 25. WMS looks OK to meet this date, portal code is tight and maybe will be two or three days off this date, thumbnails are OK, statistics updates are OK, and signature checking updates OK. The xacml utility for embargo (which is outside our software delivery) should be ready by mid-October, i.e. in time to be available when we release R5.1. So, the bottom line, is that we are close to meeting the 9/25 date.

Performance of RUcore

Jeffery led this discussion by examining two search scenarios on mss3, one in which the standard R5.0 RUcore user interface and results display is used and the other in which only a "bare bones" results display is used. The end result is that we see 3X to 4X the time to put up a display in the standard interface. This quick test allowed us to focus on specific parts of the system that might be causing delays. After some further tests, we observed that a major source of the delay was in checking xacml during the presentation of the summary results. We also concluded that the xacml system level policy configuration was different on lefty64 and mss2/3. These observations led to the following actions:

- A (very simple) code change will be made on lefty64 and mss2 to eliminate xacml checking during the presentation of summary results. Actually, this change is already in place. The xacml check will only occur for the display of the full record.
- Dave and Sho will work to resolve differences in the xacml policies on lefty64 and mss2/3.
- After these two steps are completed, we will run performance tests on lefty64 and mss2.
- If these tests show significant performance improvement on mss2, we will consider a dot release (R5.0.1) to address performance issues.
- Chad pointed out that the R5.1 portal code is likely to change performance dynamics so we will need to re-test performance on R5.1 when the portal coded is in place.

Agenda Items for the Next Meeting

- Statistics update
- PECL ImageMagick for PHP
- Performance of R5.0 and introduction of R5.0.1
- Review of R5.1 and R5.2
- Sound disseminator
- Jpeg2000/aware

rcj – 09/28/2009