Software Architecture Working Group

Minutes of October 1, 2009 Meeting

Agenda

1. Updates and Announcements
2. Status of R5.1
3. Handling of “video recording” for VMC project
4. PECL for ImageMagick and API structure/location
5. Performance of R5.0 and R5.1
6. Sound disseminator

Announcements and Quick Updates

Updates and announcements include the following:

• NJEDge has set up their collection structure and ingested collection objects using WMS. Jeffery has sent foxml for public video objects to Sujay for ingest. This is all great progress.
• Jeffery and Jie will work with Sujay to set up the xacml utility. The proposal is to send the utility to them for installation locally (rather than run it from lefty64).
• Karla Hahn (from ARL) will be visiting on Oct. 8 and we will need to stabilize lefty64 in order to demo Shibboleth and xacml.
• Grace has requested that we support “video recording” as a source type by the end of October in order for students to create metadata for VMC videos.

Status of R5.1

We have achieved “code complete” for R5.1 – congratulations to all. Kalaivani has sent the test plan to sw_arch with assignments for everyone. We clarified the approach for handling jpegs in R5.1. Jeffery has developed and tested a script that will produce (from tiff archival masters – only for photographs) the corresponding thumbnail, jpeg, djvu and pdf files. He has also developed the script for updating the objects. Our updating approach will be to add the thumbnail datastream and to modify the jpeg datastream (with versionon off). We delayed the updating of the djvu and pdf until R5.2. With versioning off, this also resolved, temporarily, a lefty64 space problem.

Our projected schedule for R5.1 is to finish lefty64 testing on October 9 and to allow one week for fixing bugs. We would expect to finish testing on mss2 by Oct. 23 or early in the week of Oct. 26. We then move to mss3 with a public announcement on Nov. 2 or 3.

As a related note, we decided that OAI harvesting should be disabled on mss3. Jeffery will notify Sujay to do the same on the NJEDge server. We should also begin separating out release notes for RUcore and NJEDge (given that there are differences).

Handling of Source Type “video recording”

Per a request from Grace, this source type is needed for the VMC project, specifically for students who will be doing metadata in late October. Given that this date coincides with our new release, there are some decisions to be made as to which release to use. Note that the “fix” for this problem does not require software changes – Yang
would need to develop a database script to handle the update. We concluded that using lefty64 will be problematic given severe space limitations and having to move the objects from lefty64 to mss3. We also concluded that R5.1 probably will not be ready in time (i.e. late October). So, the best solution is to use the existing release. Rhonda will explore if we might use one of the other existing source types rather than the proposed new type of “video recording”. Ron and Rhonda will discuss this with Grace asap. If this approach does not work, a possible plan B might be to just do the WMS metadata on lefty64 (with the new source type added). We might then be able to move the WMS database to mss3 and proceed with ingesting (not a very desirable approach).

**APIs and PECL for ImageMagick**

Chad introduced a proposal for an API directory and structure, initially to handle the search API but also to provide a generic process for handling other APIs (e.g. for statistics). The proposal was accepted. We also decided to use PECL and a PHP soap class for ImageMagick rather than using the exec command. Jeffery and Yang will need to make software changes in R5.2. We’ll continue to explore the elimination of the use of the exec command in other areas.

**Performance of R5.0 and R5.1**

We concluded that we will not make the quick fix to improve R5.0 performance since this code will change in R5.1. Chad reviewed the portal approach in R5.1 which allows for the configuration of the search API (checking of xacml is either on or off) and further configuration at the agent level (e.g. RUcore or NJDH). Since Chad supports features at the summary results level regarding restricted resources, checking is still done when the summary results are presented. The performance overhead in this checking is due to using the Fedora API. Dave suggested that we use xslt to check for the POLICY datastream which should result in significant performance improvement. Chad will move ahead with this approach and we will do performance testing before releasing R5.1.

**Agenda Items for the Next Meeting**

- Statistics update for R5.2
- Status of R5.1
- Software investigations – java bridge and Perl to PHP
- Sound disseminator
- Jpeg2000/aware
- Amberfish performance (e.g. in parsing more complex queries)
- R5.2 review

rcj – 10/012/2009