Software Architecture Working Group   May 5, 2009

Minutes of April 23, 2009 Meeting

Agenda

1. Quick updates and Announcements
2. R5.0 outstanding problems
3. R5.0 migration process
4. Special migration topics
5. WMS R5.1 requirements and video scenario

Announcements and Quick Updates

From the NJVid conference call, it was concluded that we will do Flash streaming and we will continue with QT streaming. The Flash streaming has not yet been scheduled into a release. The NJVid steering committee also concluded that we would begin a multi-day training session in early July and the commercial video trial and evaluation is scheduled for the August/September timeframe. In R5.0, we will use dynamic collections to support institutional licensed videos. We also need to pursue the concept of the surrogate object that would hold institution specific metadata. Ron mentioned that the Web Services group will become the oversight group for external applications such as ETDs, WAAND, OJS, and Eagleton. Grace took part in this discussion and requested that we start tracking projects at a more detailed task level. As a result, we will begin a trial process with the Drupal projects (e.g. directory services) and the OJS project.

R5.0 Outstanding Problems

We discussed several outstanding problems as follows:

1. Given initial testing, it looks like we will be able to use batch WMS to ingest NJEDL objects. There are 84 map objects with coordinates that cannot be handled in batch WMS. The plan is to ingest these objects and add the map coordinates to the structure map in a post-ingest operation.

2. In WMS R5.0, a user can add a related item field with the attribute type set equal to "local". This type value should be a protected system value and is used for indexing. We discussed two possibilities: a) blocking the user from inputting a value of "local" or b) displaying a warning message. The group concluded that the warning message would result in more work to find objects that were not indexed properly. As a result, we asked Yang to implement option a) in R5.0.

3. We have encountered situations in which a faculty member wants to ingest two word documents and have them aggregated as one pdf. Actually, this feature should work in WMS but there is a remaining bug. Yang and Chad will work to fix this problem in R5.0. However, this discussion raised a larger issue in which it might be possible to have two Word documents rendered as two pdf documents. We need to better understand the user's need to ingest such an object as opposed to ingesting two separate

objects. Additionally, this raises the larger question of having different content models for different application areas (RUcore, NJVid, faculty deposit, etc). A more detailed discussion of this issue will be scheduled for a future meeting.

Special Migration Projects

Sho indicated that approximately 1.2 TB of disk storage will be needed on lefty64 to ingest all of the objects from mss3. After considerable discussion, we concluded that we will have to find another 400 GB of space to add to the existing 800GB of free space. Isaiah will copy existing objects to an auxillary store and Sho will delete these objects from the mellon directory. Hopefully, this will provide sufficient space.

We discussed the need to take RUcore and related services down for possibly 5 or 6 days to allow for the migration and the preparation of mss3 for R5.0. Everybody was uncomfortable with this amount of down time but it's not clear we have many alternatives. Offline, we will explore the possibility of a read-only system and discuss this further in the next meeting.

Licensed Video Scenario for R5.0

Ron reviewed the licensed video scenario for R5.0 – see Attachment One below. The scenario has been reviewed and approved by Grace. In summary, we will use the dynamic collection capability and custom portals to create collections of licensed videos for each institution. Jeffery has extended indexing to include the POLICY datastream – a capability which will be used to create the dynamic collection. We will need an external utility to allow the super-collection manager to create the POLICY datastream and add a rights event to each commercial video object. This action will occur after the video has been ingested. These capabilities will be integrated into WMS for R5.1. Editing of xacml policies will be accomplished via dlr/EDIT.

WMS 5.1 Requirements

We did not have time to review WMS requirements other than what was discussed in the previous section.

Pending for Next Meeting

- Utility for licensed videos
- Content models
- Migration process and down time
- Continue discussion of ETD content model
- Second pass at WMS R5.1 requirements and licensed video scenario

Attachment One

Scenarios for Commercial (Licensed) Videos

There are many assumptions in the attached but these notes should help stimulate further discussion. The following scenario proposes that we use the RUcore dynamic collection capability to support videos for institutional portals in R5.0. There are two major issues with our current direction that suggest we should use this scenario: 1) our current direction calls for a surrogate video object that would hold institution-specific metadata. This surrogate is, in effect, an annotation of a commercial video object – a process that has not been approved by the commercial vendors, and 2) the surrogate object is basically a subset of the more advanced annotation capability which is now planned for R6.0. From the standpoint of both effort and architecture, it would be best if we implemented the surrogate object capability by re-using some of the base annotation code. Given these difficulties, the following scenario could serve very well for institutional portals as either an interim or a permanent capability.

Scenario for NJVid Licensed Videos with R5.0

The assumption is that RUcore has been installed at NJVid, public videos have been exported and ingested, and the NJVid public portal is operational. The following is the assumed scenario:

1. A selection of FMG videos is ingested into the NJVid FMG collection. The collection is not yet indexed or made public. The ingest is done by an NJEDge member – the Super-collection manager (SCM). For each video ingest, the SCM will receive an email alert. For R5.0, they will need to manually correlate the repository ID with a unique identifier for the video.

2. The SCM prepares xacml to reflect licensing agreements and the xacml is added in a post-ingest edit process. The policy for each video is ingested as a datastream with ID equal to "POLICY". A separate rights event will also be added in DigiProv to provide a human-readable version of the xacml policy. We will develop a "lightweight" external utility for creating the policy xacml and rights event for R5.0. This function will be integrated into WMS for R5.1 (an early Fall, 2009 release).

3. Montclair (for example) creates an FMG commecial video collection object. This collection would likely represent a sub-collection under their main video collection object (although this is not necessary).

4. A dynamic collection is created by finding/indexing the xacml policies that provide access to Montclair. A minor feature has been made in R5.0 to allow indexing of the policy xacml.

5. The Montclair FMG dynamic collection is attached to their portal and the videos are available for presentation. Note that no copies are made of the FMG videos.

6. If Montclair later licenses additional videos from FMG, the SCM edits the xacml for the respective videos. The dynamic collection is re-indexed nightly, so these newly licensed videos would be available the next day.

7. This scenario is simple, available in R5.0, and does not require the institution to add additional metadata.

rcj – 04/17/2009