

Software Architecture Meeting, Thursday, November 15th , 2007

(Ananthan, Beard, Ellis, Geng, Hoover, Jantz, Liew, Marker, Mills, Nakagama, Triggs , Yu)

Agenda

- 1) Video Streaming investigation paper, Beard & Hoover.
- 2) XACML – Can permission be defined at the datastream level?
- 3) Handle server, single handle pointing to multiple objects
- 4) Digital Docs/Administrative Space R5.1 Specification Review

General Announcements

Jantz brought up the topic that the video and audio object standards analysis will need to be revisited regarding multiple structure maps (SMAP) needed in the future for video/audio objects. Should the SMAP be similar to that of books? Multiple technical metadata sections will also be needed in video objects. It was decided not to store multiple masters at specific checkpoints in the object, but rather store the information regarding what was done to the video in the editing process to achieve those checkpoints. Beard will update and draft to group.

Agenda Items

- 1) Video streaming investigation, Beard & Hoover.

What is driving our decision for supporting Quicktime & Flash Video? Do we base our decisions on the fact that we already have a Helix streaming server? Do we need/want to use H.264?

Helix only supports streaming H.264 in a 3GPP container. H.264 in a QT container could be streamed with a Mac using Darwin. If we wanted to stream H.264 in a QT container would we want to purchase an Xserve for this purpose? An alternative would be to stream a non H.264 file with Helix.

For Release 4.5 the following was decided:

- QT Stream with Flash Video progressive download
- MPEG4 encoded stream, looking towards H.264 in the future
- No custom SMAP at this time
- Archival masters .avi
- Segmented TARs for archival masters over 2GB

One major topic unaddressed is provided a mechanism for protected content. It is unknown how to provide that at this time.

- 2) XACML – Can permission be defined at the datastream level?

Access control can be granted with a policy at the datastream level. A class of access permission would need to be implemented with profiles of their use. A policy datastream would need to be added to an object to enforce that policy. Ananthan and Triggs will investigate further.

- 3) Handle server, single handle pointing to multiple objects

There is an issue with handles for objects on the test system(s) resolving to the production system. The problem does not exist in objects created on the system, they resolve properly. The problem exists for objects that were migrated from one system to another. The handles still resolve to the originating system. A framework needs to be developed for mass editing of objects handles that are not resolving properly. Also policies need to be created for handling the migration of objects in the future. This depends if the migration was part of an upgrade so it might be temporary or if it

were permanent, for instance adding a sample set of objects to the development system for development and testing purposes. Hoover, Nakagama and Triggs will develop policies and framework.

4) Digital Docs/Administrative Space R5.1 Specification Review

Next meeting.

Next Meeting

The next Software Architecture Meeting is scheduled for Wednesday, November 28th at 9:30 A.M. at the SCC.

An initial, proposed agenda is below:

- 1) Review changes to the Video/Audio object architecture documents; Beard.
- 2) XACML followup; Ananthan and Triggs.
- 3) Handle server, test object migration followup; Hoover, Nakagama and Triggs.

Digital Docs/Administrative Space R5.1 Specification Review will be reserved for a later meeting and Mary Beth Weber will be invited to attend.