

Software Architecture Working Group
Minutes of November 20, 2008 Meeting

January 13, 2009

Agenda

1. Quick updates
2. Handle server upgrade
3. ETD migration to reaper64
4. Thumbnail spec

These abbreviated minutes are being provided at this late date primarily as a placeholder so we have a complete record. Note that subsequent minutes either have more complete specifications on the topic or the topic will be covered more extensively in an upcoming working group meeting.

Handle Server

Sho and Ron briefly discussed a proposal to move to a new Handle server. The major points are:

- We will retain all the existing handles.
- Testing will be done on lefty64.
- In moving to mss3, there will be a brief period when the new Handle server database is empty. A script will have to be written to regenerate all the handles. The brief period should be less than 24 hours and should not be a serious service problem (since relatively few of our resources are accessed via the PID).

Note that this discussion will be brought back into the working group as part of the discussion for creating handles that point to a url with “rucore” rather than “mss3”. The draft notes that were input to this discussion are included here (see page 2 below).

ETD Migration

As of this date, the ETD application has been migrated to reaper64. The problem discussed in the Nov. 20 meeting related to ETDs that were “stranded” on the Harvest server. With some re-configuration work and testing, this problem has been subsequently solved.

Thumbnail Generation

Chad reviewed a proposal for the generation of jpeg thumbnails as a datastream as opposed to the current method. This proposal has subsequently been reviewed several times and approved by the software architecture working group. The document is available at

http://rucore.libraries.rutgers.edu/collab/ref/spc_sawg_r5_1_tnail_jpeg_ds.pdf

DRAFT

Notes on Upgrade of Handle Server

The following are brief notes based on informal discussions; these notes should guide our discussion in an upcoming sw_arch meeting. The objective is to upgrade to Handle server (v. 6.2) which will run with Java versions 1.4.2 and higher. This upgrade will provide increased reliability, flexibility and ease of maintenance.

Upgrade Process

- Decommission old server and bring on new server. Previously, we had a separate server for each global prefix (i.e. five servers). These will all be combined into one server with the new release.
- After the cutover, we now have a “blank” Handle server, i.e. there are no urls in the Handle database and, for a short period estimated at maybe 24 hours, our PIDs will not work. We will therefore need to develop a script that will recreate all of the handles. Note that the prefixes and persistent IDs will remain the same – there is no update required to any of the metadata in the objects. (Editorial note. I don’t think inoperable PIDs for 24 hours will be a big problem, however we will need to notify users. I expect that the majority of our hits come accessing the full record, not the PID.)
- Note that ingest should not be affected by this upgrade and should be able to proceed normally.

Impact and Synchronization with RUcore Releases

- A new Handle client will be introduced in R5.0. Initial testing indicates that this change works with the existing and new version of the Handle server.
- When do we upgrade to the new server? This upgrade does not have to be synchronized with an RUcore release. We can choose, for example, to upgrade between R5.0 and R5.1. This needs further discussion.
- With the upgrade, a primary and slave server can be run to give us more redundancy. Probably Systems should run the primary and SCC should run the slave. It is not clear whether the switch can be manual or automatic.