LSST Database Hangout 2014-07-16

Date

Jul 16, 2014

Attendees

- Jacek Becla
- Andy Salnikov
- Unknown User (danielw)
- Serge Monkewitz
- Fabrice Jammes

Goals

· Get together, resolve all bottlenecks, make progress faster, exchange ideas

Discussion Items

master inadvertently broken (merge of DM-622)

- · probably incorrect merge
- fixed in u/fjammes/dm-967 during the meeting, reviewed and merged

How to install system dependencies?

- Can't do through eups
- Maybe special package that checks and reports missing dependencies?
- Check with Kian-Tat Lim?
 - (KTL) We don't have a solution for this in the stack yet. My preference is currently for a "stub" package that checks for system dependencies. I don't want to have system dependency installation in newinstall.sh, which should only be for installing eups.

Running on multi-node

- runServer, people not happy at large scale
- pmg used by LHC/Atlas
- ideally, just be flexible and use whatever is recommended for a given cluster

contrib/eupspkg/* packages that Fabrice Jammes created

- Should there be a better place for these things?
- Ask Kian-Tat Lim?
 - (KTL) LSST/external/* once they have been reviewed.

xrootd integration tests

- · Get the latest custom xrootd package, see DM-944
- Get qserv from u/daniel/kirkwood
- Jacek will set up test environment
- identified first issue: context not passed during the meeting

25 node cluster for Qserv test

· Likely available in Sept, maybe even in Aug, Fabrice will double check

Refmatch

- About week away from testing
- Includes name resolution
- · Can't support outer joins that are spatial
 - So queries like "find objects without matches" would not work
 - Chat with Mario Juric about it, maybe in Phoenix?
 - ° That is because now we concatenate results from two joins: one against subchunk data, one from overlap
 - Possible fix: maintain in memory subchunk, and subchunk+overlap (now we have subchunk and overlap). But This doubles memory requirement. Need to run through spreadsheet and check cost increase
 - ° Or... load to memory subchunk+overlap, filter out overlap through a non-materialized view

boost dependency checker script (by Andy Salnikov)

- code non-trivial, naming conventions in boost crazy, likely to change in the future, code needed in more than one place
 needed for partitioner (see DM-666)
- want to put the boost dependency checker into sconsUtil
 but sconsUtil depend on eups

- partitioning package is simple, does not want all these dependencies
 sentiment: maybe better to duplicate code for checking boost versions than use sconsUtil?
 get advice from Kian-Tat Lim
- - (KTL) I suggested to Daniel that maybe we should punt on all this and just require the user to specify where Boost is (equivalent of "-with-boost="). We can of course look in BOOST_DIR if eups has set that.