

Middleware/Infrastructure? Status Report for June 15, 2010

Allsman Robyn

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|--|--------------------|
| MWI827 | 0% | prototype buildbot script to run pipeline unittest | <i>not started</i> |

*Percent updated in this report

Comments:

Other Activities

Axelrod Tim

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|-----------------------|--------------------|
| MWI834 | 0% | Select CHFT Test Data | <i>not started</i> |

*Percent updated in this report

Comments:

Other Activities

Baker Bill

Reported 06/21/10

| ID | Percent | Task | Comments |
|--------|---------|--|--------------------|
| MWI569 | 20% | Maintain automated testing structure | |
| MWI41 | 25% | Support distributable VMs for new developers | |
| MWI852 | 50% | Web interface to Parasoft | |
| MWI74 | 50% | configure test system for automated V&V | |
| MWI637 | 25% | Automated standards checking script | |
| MWI638 | 0% | Buildbot to detect ABI changes on trunk | <i>not started</i> |
| MWI661 | 0% | Advanced interslice communications support | <i>not started</i> |
| MWI662 | 0% | Machine-readable inputs/outputs manifest | <i>not started</i> |
| MWI707 | 25% | Automating nightly DC3b run | |

*Percent updated in this report

Comments:

Other Activities

I'm transitioning off of LSST, with two tasks to focus on:

- finishing the security summary for PDR (an executive summary of the security document)
- continuing to support nightly builds (buildbot)

Ergo, my list of tasks will probably stay where it is. There are some half-finished projects in there -- mainly the web interface to Parasoft -- that I can either hand over to someone else or just put into a dormant mode for now.

Becker Andy

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|-----------------------|--------------------|
| MWI838 | 0% | Chop CFHT data by amp | <i>not started</i> |

*Percent updated in this report

Comments:

Other Activities

Becla Jacek

Reported 06/18/10

| ID | Percent | Task | Comments |
|--------|---------|---|--------------------|
| MWI681 | 0% | Updates: exposure-related tables | <i>not started</i> |
| MWI691 | 20% | Partitioning: design partitioning of MovingObject? table | |
| MWI693 | 75% | Tools for partitioning data | |
| MWI831 | 90% | qserv: MyProxy? | |
| MWI832 | 75% | DB backup and replication | |
| MWI700 | 25% | Benchmarking | |
| MWI160 | 25% | capturing full SW/HW info | |
| MWI159 | 0% | demonstrating re-creation of Calibrated Science Images | <i>not started</i> |
| MWI165 | 41% | support persistence and retrieval of deep detection products and inputs | |
| MWI465 | 40% | implement objectId synchronization between data releases (not DC3) | |

*Percent updated in this report

Comments:

- lsst

- ◆ qserv plan update
- ◆ reddenet servers - logistics at slac incl security issues, server location, paperwork etc
- ◆ reached out to students at Stanford and arranged one for the lsst-db group (part-time). Starts June 21
- xldb4
 - ◆ finished website contents and released website
 - ◆ compiled list of speakers, invitees for the workshop
 - ◆ discussions with potential sponsors
- scidb
 - ◆ changes to website
 - ◆ presentation for the ldrd proposal review committee
 - ◆ nsf proposal planning
- slac - yearly performance reviews

Note: I am on vacation since June 09

Other Activities

Bosch Jim

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|---------------------------------------|--------------------|
| MWI685 | 5% | Near neighbor query over 2 or 3 nodes | |
| MWI696 | 0% | DC3b syntax parser and aggregation | <i>not started</i> |

*Percent updated in this report

Comments:

Other Activities

Cribbs Chris

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|----|---------|------|----------|
|----|---------|------|----------|

*Percent updated in this report

Comments:

Other Activities

Daues Greg

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|------------------------------|----------|
| MWI656 | 50% | Pipeline shutdown mechanisms | |

| | | | |
|--------|-----|--|--------------------|
| MWI853 | 0% | Adding run filter for shutdown events | <i>not started</i> |
| MWI664 | 0% | Freeze-drying clipboards: Harness support | <i>not started</i> |
| MWI106 | 0% | Work to support communication of general serializable types over MPI | <i>not started</i> |
| MWI107 | 0% | Develop mechanisms for identifying/accessing | <i>not started</i> |
| MWI113 | 0% | Improving harness exception handling | <i>not started</i> |
| MWI709 | 25% | Improve simple, interactive harness execution: interface | |

*Percent updated in this report

Comments:

Other Activities

Freemon Mike

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|---|--------------------|
| MWI849 | 0% | Prepare LSST10 for primary catalog database | <i>not started</i> |

*Percent updated in this report

Comments:

Other Activities

Gehrig David

Reported 06/21/10

| ID | Percent | Task | Comments |
|--------|---------|---|--------------------|
| MWI723 | 25% | Image file access server ready | |
| MWI724 | 100%* | Unify account management procedures - svn mysql linux svn | |
| MWI722 | 30% | Prepare LSST2 for iRODS | |
| MWI848 | 25%* | Prepare LSST1 as web data server / schema browser | |
| MWI849 | 25%* | Prepare LSST10 for primary catalog database | <i>not started</i> |
| MWI837 | 100%* | Download CFHT Data | |

*Percent updated in this report

Comments:

Other Activities

*Migrating data from lsst cluster to mass storage *Moved data browser from lsstbook to lsst1

Comments:

Other Activities

Hanushevsky Andy

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|---|----------|
| MWI165 | 41% | support persistence and retrieval of deep detection products and inputs | |

*Percent updated in this report

Comments:

Other Activities

Lim KT

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|---|--------------------|
| MWI691 | 20% | Partitioning: design partitioning of MovingObject? table | |
| MWI160 | 25% | capturing full SW/HW info | |
| MWI159 | 0% | demonstrating re-creation of Calibrated Science Images | <i>not started</i> |
| MWI165 | 41% | support persistence and retrieval of deep detection products and inputs | |
| MWI465 | 40% | implement objectId synchronization between data releases (not DC3) | |
| MWI180 | 0% | persistence framework refinement | <i>not started</i> |
| MWI643 | 0% | Upgrade OutputStage? to register outputs | <i>not started</i> |
| MWI644 | 0% | Implement simple, non-Policy retrieval | <i>not started</i> |
| MWI645 | 0% | App Class: remove need to declare friend classes | <i>not started</i> |
| MWI646 | 0% | App Class: remove intrusiveness of Boost persistence | <i>not started</i> |
| MWI647 | 0% | App Class: legacy file-based persistence/retrieval | <i>not started</i> |
| MWI648 | 0% | Python pers: investigate efficiency of methods | <i>not started</i> |
| MWI649 | 0% | Python pers: define app class interface | <i>not started</i> |
| MWI650 | 0% | Implement simple non-Policy persistence | <i>not started</i> |
| MWI651 | 0% | Upgrade InputStage? | <i>not started</i> |
| MWI652 | 0% | Generic ORM: mapping attributes to columns | <i>not started</i> |
| MWI653 | 0% | Generic ORM: collection persistence and retrieval | <i>not started</i> |
| MWI663 | 0% | Freeze-drying clipboards: design | <i>not started</i> |
| MWI673 | 0% | Determine, retrieve cutout areas over given sky tile | <i>not started</i> |
| MWI675 | 0% | Write to co-add template pixel store on sky tile basis | <i>not started</i> |
| MWI674 | 0% | Determine template pixels overlaying given coords | <i>not started</i> |
| MWI676 | 0% | Retrieve template pixels | <i>not started</i> |
| MWI677 | 0% | Investigate local disk use for postage stamp generation | <i>not started</i> |

*Percent updated in this report

Comments:

Other Activities

Monkewitz Serge

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|--|--------------------|
| MWI690 | 25% | Partitioning: research htm/healpix/stomp/dif | |
| MWI692 | 0% | Implement generic query partitioner | <i>not started</i> |
| MWI693 | 75% | Tools for partitioning data | |
| MWI696 | 0% | DC3b syntax parser and aggregation | <i>not started</i> |
| MWI854 | 15% | Spatial support for qserv and corresponding MySQL UDFs | |
| MWI465 | 40% | implement objectId synchronization between data releases (not DC3) | |
| MWI669 | 0% | Determine segment images over a given sky tile | <i>not started</i> |

*Percent updated in this report

Comments:

Other Activities

Pietrowicz Steve

Reported 06/18/2010

| ID | Percent | Task | Comments |
|--------|---------|---|---|
| MWI658 | 0% | I/O stage for interactive pipeline launch | <i>not started</i> |
| MWI659 | 75% * | Refactor Orca | currently in testing for Abe |
| MWI538 | 0% | Event Monitor integration | <i>not started</i> |
| MWI589 | 0% | Pipeline Fault Tolerance | <i>not started</i> |
| MWI570 | 75% * | Events orchestration layer support | integrated and being used in orca and joboffice |

*Percent updated in this report

Comments:

Other Activities

Plante Ray

Reported 06/18/2010

| ID | Percent | Task | Comments |
|--------|---------|----------------------------|----------|
| MWI624 | 75% | User preferences directory | |
| MWI625 | 75% | Support user/server tags | |

| | | | |
|--------|-------|--|---|
| MWI626 | 0% | Improve packages installation/declaration | <i>not started</i> |
| MWI627 | 25% | Improve EUPS Docs | |
| MWI628 | 0% | Meta releases | <i>not started</i> |
| MWI629 | 0% | User publishing of packages to server | <i>not started</i> |
| MWI631 | 0% | As-built manifests into install directories | <i>not started</i> |
| MWI632 | 0% | Make SConsUtils dependency on EUPS optional | <i>not started</i> |
| MWI633 | 0% | Upgrade SConsUtils for latest Scons | <i>not started</i> |
| MWI641 | 0% | Logging tasks | <i>not started</i> |
| MWI840 | 25% | Update and test stack for latest product versions | |
| MWI841 | 100%* | Job scheduling via JobOffice/Blackboard | Basic functionality was in place and in use last month. |
| MWI670 | 0% | LRU cache for raw segment images | <i>not started</i> |
| MWI671 | 0% | LRU cache for calibrated science exposures | <i>not started</i> |
| MWI672 | 50%* | Write/retrieve images to disk/tape | General purpose software will save new data to tape via scp; will switch to globus-url-copy for improved performance. This month, I have been concentrating on supporting the <u>ImSim</u> team and the lsst2 server. |
| MWI842 | 0% | Develop and implement file bundling for Mass Store | <i>not started</i> |
| MWI855 | 75%* | JobOffice Middleware, testing and debug | Currently integrating use of databutler to support SrcAssoc pipeline |
| MWI848 | 0% | Prepare LSST1 as web data server / schema browser | <i>not started</i> |

*Percent updated in this report

Comments:

Note that as of May 15, I am now 50% on LSST.

Other Activities

PT1 integration activities

- My three most important activities:
 - ◆ Supporting SrcAssoc with the JobOffice (see MWI855 above)
 - ◆ Final testing of orca for routine launching of productions on Abe (with Pietrowicz)
 - ◆ Migrating ImSim data from lsst2 to mass storage
- lsst cluster disk space maintenance

Van Dyk Schuyler

Reported xx/xx/xx

| ID | Percent | Task | Comments |
|--------|---------|-------------------------|----------|
| MWI722 | 30% | Prepare LSST2 for iRODS | |

*Percent updated in this report

Comments:

Other Activities

Wang Daniel

Reported 06/24/10

| ID | Percent | Task | Comments |
|--------|---------|---|----------|
| MWI165 | 42%* | support persistence and retrieval of deep detection products and inputs | |

*Percent updated in this report

Comments:

- qserv-related:
 - ◆ Added db context support in proxy/Lua and qserv parser.
 - ◆ Check for garbage queries in frontend so that they don't crash the system.
 - ◆ Test Object-Source table joining.
 - ◆ Add more error checking in parser to catch bad (though not garbage) queries.
 - ◆ Accept non-lower-case functions in SQL.
 - ◆ Refactor parser-driving code.
 - ◆ Start stabilizing the testing code.
 - ◆ Implement synthesizer for fake Source data from usnob tables.
 - ◆ Increase robustness of result-merging code.
 - ◆ Add db-access checks in sql parser.
 - ◆ Add basic query squashing so that really early failures can avoid useless work.
 - ◆ Handle errors better when query hints are missing/malformed.
 - ◆ Write high-level overview of qserv.
 - ◆ Add result-table specification in subqueries, and dump/transmit/reload tables instead of databases to avoid excessive overhead from creation/destruction of databases.
 - ◆ Improve mutex protection on qserv master.
 - ◆ Add basic objectId support in query hints.
 - ◆ Switch subquery mgmt to conditions rather than polling -- shortest queries are now ~1s.
 - ◆ qserv-worker:
 - ◇ Fix worker to create overlap tables when subchunking.
 - ◇ Some code cleanup.
 - ◇ Improve error handling to pass execution errors during result signalling so that errors propagate up to xrootd.
 - ◇ Improve query write-buffering.

Other Activities

Objectives for the Next Period

What you expect to accomplish.

NCSA

LSSTC

Database Group

Problems Encountered and Solutions Being Pursued

Budget or schedule variance, technical issues, management issues.

NCSA

LSSTC

Database Group