

Middleware/Infrastructure? Status Report for April 15, 2010

Guide on Reporting Percentage Completed:

For software development tasks,

- use 0% if the solution is still being designed;
- use 25% if the solution's design is completed;
- use 50% if the solution is implemented and tested within the Ticket branch;
- use 75% if the implementation review is complete, the Ticket branch has been merged onto the Trunk branch, and the Ticket is closed.
- use 100% if the affected Trunk packages are tagged and released.

For other tasks, still use these increments, but apply their meaning as best as possible.

Note: Please place an asterisk (*) after the percent if you updated this value in this report.

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

Baker Bill

Reported 4/19/10

ID	Percent	Task	Comments
MWI569	20%	Maintain automated testing structure	
MWI41	25%	Support distributable VMs for new developers	
MWI74	50%	configure test sytem 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

- Work on pex_policy
 - ◆ bug fixes: [#1210](#) - included in 3.4.4
 - ◇ improve handling of sub-dictionaries
 - ◇ push more validation to construction instead of at use time
 - ◆ load Policy by URN: [#1035](#) - future version (3.5?)
 - ◇ format is `urn:eupspkg:<package>[:<repository>]:<path>`
 - ◇ implementation is about 90% complete
- Buildbot
 - ◆ Working on a trunk vs. trunk build
- Long-term
 - ◆ developing web interface to Parasoft CppTest? for sharing among developers

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 04/16/10

ID	Percent	Task	Comments
MWI681	75%*	Updates: exposure-related tables	waiting for Apps team for input
MWI691	20%	Partitioning: design partitioning of MovingObject? table	
MWI693	75%	Tools for partitioning data	
MWI831	60%	qserv: MyProxy?	
MWI832	25%*	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)
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*Percent updated in this report

Comments:

Other Activities

- attended mysql conf, debrief sent to lsst-data
- SAT schema review
- schema updates (exposure tables, provenance)
- coordinating installing reddnet machines at slac
- qserv discussions about configuration
- telecon about Gator
- imSim planning
- xldb
 - ◆ website contents
 - ◆ put together organizing committee
 - ◆ draft budget and other docs for DOE (got the approval from DOE!)
- scidb
 - ◆ wrote/submitted ldrd proposal
- 1 week vacation

Daues Greg

Reported xx/xx/xx

ID	Percent	Task	Comments
MWI656	50%	Pipeline shutdown mechanisms	
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	50%*	Improving harness exception handling	
MWI709	50%*	Improve simple, interactive harness execution: interface	

*Percent updated in this report

Comments:

- For MWI113, within ticket 1187 support for a failure Stage (that is executed when an exception is caught in the Pipeline or a Slice) has been added.
- For MWI656, within ticket 1187 shutdown mechanisms were made more robust.
- For MWI709, Daues extended the `datarel` package with harness-level pipeline execution sets (adding to the original `orca`-level sets) for test pipelines `SFM` and `CrSplit`. This activity was undertaken during Integration week at IPAC.

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 xx/xx/xx

ID	Percent	Task	Comments
MWI723	25%*	Image file access server ready	
MWI724	25%*	Unify account management procedures - svn mysql linux svn	
MWI722	90%	Prepare LSST2 for iRODS	
MWI848	30%	Prepare LSST1 as web data server / schema browser	
MWI849	0%	Prepare LSST10 for primary catalog database	<i>not started</i>
MWI837	50%*	Download CFHT Data	

*Percent updated in this report

Comments:

Other Activities

- Updated MWI project plan reflecting design review scoping changes

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>

MWI465	40%	implement objectId synchronization between data releases (not DC3)	
MWI669	100%	Determine segment images over a given sky tile	<i>done (for the PT1 sky-tiling scheme)</i>
?	75%	Spatial support for qserv and corresponding MySQL UDFs	<i>Still need to implement UDFs</i>

*Percent updated in this report

Comments:

Other Activities

Pietrowicz Steve

Reported xx/xx/xx

ID	Percent	Task	Comments
MWI658	0%	I/O stage for interactive pipeline launch	<i>not started</i>
MWI659	50%	Refactor Orca	
MWI538	0%	Event Monitor integration	<i>not started</i>
MWI589	0%	Pipeline Fault Tolerance	<i>not started</i>
MWI570	0%	Events orchestration layer support	<i>not started</i>

*Percent updated in this report

Comments:

this activity isn't listed above: 50% Worked on implementing Event typing. This is currently in the trunk and is being tested with the Job Office.

Other Activities

Plante Ray

Reported xx/xx/xx

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	3%	Job scheduling via JobOffice/Blackboard?	
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	0%	Write/retrieve images to disk/tape	<i>not started</i>
MWI725	50%	Define directory structure	
MWI848	0%	Prepare LSST1 as web data server / schema browser	<i>not started</i>

*Percent updated in this report

Comments:

Other Activities

Wang Daniel

Reported 04/20/10

ID		Percent	Task	Comments
MWI165	41%		support persistence and retrieval of deep detection products and inputs	Ongoing. Finishing up parsing/front-end qserv prototype.

*Percent updated in this report

Comments:

- qserv development.
- Add new ANTLR grammar for query parser, which should be compliant with all (?) SQL92 syntax. Add rules and code to process column and table names. Support table remapping, depending on whether chunks or subchunks are available, and whether subchunking is needed for a query.
- Add tool for daemon-less testing of qserv.
- Cleaned up build configuration.
- Added hint string handling.
- Integrated Serge's geometry code for partitioning.
- Add configuration file facility for qserv.
- Test near end-to-end query execution from submit query+hintstring to c++ async executor.
- Finish two-file/url dispatch mechanism for lower latency and resource usage.
- Add worker-side query throttling to prevent server crash.

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