

Middleware/Infrastructure? Status Report for March 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.

Baker Bill

Reported 03/06/10

ID	Percent	Task	Comments
MWI569	20%	Maintain automated testing structure	
MWI41	25%	(BB) support distributable VMs for new developers	
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	0%*	Automating nightly DC3a run	Robyn is working on scripts for this, which I will configure to run on the cluster under buildbot

*Percent updated in this report

Comments:

Other Activities

Becla Jacek

Reported 03/17/10

ID	Percent	Task	Comments
MWI680	100%*	Updates: source-related tables, Object table	
MWI681	0%	Updates: exposure-related tables	<i>not started</i>
MWI691	20%*	Partitioning: design partitioning of MovingObject? table	<i>not started</i>
MWI693	75%	Tools for partitioning data	
MWI697	25%	Task manager: design presentation	
MWI700	25%	Benchmarking	
MWI701	25%	Data Release tools	
MWI702	25%	Documentation	
MWI160	25%*	capturing full SW/HW info	<i>not started</i>
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:

Other Activities

- schema design (sources, diasource, forced sources, exposure)
- discussions about ImSim db
- coding for qserv (lua script for mysqlproxy)
- coordinating servers at slac (a) for DC3b database, (b) reddnet
- arranging upgrade of lsst-related test bed at slac (faster 3 node cluster, access to a new 64 node cluster)
- xldb
 - ◆ PI on a new qserv-related proposal for DOE/ASCR - a complete proposal coordinated/prepared, including narrative and budget [this took A LOT of my time this month]
 - ◆ preparing for xldb event
- scidb
 - ◆ assistance with various legal issues, including some meetings

Bosch Jim

Reported xx/xx/xx

ID	Percent	Task	Comments
MWI685	5%	Near neighbor query over 2 or 3 nodes	
MWI694	0%	Basic generic query parser in place	<i>not started</i>

MWI695	0%	Demonstrate joining Object table with non-partitioned tables	<i>not started</i>
MWI696	0%	DC3b syntax parser and aggregation	<i>not started</i>
MWI698	0%	Task manager: multiple queries	<i>not started</i>
MWI699	0%	Task manager: interactions with user	<i>not started</i>
MWI701	25%	Data Release tools	
MWI702	25%	Documentation	

*Percent updated in this report

Comments:

Other Activities

Cribbs Chris

Reported xx/xx/xx

ID	Percent	Task	Comments
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*Percent updated in this report

Comments:

Other Activities

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	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

Gehrig David

Reported xx/xx/xx

ID	Percent	Task	Comments
MWI47	0%	build warnings if unittest doesn't satisfy DC3 coverage requirement	<i>not started</i>

MWI52	0%	any failures cause automatic 'Failed Nightly Build' ticket at high priority	<i>not started</i>
MWI54	0%	any failure causes automatic 'Failed Production sanity check' ticket at high priority	<i>not started</i>
MWI55	0%	auxiliary automatic notification to highest authority on failure (separate from ticket notification)	<i>not started</i>
MWI57	0%	Standards: specify requirement to version and archive build's provenance;	<i>not started</i>
MWI58	0%	Configuration Management: define procedure to satisfy that requirement;	<i>not started</i>
MWI59	0%	Configuration Management: implement its instantiation.	<i>not started</i>

*Percent updated in this report

Comments:

Other Activities

- working on LSST cluster infrastructure

removing Lustre, getting lsst2 ready for iRODS

- working on PT1 task replan
- working with Dick S to determine which CFHT calibration data to download for PT1
- vacation - March 5 to 12

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	0%	Partitioning: design partitioning of MovingObject? table	<i>not started</i>
MWI698	0%	Task manager: multiple queries	<i>not started</i>
MWI699	0%	Task manager: interations with user	<i>not started</i>
MWI702	25%	Documentation	
MWI160	0%	capturing full SW/HW info	<i>not started</i>
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>
MWI669	0%	Determine segment images over a given sky tile	<i>not started</i>
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>
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)	

*Percent updated in this report

Comments:

Other Activities

Pietrowicz Steve

Reported 03/22/10

ID	Percent	Task	Comments
MWI665	0% *	Expose Event API	Server-side selectors tested, working on testing new rev. of ActiveMQCPP library.
MWI228	25%	Event system failover	
MWI658	0%	I/O stage for interactive pipeline launch	<i>not started</i>
MWI659	50%	Refactor Orca	LSST cluster orchestration done, working on Condor orchestration
MWI538	0%	Event Monitor integration	<i>not started</i>
MWI589	0%	Pipeline Fault Tolerance	<i>not started</i>
MWI570	25% *	Events orchestration layer support	Shutdown support has already been added to Orca
MWI666	0%	Scripts to monitor for node/pipeline failures	<i>not started</i>
MWI667	0%	Python-based high-level event monitor scripts	<i>not started</i>

*Percent updated in this report

Comments:

New version of Orca was tagged and released. Update coming for Condor support in orchestration. Prototyping of changes required for update to ActiveMQCPP library, for proposed Event API changes to support Blackboards, and for Event objects in the Event API.

Other Activities

Plante Ray

Reported 03/18/10

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>

*Percent updated in this report

Comments:

Other Activities

This month was focused on primarily on PT1 preparation

- worked Pietrowicz and Daues on completing `ctrl_orca` for PT1
 - ◆ created and initially developed the `ctrl_provenance` package for use by `ctrl_orca` (Pietrowicz completed this work)
 - ◆ presented DC3b orchestration plan for orchestration design review
 - ◆ did study of Blackboard-based approaches to pipeline orchestration; designed a proposed implementation
 - ◆ `ctrl_sched`: completed 50% of Blackboard implementation and unit tests (including items and queues)
- worked on updating packages for the software stack
- contributed to working groups: middleware, TCB, SAT
- assisted Gehrig with "re-plan" activities

Wang Daniel

Reported 03/17/10

ID	Percent	Task	Comments
MWI165	41%	support persistence and retrieval of deep detection products and inputs	Ongoing. Debugging execution and re-writing frontend task mgmt.

*Percent updated in this report

Comments:

- qserv development.
- Work with xrootd developer (Andy) on new LSST-specific features, and debugging asynchronous dispatch primitives.
- Re-work front-end interface for mysqlproxy usage.

Other Activities

Most(?) of the time this period was spent on drafting/editing a proposal for future work on qserv.

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