Previous month <u>Apps</u> - <u>MW/Inf</u> - <u>Mgt/SE</u>

Current month <u>Mgt/SE</u>

Next month <u>PT1.1</u> - <u>Mgt/SE</u>

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 level of effort tasks, use % of effort expended rounded to nearest 5%:

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

- use 0% if the deliverable is still being designed;
- use 25% if the deliverable's design is completed;
- use 50% if the deliverable is implemented awaiting review/approval;
- use 75% if the deliverable has been reviewed and in revision;
- use 100% if the deliverable is approved and posted to appropriate repository.

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

Task	Start	Finish	Resources (lead first)	% Complete	Comments
ImSim Data			*Krughoff Simon*	50%	*Scripts for staging complete distributed to all three produ sites (Purdue, SLAC, U. Washington). Inputs to simul generated for seven fields fo year of opsim3_61. Generati simulated images begun at 1 of three sites (Purdue).*
Make census of ImSim data at NCSA, request missing visits resend	8/23/2010	8/23/2010	Plante Ray[50%]		
Create ImSim Data Flow for PT 1.1 from all image generation sites	8/24/2010	8/30/2010	Plante Ray[25%],Krughoff Simon[25%]	25%	SK: Fields selected, staging set up.; RP: Waiting for contribution from Garrett RP: received scripts; progres delayed by Orch. workshop
Prepare to generate 450 (was 600) visits in 7 adjacent fields in 15 x 15	8/23/2010	8/27/2010	Krughoff Simon[30%]	10%	These fields only had 450 observations in the first year Generation at Purdue begun

field					
Generate reference galaxy catalog (turn on magnitudes, improved photometry)	8/30/2010	9/3/2010	Krughoff Simon[30%]	25%	Code in place, testing in prog
Import reference catalogs into Gator for comparison to output catalogs	9/6/2010	9/7/2010	Monkewitz Serge[50%]	25%	
Environment and Tools			*Plante Ray*		*This effort is largely comple apart from the final upgrade the stack, which has been postponed until after the Orchestration workshop and completion of the JobOffice extensions.*
TCT approval for environment/tool updates	8/23/2010	8/23/2010	Allsman Robyn[50%]	100%	
Install, configure, publish environment/tool updates	8/24/2010	8/25/2010	Plante Ray[25%]	25%	upgrade Boost, gcc are avail now; stack builds under gcc will resume this work after e
Complete eups release	8/26/2010	9/1/2010	Plante Ray[25%]	50%	this status represents work d prior to 8/26
Support trac, svn, systems administration	8/23/2010	12/6/2010	Pietrowicz Steve[15%]		
Document and improve Single Stage Tester, Stand-alone, Repeatable Failure scripts	8/30/2010	9/1/2010	Lim KT[50%]	100%*	
Production-Pipeline-Stage Middleware			*Pietrowicz Steve*		*Logging updates being integ into the tree. Test runs are b executed now.*
Improve Logging performance, reporting, error checking	8/23/2010	9/24/2010	Pietrowicz Steve[10%],Daues Greg[10%]	50%*	workerid's now in database/l using harness #1398 orca #1 depends on Abe availability
Restore logging to database	8/23/2010	9/3/2010	Pietrowicz Steve[10%]	100%*	
new Logging to per-run database	8/23/2010	9/24/2010	Pietrowicz Steve[10%]	50%*	Need to test on Abe
Update Event Monitor for execution statistics	9/6/2010	10/1/2010	Pietrowicz Steve[15%]	25%*	
Improve shutdown mechanism for data stack	8/23/2010	10/8/2010	Daues Greg[10%],Pietrowicz Steve[35%]	0%*	
Complete JobOffice implementation to allow integration of Source Association	9/2/2010	9/24/2010	Plante Ray[50%]	50%*	

Automate transfer of data to/from MSS	9/27/2010	11/1/2010	Plante Ray[10%]; Adams Darren[100%]	0%	
Data Release Production Architecture and Performance			*Lim KT*		*Performance improvements implemented resulting in convolution speedups of 4X-... depending on kernel size and warping speedups of 1.5X-12 depending on kernel type and accuracy parameters. Ran ur pipeline (all stages through S for one CCD) via Orca using files in datarel/trunk/pipeline/PT1Pi and trunk versions of most of packages (except a hand-pat version of meas_astrom).*
Improve speed of convolution and warping	8/23/2010	12/6/2010	Owen Russ[50%]	100%	I implemented both planned convolution speedups (Kreso algorithm and improved interpolation). The net improvement is shown in tic #1411; the dramatic increase speed for LinearCombinationKernel w delta function kernels is due Kreso's algorithm (which wi help any LinearCombinationKernel w many bases). RHL sped up warpExposure but I do not k by how much (no formal tim code exists yet); he described fast enough to not embarrass LSST.
Implement speed-up for ISR metrics calculation	9/1/2010	9/1/2010	Krughoff Simon		
Merge 6 PT1 Pipelines into 2	8/25/2010	9/30/2010	Lim KT[50%]	25%*	
Data Access Middleware and Database			*Lim KT*		*Some improvements to the da butler were determined to be unnecessary for PT1.1. How a need was identified for additional design and implementation for the Sour class and its persistence.*
Subimage and WCS retrieval in Data Butler	8/30/2010	12/1/2010	Lim KT[50%]	25%*	No longer required for PT1.1
Pass through comments in FITS headers	9/3/2010	9/30/2010	Lim KT[25%]	0%*	Dates changed

Task	Start	End	Assigned	%	Notes
Database schema updates (incl galaxy photometry)	9/21/2010	10/18/2010	Becla Jacek[5%]		
Update psf/exposure formatters	9/20/2010	9/24/2010	Lim KT[50%]		
Update Source formatter	9/27/2010	10/1/2010	Lim KT[50%], Monkewitz Serge[50%]	0%*	Depends on Apps work to redesign Source
Point Source Photometry			*Axelrod Tim*	25%*	*Processed HSC simulated da through all PT1 stages. Achi c. 0.009 mag RMS for standa stars in 3000 2kx4k CCDs (5 visits to 6 fields; 100 CCDs p visit)*
Split photometry and astrometry catalogs	8/23/2010	9/3/2010	Lang Dustin[50%]		We agreed this task is not necessary. But photometry/astrometry flag n to be fully implemented
Identify and fix zeropoint calculation error	8/23/2010	8/27/2010	Bickerton Steve[30%]	0%	At least part of this was due poor measurement; this has been fixed for the simplest ca a constant PSF and the fields HSC DC1) calibrate to under for PSF mags.
Implement aperture corrections	8/23/2010	9/17/2010	Bickerton Steve[50%]	0%	
PSF Estimation			*Lupton Robert*		*Monthly*
Implement Jarvis PSFs	8/23/2010	9/17/2010	Jarvis Mike[50%]	75%*	Code in trunk. More testing required.
Implement PCA PSFs	8/23/2010	9/3/2010	Lupton Robert[25%]	75%*	worked on algorithms; mostl behaves but some bad cases
Change meas_algorithms to support multiple PSFs	9/20/2010	10/1/2010	Lupton Robert[50%]	60%*	All book-keeping complete, we just have to try it
Background Determination			*Becker Andy*		*Applying background subtra and running detection on PT imsims. Background subtrac found to be most sensitive to background mesh size, and n statistic used to calculate background (clipped mean v median). Will next address s type. We have the known ims backgrounds which will be u as ground truth to compare fitted models to.*
Tune mesh size	8/23/2010	9/10/2010	Becker Andy[25%]	50%	
Examine statistics (mean vs median)	8/23/2010	9/10/2010	Becker Andy[25%],Bickerton Steve[50%]	100%	

Galaxy Photometry			*Bosch Jim*		*Added a simpler galaxy mod (exponential) as a fall-back option and to aid in testing o Sersic models. Added a Minuit-based fitter to replac own custom fitter; this ensur have a more robust and well-tested (if potentially slo optimizer available for PT1.*
Prepare for local testing runs	8/27/2010	9/2/2010	Dubcovsky Martin[20%]	0%	Task description changed, ar actually pretty trivial, so we' bothered that we haven't star
Determine fitting code failure modes	9/3/2010	9/16/2010	Bosch Jim[10%],Dubcovsky Martin[50%]	30%	Discovered two new problem are presently working on: an gradient computations are incorrect (even though mode derivatives seem to be corred and Sersic lookup-table population is not robust for certain parameter values (alr 40% resolved).
Determine fitting outputs to be stored in database	9/16/2010	9/16/2010	Bosch Jim[5%],Dubcovsky Martin[5%]	0%	
Update Source class for galaxy photometry, incl formatters	9/17/2010	9/20/2010	Monkewitz Serge[50%],Lupton Robert[50%]	20%*	new meas::algorithms shoul support this, needs to be confirmed
Write stage for source fitting	9/21/2010	9/27/2010	Dubcovsky Martin[25%]	40%	
Source Association			*Monkewitz Serge*		*Monthly*
Define SDQA metrics for Source Association	8/23/2010	8/25/2010	Monkewitz Serge[50%],Axelrod Tim[25%]	30%	initial proposal sent to Tim
Implement SDQA metrics for Source Association	8/26/2010	9/8/2010	Monkewitz Serge[50%]	25%	Implemented coverage map generation (for determining t expected maximum number sources for an object at a giv position). Began implementi reference to output object ca cross-matching - so far, I've code that filters the reference catalog down to those entries could actually have been obs in a particular production rur
Iteratively improve Source Association algorithm	9/9/2010	10/11/2010	Monkewitz Serge[50%]		
Change Source Association to use inverse variance	10/12/2010	10/13/2010	Monkewitz Serge[50%]		

weighting and calibrated fluxes					
Build and Test			*Allsman Robyn*		*Implemented and deployed continuous integration of development branch and rele... branch.*
Configure continuous integration - release branch	8/23/2010	8/23/2010	Allsman Robyn[50%]	100%	
Configure continuous integration - development branch	8/24/2010	9/3/2010	Allsman Robyn[50%]	100%	Implemented and deployed continuous integration of development branch.
Monitor buildbot integration and test	8/31/2010	12/6/2010	Allsman Robyn[25%]	5%	Established new buildbot sla... incorporating anonymous sv... access; existing 2 slaves bein... converted. Upgrading slaves ... use gcc 4.4 to bring into alignment with development software environment
Production Runs			*Daues Greg*		*Monthly*
Practice runs on Abe with CFHT night/sub-night	8/23/2010	9/3/2010	Daues Greg[10%]	50%	Several good runs complete, ... scaling up in size and constit... pipelines. 1) ISR run thru 17... visits; 2) ISR-ccdassembly-crsplit-img... thru 3 D2 visits
Abe runs with ImSim data subsets	10/18/2010	12/6/2010	Daues Greg[50%]		

User Support			*Shaw Dick*		*Monthly*	
Prepare Data Challenge Handbook	8/23/2010	9/30/2010	Shaw Dick[50%]	45%*	Input requested on details of processing algorithms. Technical review now planned for 28-Sept.	23-Sep-2010
Organize DM User Support	9/20/2010	10/1/2010	Shaw Dick[50%]	30%*	Wiki page now available to document User Support processes and identify unresolved issues	23-Sep-2010
Define SDQA analysis process	10/4/2010	10/15/2010	Shaw Dick[50%]	0%		27-Aug-2010
Configure/tune catalogs	10/18/2010	11/12/2010	Becla Jacek[10%]			9/10/2010

Data Analysis			*Axelrod Tim*		*Monthly*
DM Scientist/Engineer? data analysis	10/18/2010	11/12/2010	Axelrod Tim[50%],Lupton Robert[50%],Bosch Jim[50%],Becker Andy[50%],Van Dyk Schuyler[25%],Shaw Dick[50%]		

Science Collaboration data analysis	10/18/2010	11/12/2010	Science Collaboration			
Data analysis report	11/15/2010	11/19/2010	Axelrod Tim[50%],Lupton Robert[50%],Bosch Jim[50%],Becker Andy[50%],Van Dyk Schuyler[25%],Shaw Dick[50%],Science Collaboration			
Infrastructure			*Pietrowicz Steve*		*System has been ordered, and waiting for vendor to call to let us know the system is ready to be configured. We plan on a conference call with the vendor to discuss this.*	
Generate storage proposals	8/23/2010	8/27/2010	Pietrowicz Steve[20%]	100%		9/7/10
Acquire and configure storage	8/30/2010	9/10/2010	Pietrowicz Steve[20%]			

Other Activity

Plante, Ray
9/10/10

- Some support work for HTTP data access via lsst1
- Logistics planning for the Middleware workshop

9/17/10

- Logistics planning for the Middleware workshop

9/24/10

- Middleware workshop: 9/20-22
- subversion 1.6 now available as lsstpkg download (requested by Robyn)
- Bug Fix: #1456