

Previous month PT1.1 - Mgt/SE

Current month PT1.2

Next month PT1.2 - Mgt/SE

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	Last Updated
<i>LSST DMS System Engineering, Proposal, Review Support</i>	9/1/05	4/5/13		66%		
<i>Prepare and conduct Preliminary Design Review</i>	5/1/08	7/1/11		58%		
<i>Database and Data Access Analyses</i>	5/1/08	5/4/11	Becla Jacek[0%]	93%		
Scalability tests phase III (up to 250 nodes)	3/3/11	3/31/11	Becla Jacek[10%], Wang Daniel[75%], Dubois-Felsmann Gregory[5%]	0%		3/1/11
SSD Database Tests	8/2/10	2/24/11	Becla Jacek	95%		3/1/11
Improve trac db documentation for PDR	9/2/09	4/6/11	Becla Jacek[10%]	40%		3/1/11
Write design document for PDR	4/6/11	5/4/11	Becla Jacek[5%], Lim KT[5%], Daniel Wang[20%]	0%		3/1/11
<i>Pipeline Middleware Analyses</i>	2/22/11	4/11/11	Lim KT[0%], Plante Ray[0%]	0%		
	2/22/11	4/11/11		0%		

Guide on Reporting Percentage Completed:

<i>Pipeline Execution Middleware Scaling Tests</i>					
Define scaling tests	2/22/11	2/28/11	Plante Ray[5%]	0%	
Create benchmark stage implementations and pipeline configurations	3/1/11	3/21/11	Daues Greg[25%]	0%	
Execute scaling tests, analyze, report results	3/22/11	4/11/11	Daues Greg[25%]	0%	
Pipeline Execution Monitoring Visualization Tool	2/22/11	4/4/11	Plante Ray[25%],Dubois-Felsmann Gregory[25%],Lim KT[25%]	0%	
Develop requirements for pipeline processing visualization tool	2/22/11	2/28/11	Plante Ray[5%]	0%	
Design/acquire/review pipeline processing visualization tool	3/1/11	3/21/11	Plante Ray[5%],Pietrowicz Steve[25%]	0%	
Implement pipeline processing visualization tool	3/22/11	4/4/11	Pietrowicz Steve[75%]	0%	
<i>Demonstrate rescheduling of failed processing</i>	2/22/11	4/4/11		0%	
Define demonstration of rescheduling of failed processing	2/22/11	2/28/11	Plante Ray[5%]	0%	
Create simulated worker failure mechanism	3/1/11	3/14/11	Pietrowicz Steve[50%]	0%	
Enable detection of failure and mapping to job	3/15/11	3/21/11	Pietrowicz Steve[75%]	0%	
Enable rescheduling of failed job	3/22/11	4/4/11	Pietrowicz Steve[75%]	0%	
Create Calibrated Image on-the-Fly from Raw plus Provenance	2/23/11	3/8/11	Lim KT[25%]	0%	
<i>MOPS Analyses</i>	10/10/08	4/19/11	<i>Axelrod Tim[0%]</i>	53%	<i>Candidate tracks found by MOPS are evaluated for plausibility prior to sending them off to the orbit fitter, which is a computationally expensive task. The plausibility check in MOPS involved fitting a quadratic in</i>

time to the ra and dec of the observed points, and cutting on the rms of the fit. This cut was not tied in any quantitative way to the actual probability that the candidate is a real track. In the last month we have completely overhauled this section of MOPS to use a probability of chi_squared formalism. Crucially, it was recognized that topocentric corrections must be applied before fitting the polynomial in ra, and this has been incorporated into the procedure. The result is a plausibility cut which is still computationally much faster than full orbit fitting, but is at least 10x better in discriminating true from false tracks. We have also quantified the capabilities of MOPS on different classes of solar system objects. This has

					<i>confirmed our intuition that, with the current limits on velocities and acceleration, our NEO detection efficiency falls well short of 50%. We are investigating a hybrid approach in which MOPS detects and eliminates the large population of main belt objects, and then leaves the remaining fast movers to a more specialized code.</i>
Complete analysis of runs of FindTracklets/LinkTracklets? and OrbFit? driven by simulated DIASources	10/10/08	3/4/11	Axelrod Tim[20%],Myers Jonathan[75%]	75%	3/23
Estimate amount of CPU required for LSST MOPS	11/8/10	3/11/11	Axelrod Tim[20%],Myers Jonathan[75%]	50%	3/23
Prototype key algorithms in MOPS design	12/6/10	4/12/11	Axelrod Tim[20%],Myers Jonathan[75%]	50%	3/23
Determine requirements for FutureMOPS that will satisfy solar system science requirements as sketched out in SRD	1/17/11	4/19/11	Axelrod Tim[20%],Myers Jonathan[75%]	50%	3/23
<i>Complete DM content in LSR and OSS</i>	4/1/10	5/5/11	<i>Dubois-Felsmann Gregory[0%]</i>	40%	
Update star and galaxy counts	9/8/10	2/25/11	Dubois-Felsmann Gregory[5%]	75%	
Extract values for Data Quality Requirements	10/20/10	2/25/11	Dubois-Felsmann Gregory[5%]	75%	
Review LSR to place under change control	2/25/11	3/16/11	Kantor Jeff[5%],Axelrod Tim[5%],Dubois-Felsmann Gregory[5%]	0%	
Review OSS to place under change control	3/16/11	4/25/11	Kantor Jeff[5%],Axelrod Tim[5%],Dubois-Felsmann Gregory[5%],Allsman	0%	

			Robyn[5%],Plante Ray[5%],Lupton Robert[5%],Becla Jacek[5%],Lambert Ron[5%],Lim KT[5%],Freemon Mike[5%],Connolly Andy[5%],Bosch Jim[5%]	
Capture network requirements in SysML model	4/25/11	4/26/11	Dubois-Felsmann Gregory[5%]	0%
Capture cyber-security requirements in SysML model	4/26/11	5/3/11	Dubois-Felsmann Gregory[5%]	0%
Support establishment of traceability between LSR and OSS	9/1/10	5/5/11	Dubois-Felsmann Gregory[15%]	62%
Establish bounding requirements in SysML for MOPS	12/6/10	3/18/11	Dubois-Felsmann Gregory[5%]	50%
<i>Revise DM-FRS</i>	9/10/10	2/24/11	<i>Dubois-Felsmann Gregory[0%]</i>	64%
Restate existing quantitative requirements as constraint blocks	2/23/11	2/24/11	Dubois-Felsmann Gregory[50%]	0%
Update Structure Model	9/29/10	2/25/11	Dubois-Felsmann Gregory[0%]	20%
Update Structure Model to match revised WBS	2/23/11	2/24/11	Dubois-Felsmann Gregory[50%]	0%
Create DM internal ICD N2 diagram	2/25/11	2/25/11	Dubois-Felsmann Gregory[50%]	0%
<i>Update OSS/LSR/FRS/SM traceability</i>	5/2/11	5/13/11	<i>Dubois-Felsmann Gregory[0%]</i>	0%
Establish traceability of FRS to OSS (or elsewhere)	5/2/11	5/6/11	Dubois-Felsmann Gregory[50%]	0%
Update Structure Model - FRS traceability	5/9/11	5/10/11	Dubois-Felsmann Gregory[50%]	0%
Review traceability with Tim and Chuck, clean up	5/11/11	5/13/11	Dubois-Felsmann Gregory[50%],Axelrod Tim[50%]	0%
<i>Prepare ICDs</i>	1/3/11	6/2/11	<i>Dubois-Felsmann Gregory[0%]</i>	24%
DM-CCS	1/3/11	3/17/11	Dubois-Felsmann Gregory[25%],Marshall Stuart[25%]	40%
DM-TCS	3/9/11	3/22/11	Sebag Jacques[50%],Dubois-Felsmann Gregory[50%]	50%
Camera CoDR report review	3/22/11	3/29/11	Dubois-Felsmann Gregory	0%
DM-OCS	3/17/11	4/11/11	Dubois-Felsmann Gregory[50%],Schumacher	44%

			German[50%]			
DM-EPO	5/2/11	5/16/11	Jacoby Suzanne[50%],Dubois-Felsmann Gregory[20%]	0%		
DM-sites	5/16/11	5/23/11	Dubois-Felsmann Gregory[50%],Lambert Ron[50%],Barr Jeff[50%]	50%		
DM - VAO	2/25/11	6/2/11	Plante Ray[5%]	0%		
<i>Update App and MW Reference Design for DC3a, DC3b PT1, PT1.1</i>	9/20/10	3/25/11	Allsman Robyn[0%]	43%		
Update reference design from DC3a and DC3b model	9/30/10	3/4/11	Lim KT[25%],Axelrod Tim[10%],Plante Ray[10%],Allsman Robyn[25%],Dubois-Felsmann Gregory[10%]	38%		
Develop Performance Budgets, Timing/Sequence? Diagrams for Alert and Data Release steady state	10/14/10	3/22/11	Dubois-Felsmann Gregory[50%],Lim KT[75%]	50%	Diagrams developed but quantities need to be reviewed	201
Update reference design - structure model traceability	3/23/11	3/25/11	Dubois-Felsmann Gregory[50%],Kantor Jeff[25%],Allsman Robyn[50%],Lim KT[25%],Plante Ray[25%]	0%		
<i>Update Infrastructure Reference Design</i>	10/22/10	5/3/11	Freemon Mike[0%]	8%		
Update Mountain/Base? Network Design	10/22/10	3/1/11	Lambert Ron[20%]	50%		
Update Long-Haul Network Acquisition Plans	10/22/10	2/25/11	Lambert Ron[5%],Kantor Jeff[5%]	8%		
Update Infrastructure Power, Cooling, Floor Space	2/25/11	3/8/11	Lambert Ron[10%],Freemon Mike[10%]	0%		
Update Infrastructure Trends Document with our position (e.g. SSD, GPU, Advanced Processor Architecture, Virtual Shared Memory)	3/9/11	4/5/11	Freemon Mike[20%],Dubois-Felsmann Gregory[20%],Lim KT[20%]	0%		
Update Computing, Storage Reference Design Documentation	4/6/11	5/3/11	Freemon Mike[20%]	0%		
<i>Requirements and Design for Science User Interface</i>	1/9/11	3/22/11	Van Dyk Schuyler[0%]	25%		
Define requirements, integrate into FRS and system requirements	2/23/11	3/22/11	Van Dyk Schuyler[50%],Dubois-Felsmann Gregory[25%]	0%		
	9/30/10	3/4/11	Axelrod Tim[0%]	85%		

<i>Develop Apps Roadmap and Data Quality Plan</i>						
Develop Apps sheet of DM Roadmap	11/25/10	3/4/11	Axelrod Tim[10%],Allsman Robyn[10%]	67%		
<i>DM Test Plans</i>	9/30/10	4/15/11	Allsman Robyn[0%]	21%		
Draft DM Unit Test documents	9/30/10	3/1/11	Allsman Robyn[25%]	50%		
Draft DM Integration Test documents	10/14/10	3/8/11	Allsman Robyn[25%]	50%		
Draft DM System Test documents	3/9/11	3/11/11	Allsman Robyn[35%]	0%		
Draft DM Acceptance Test documents	3/14/11	3/25/11	Allsman Robyn[25%]	0%		
Generate Integration Test Cases from DM Ref Design Use Cases/Activities?	3/28/11	4/1/11	Allsman Robyn[50%]	0%		
Create Performance System Test Cases from DM Subsystem Requirements Constraint Blocks	4/4/11	4/8/11	Allsman Robyn[50%]	0%		
Generate Functional Acceptance Test Cases from DM Subsystem Requirements	4/11/11	4/15/11	Allsman Robyn[50%]	0%		
<i>Update DM Sizing Model</i>	2/15/11	3/4/11	Freemon Mike[0%]	15%		
Update Science workbook and explanation document	2/28/11	3/4/11	Dubois-Felsmann Gregory[10%],Axelrod Tim[10%]	0%		
Update Technology Trends workbook and explanation document	2/22/11	2/28/11	Freemon Mike[20%]	0%		
Consolidate and update Computing workbook and explanation document	2/22/11	2/28/11	Lim KT[20%]	50%*	Consolidation complete; quantities and formulas need review	201
Consolidate and update I/O and Storage workbook and explanation document	2/22/11	2/28/11	Lim KT[10%],Becla Jacek[10%],Axelrod Tim[10%]	25%*	Consolidation complete; restructuring underway	201
Update Network workbook and explanation document, integrate into sizing model sheets	2/22/11	3/4/11	Lambert Ron[20%],Freemon Mike[10%]	0%		
<i>Complete DM Inputs to Risk Management, System Integration, Commissioning,</i>	12/1/08	4/19/11	Kantor Jeff[0%]	37%		

<i>and Operations Plans</i>				
Update DM parts of LSST System Integration Test Plan	10/22/10	3/7/11	Allsman Robyn[30%],Freemon Mike[10%],Kantor Jeff[5%]	1%
Contribute DM sections to LSST Risk Management, Commissioning, I&T, and Operations Plans	4/16/10	4/4/11	Kantor Jeff[10%],Allsman Robyn[20%],Axelrod Tim[20%],Plante Ray[20%],Freemon Mike[20%],Dubois-Felsmann Gregory[13%]	5%
Get MOUs with resource support/commitment from DM partners	2/23/11	4/19/11	Kantor Jeff[5%],Van Dyk Schuyler[5%],Freemon Mike[5%],Becla Jacek[5%],Lupton Robert[5%],Lambert Ron[5%]	0%
<i>System Architecture Team</i>	4/9/10	5/27/11	<i>Dubois-Felsmann Gregory[0%]</i>	73%
<i>PDR final material preparation</i>	6/3/11	6/24/11	<i>Kantor Jeff[0%]</i>	0%
Update PMCS II DM FDP project	6/3/11	6/9/11	Kantor Jeff[5%],Claver Chuck[5%],Jacoby Suzanne[5%],Krabbendam Victor[5%],Kurita Nadine[5%]	0%
Ensure all documents in docushare updated	6/3/11	6/8/11	Kantor Jeff[25%],Axelrod Tim[25%],Plante Ray[25%],Freemon Mike[25%],Dubois-Felsmann Gregory[25%],Allsman Robyn[25%],Becla Jacek[25%],Lim KT[25%]	0%
Create PDR presentations	6/9/11	6/14/11	Kantor Jeff[25%],Axelrod Tim[25%],Plante Ray[25%],Freemon Mike[25%],Dubois-Felsmann Gregory[25%],Allsman Robyn[25%],Becla Jacek[25%],Lim KT[25%]	0%
Dry Run DM Presentations	6/15/11	6/20/11	Kantor Jeff[25%],Axelrod Tim[25%],Plante Ray[25%],Freemon Mike[25%],Dubois-Felsmann Gregory[25%],Allsman Robyn[25%],Becla Jacek[25%],Lim KT[25%]	0%
Update DM Presentations for Final Version for PDR	6/21/11	6/24/11	Kantor Jeff[25%],Axelrod Tim[25%],Plante Ray[25%],Freemon Mike[25%],Dubois-Felsmann Gregory[25%],Allsman Robyn[25%],Becla	0%

			Jacek[25%],Lim KT[25%]	
Conduct Preliminary Design Review	6/27/11	7/1/11	Kantor Jeff[80%],Axelrod Tim[80%],Van Dyk Schuyler[80%],Plante Ray[80%],Freemon Mike[80%],Dubois-Felsmann Gregory[80%],Allsman Robyn[80%],Becla Jacek[80%],Lim KT[80%]	0%

Other Activity