

DATA CHALLENGE 3b MANAGEMENT

- See below for [#DC3bPT1.2 PT1.2 planning links](#)

DC3b Scope

Overall Goals appear below on this page. Detailed pages for scope decisions, data requirements and data quality metrics, etc. are linked to [DC3b Scoping Meeting III](#) Virtual Meeting, July 27 - 28, 2009

These include:

- Data Preparation Tasks, including simulated data, pre-cursor data
- Applications Tasks (Science/Algorithms?, MOPS, SDQA)
- Middleware Tasks (Metadata, Middleware, Build/Environment?)
- Infrastructure Tasks (Platforms, Data Transfer)
- System Engineering Tasks (Scalability/Performance?, Fault Tolerance)

DC3b Global goals

- Improve middleware for continuous integration of applications into pipeline.
- Upgrade middleware so that it can easily be used for algorithm development.
- Scale database up in order to demonstrate ingest to 15% DR1 level for alert and data release productions.
- Query DB which is running on multiple nodes transparently to user.
- DC3b databases to include a combined database for pipeline outputs/SDQA and scalability tests.
- Demonstrate technologies for file transfer (already demonstrated 15% rate in DC1).
- Define a set of QA metrics we will meet and configure SDQA system to support those metrics.
- Define pipeline validation metrics to encompass all stages and implement those metrics.
- Implement deep detection and characterization using multifit with at least a simple galaxy/star model.
- Integrate MOPS into LSST framework and run in that framework.
- Improve alert production latency/throughput by x%. (x% should be set at a level that crosses a threshold on hardware from basic clusters to advanced technologies.)
- General R&D goal of being knowledgeable of advanced technologies for pipeline execution (at least GPUs). See the [DC3b GPU development plan](#).
- Demonstration of basic fault tolerance capability.

DC3b Data Quality Requirements

See also the main DM [SDQA wiki page](#), where ongoing efforts are documented.

- [?DC3b Data Quality Requirements Document](#)
- [?DC3b Data Quality Metrics Scorecard](#)

DC3b Plans

DC3b schedules are part of the overall [DC3Schedule](#)

DC3b Software Development Plans

- ?PT1 Integration Task List (a work in progress)
- Ongoing integration status: DC3bPT1IntegrationStatus

The following plans will be updated for DC3b specifics.

- DM DC3b Project Management Plan
- DM DC3b Release Transfer Plan
- DM DC3b Configuration Management Plan
- DM DC3b Verification and Validation Plan
 - ◆ DM DC3a Subsystem Integration Test Plan
 - ◆ DM DC3b Subsystem Integration Test Plan? TBD
- DM DC3b Software Quality Assurance Plan

DC3b User Support

- DM User Support Plan for DC3b_PT1 and beyond

DC3b Environment

TBD - Build environment, tools, platforms, etc.

DC3b Input Data

- DC3b Simulated Input Data
- DC3b CFHTLS Input Data

DC3b Processing Flow

- DC3b Processing Flow discussion and diagram and enumeration of stages
- Regenerated nightly, the following EA model subsets are available
 - ◆ ?DC3b Data Release Production --- includes color coded PT* pipeline groups
 - ◆ ?DC3 Domain
- Operator's Guide to running PT1 Production Pipeline
- Using the ORCA Scheduler

DC3b Meetings

- DC3b Scoping Meeting I May 19-20, 2009
- SDQA Meeting IPAC, June 11, 2009
- DC3b Scoping Meeting II June 12, 2009
- DC3b Scoping Meeting III Virtual Meeting, July 27 - 28, 2009

DC3b Telecons

- [DC3b Telecon Notes](#)

DC3b Integration Stand-up Meetings

- Starting the week of April 12th, 2010, we are having short daily meetings at 14:00 PDT. We are maintaining a status board for these meetings at [DC3bPT1IntegrationStatus](#).

DC3b PT1 Execution and Benchmarking

- [DC3bPT1ProductionRunStatus](#)
- [DC3bPT1ProcessedExposures](#)

DC3b PT1.1 aka 2 month plan

- [DC3bPT1_1](#)

DC3b PT1.2

(previously known as "PT 1.5" as well as "6 month plan")

- [DC3bPT1_2](#)
 - ◆ 3000-series run goals: [DC3bPT1.2-3000](#)
- [PT1_2SoftwareInfrastructure](#)
- Execution and Benchmarking
 - ◆ [DC3bPT1.2ProductionRunStatus](#)
 - ◆ [DC3bPT1.2ProcessedExposures?](#)
 - ◆ [DM/buildbot/Weekly_Production](#) - Buildbot Weekly Production status for tagged and/or trunk stacks

DC3b Reference Documents

- [?Dave Monet's draft document on astrometry for DC3b](#).
- [User Guide for DC3b](#) Outline, links to relevant material for inclusion, etc.