Joint Technical Meeting 2017-03-06 to 2017-03-08

This page is currently available for collecting proposals for agenda items at the 2017 JTM to be held at the Glendale Hilton.

- Overall meeting agenda
- KTL's take on how this agenda plays out for DM
- See also the Project Office Confluence page for the meeting

Inter-Subsystem Interface Items

This section is for specific items to be discussed that relate to the Camera, Telescope & Site, OCS, EPO, etc.

- (Tuesday 3:30) (high priority) Discuss activities and functionality at the base site for 2017 through summer 2018 including security monitoring, networking infrastructure, account and authorization services. Discussions is meant to coordinate and make sure all bases are covered.
- (Wednesday 9:00) (high priority) Discussions on what is actually required (necessary functionality) for all pre operations milestones (including early integration pathfinder exercises). Defining service and processing requirements, mapping to deliverables.
- (Tuesday 11:00) Donald Petravick: NCSA L1 services needs time with the commissioning effort, in particular OCS/CCS sub subsystems, likely in the context of commissioning.
- (Tuesday 3:30 merged with first) Donald Petravick NCSA Cross NCSA-BASE (true) ITC. Flow in WAN if WAN people attending.
- (Tuesday 3:30 merged with previous) Donald Petravick NCSA general ITC Authentication and Authorization
- (Tuesday 3:30 merged with previous) NCSA Lambert / Kantor discussions about responsibility demarcs at the base site
- (Tuesday 3:30) Mario Juric: Bring up before the Project Science Team recommendations on descopes or architectural changes affecting science deliverables, ask for concurrence

Intra-Subsystem Interface Items

This section is for specific items to be discussed that are related to interfaces between DM teams.

(Possible from Unknown User (jalt) perspective, to supercede with better topics as necessary, constrained by allotted time, needed groups inferred from subject):

- (Wednesday 9:00) (medium priority) PDAC: service availability, external user access, developer access, timelines
- (Wednesday 9:00 merged with previous) (high priority) API to access data, exposing DAX service? only support VO protocol to data access? which team should implement it?
- (Not specifically scheduled unless merged with previous) (medium priority) Butler: Current understanding and direction. Discussions about interacting with processing, data backbone
- (Not specifically scheduled unless merged with first) (medium priority) PDAC-like QA environment: objectives, scope, goals, timelines
- (Not scheduled) (low priority) Degenerate data backbone and necessary functionality in the near term (includes inter-subsystem discussions). I
 am planning a PoC and would like to solicit use cases.
- (Not scheduled) (low priority) Migration to containerized services including QA automation

(suggestion: there are too many important topics to cover completely within the JTM timeslots. At the very least, we should discuss how we can complete these discussions in the nearterm)

- (Tuesday 3:30) (high priority) Understanding SuperTask/workflow and Butler interfaces is high priority from the Science Pipelines perspective, but it's not clear how much work will already have been carried out by the JTM so it's hard to make a concrete proposal for a session.
 - O Jim Bosch: if this work has already been carried out by JTM, a session to present that design to developers would still be useful. And I suspect we'll appreciate having time to continue designing these interfaces at the JTM, especially if we extend this to include implementing low-level persistence (which concerns largely the same people, even if it's a largely orthogonal question). +1 for a session on this.
 - Simon Krughoff: I agree this would be very useful. Is it possible to have a working group in place before hand so we can have a group to drive the discussion?
- (Tuesday 3:30 merged with previous) (high priority) NCSA developers are very interested in having in-depth technical discussions regarding SuperTask/Butler/Workflow. Joel Plutchak thinks there is value to allowing time for relevant parties to meet during JTM week.
- (Tuesday 1:30) Donald Petravick: we showed the database cross query matrix to people such as Zeljko. He thought that the understanding of
 the cross queries needed thought at the JTM. NCSA feels this affects the need for a consolidated database infrastructure. This is now a blocker
 for the DB refresh planned for this year.
- (Monday 11:00) Donald Petravick: we want to further ensure that the WBS and schedule meet the business goals and that the delivery of components are consistent. (also to be consistent with commissioning).

Project Science

- (Tuesday 9:00-12:30) Meeting of the DM Project Science group. Will need a full breakout block. Required attendance by Mario Juric, Robert
 Lupton, Melissa Graham, Colin Slater, Unknown User (ciardi), Eric Bellm, Jim Bosch, Michael Wood-Vasey, plus either Hsin-Fang Chiang or Robe
 rt Gruendl. Would be good if Zeljko Ivezic and Simon Krughoff could join us. Should occur before the PST meeting, if possible, so conclusions
 can be reported up.
- Draft agenda:
 - First 1.5hr block:
 - Science platform definition
 - Outlining a Minimum Viable System proposal
 - Organization of DM Science Verification
 - Report on & plan for future PDAC SV activities
 - Second 1.5hr block:

- Heterogeneous focal plane study update
- LDM-151 status and closure (may move this to Monday)
- Establishing meeting cadence
- R2A2 for the PSG
- Upcoming meetings: UK, Lyon
- Establish tentative schedule for internal DM Design review activities (may move this to Monday?)
 - Pipelines (March?)
 - QA (April?)
 - SUIT (April?)
 - Calibration (May?)
 - Other?
- AOB

Definition of Architecture and Interfaces for Science Platform

(Tuesday 1:30) (Written by Ciardi): i would like to see a dedicated session on the definition of the science platform including the architecture and, in particular, the interfaces between the inter- and intra- subsystems. This is related to a variety of topics listed already), but here I would like to see a high level goal of defining/refining the science platform details and interfaces with an eye towards the review in August which is only 5 months after this meeting. I think this discussion must include NCSA, SLAC, SQuaRE, and IPAC (and, of course, can include others).

I do not think this is an All-DM session - but rather a DMLT session to layout an integrated plan to deliver a user-oriented service.

Some specific topical suggestions (please fill in what you would like):

- · Priorities and milestones for PDACs
- · Connection of portal and jupyter (python) environments

All-Developer Activities ("Hack Sessions")

(All day Tuesday and Wednesday 9:00; Glendale 4&5) This section is for meetings and "hack sessions" that could involve all of the DM developers but not necessarily the complete leadership. On Tuesday morning each hack session lead should get up and give a 5 minute "sales pitch" for their hack. It is assumed that the Pybind11 work has been merged prior to Tuesday morning. None of these proposed items are *required* to be completed by the end of the day. To prevent clashes with one team, say, doing flake8 fixups whilst another renames test files in the same package, please ensure that the page JT M 2017 Hack Session is kept up to date to coordinate changes. Use JIRA tickets and note them on that page.

The following activities have been suggested. If you have a suggestion for a "hack" and it is not on this list, you can present your pitch at the first session on Tuesday morning. Feel free to add to this list.

- Presentation: Unknown User (pschella): The pybind11 port: What has changed, what should people know.
- Jonathan Sick: Documentation hacks. Burn down the Developer Guide backlog. Try out a Sphinx build with your package's new numpydoc docstrings.
- Simon Krughoff: Add attributes to commonly used classes.
- Simon Krughoff: Do some test translations of python examples to doctest and rST.
- John Parejko: New testing framework for obs packages.
- Fritz Mueller, Brian Van Klaveren: Port DAX packages to Python 3
- Fritz Mueller: Port Qserv to python 3 (DM-7310 Jira project doesn't exist or you don't have permission to view it.
- Scott Daniel: Port Sims to python 3 (with support of DM developers as needed)
- Jim Bosch, Brian Van Klaveren, Michael Wood-Vasey: Minimal viable schema for use in light-weight database ingest of stack output
 products. Provide basic table setup and ingest routines to take metadata and output products and provide them in a user-run database (at least
 one of MySQL, PostgreSQL, maybe even sqlite).

All-DM Activities

(Monday 1:30-5:00) This section is for meetings that involve all DM personnel.

- Introduction to Wil
- Restatement of overall DM architecture, services, components, and interfaces
- Reminder of overall DM integration, test, and delivery milestones
- High level description of replan including roadmap and schedule
- Per team everview of where they stand on delivering milestones called out in the replan (Simon Krughoff) (insufficient time for all teams)
- Mini-Boot Camp for new developers (not thought to be necessary)
- Sorry for adding this so late: David Reiss wants to have a conversation about the current thinking on coadd/template generation (this may be scipi
 specific: added by Simon Krughoff)
- Walkthrough of DRP (and AP?) high-level data flow and pipelines (possibly 1 hr) highlight differences between current Tasks and LDM-151 vision (proposed by Jim Bosch; would like feedback from non-Science-Pipelines teams on how broadly useful this would be). (Feedback: Unknow n User (jalt): +1)

Proposed usage of "DM 4 hour block" by KTL, after some conversation with Wil (purposely under-allocated):

- 15 min: The new DM Management and new LDM-294 (Wil)
 15 min: The new DPDD (LSE-163) (Mario Juric) and DM System Requirements (LSE-61) (Tim Jenness)
 15 min: The DM architecture and new LDM-148 (KTL)
 15 min: High level replan roadmap and milestones (Wil, Victor?)
 15 min: Supertask/Butler Working Group report and new LDM-152 (GPDF)
 30 min: Break

- 30 min: Science Pipelines walkthrough and new LDM-151 (Jim, Eric?)
 20 min: QA of software and science products (?)
 15 min: Science Platform walkthrough and new LDM-XXX (GPDF)
 15 min: Ask the DMLT anything