DM Leadership Team Virtual Face-to-Face Meeting, 2020-09-15/17



- Logistics
 - o Date
 - Location Participants
- Agenda

 - Day 1: 2020-09-15Day 2: 2020-09-16
 - O Day 3: 2020-09-17
 - Attached Documents
- Action Item Summary
- Pre-Meeting Planning

Logistics

Date

15 Sep 2020 - 17 Sep 2020

Location

This meeting will be held on Zoom:

- Join Zoom Meeting: https://washington.zoom.us/j/91337592385 (ID: 91337592385)
 Join by phone (US) +1 786-635-1003
 Join using SIP 91337592385@zoomcrc.com

For the meeting passcode, see #dm-camelot on Slack.

Participants

- Robert LuptonJohn Swinbank

- Wil O'MullaneUnknown User (npease)Kian-Tat Lim

- Simon Krughoff
 Unknown User (gcomoretto)
 Colin Slater

- Colin Slater
 Leanne Guy
 Frossie Economou
 Jeff Kantor
 Tim Jenness
 Eric Bellm
 Yusra AlSayyad
 Zeljko Ivezic
 Unknown User (mbutler)
 Jim Bosch
 Ian Sullivan
 Robert Gruendl
 Fritz Mueller

- Fritz MuellerGregory Dubois-Felsmann

Agenda

Day 1: 2020-09-15						
Time (Project)	Topic	Coordinator	Pre-meeting notes	Running notes		
Moderator: John Swinbank						
09:00	Welcome	Wil O'Mullane	Introductory remarks Review agenda and code of conduct	DMTN-153 reading for DMTN comments. Robert Gruendl reports that OCPS development is ongoing. Robert G. will report to Tim, K-T and Robert L. on the next set of development epics. A design document will be forthcoming as part of the development process. Frossie Economou will follow-up on DM-15198/DMTN-139 with Gregory Dubois-Felsmann. Robert Gruendl — provide a briefing to Tim Jenness, Kian-Tat Lim, Robert Lupton on OCPS development. 28 Sep 2020		
09:15	Project news and updates	Wil O'Mullane	It's been three weeks since our last DMLT call; what's been happening?	See slides. Lessons learned on Confluence. Expect an upcoming EVMS audit may require epics through FY21; instructions from Wil O'Mullane and Kevin Long will be forthcoming. An ETC-to-complete will also be forthcoming. You should not file a travel request for virtual conferences. Mail Michelle Poland, CC Wil.		

09:40	John	John Swinbank		
00.40	Swinbank tra nsition	SOITI SWIIDGIIK	Review plans for John Swinbank leaving the country / the project over the next few weeks.	 At (home) desk in Seattle through next week (until 2020-09-25); expect to continue regular work. Flying to NL 2020-09-30. At this point, Yusra AlSayyad (overall manager, focus on DRP) and lan Sullivan (deputy, focus on AP) assume full management responsibilities for the Science Pipelines team. In quarantine in NL through 2020-10-14; will continue tidying up loose ends & writing documentation, and will be available for questions, meetings, etc, on demand. 2020-10-15 onwards: stepping back from regular work on Rubin. Will continue to be available by mail (and Slack, probably) for questions, discussions, etc, on request.
09:45	Community support	Leanne Guy	 Melissa Graham has proposed a model for technical support during construction, which spawned some discussion on RFC-703. She has subsequently been developing these ideas into DMTN-155. Do we have DMLT sign-off on these ideas? In particular, do they provide an adequate level of support to the community, without placing an excessive burden on the construction team? How will these plans be communicated to the wider community? 	 The scope of this document is "science-level" questions, not technical support at the level of lost passwords etc. ○ The IT helpdesk will be provided by NOIRLab, SLAC, NCSA, etc. (Leanne summarizes the DMTN; not transcribed here.) Community engagement in operations is described in RTN-006. How do we determine whether a given issue is an IT problem or a scientific issue? ○ Often, it will be "obvious". ○ Where necessary, CET will provide triage through the Community Forum. Request for more boilerplate: when a question has already been answered in Slack, but we need to take it to Community. ○ In general, people shouldn't answer on Slack, so ideally this doesn't happen. ○ But when it does, we should aim to copy & paste. There is concern that running support through Community will increase the load on the DM team relative to Slack. ○ We expect it to continue to evolve based on experience from construction and DP0 (1, 2). ○ And the SST, CET, etc are very much open to feedback and suggestions. This is not just an effort to prepare for ops, but also an effort to relieve growing pressure on the construction team. There are requests for the CET to take a larger role sooner, but this is limited by its scope and funding source, which are both tied to operations. We do have to ensure we acknowledge especially external contributors, and not simply try to redirect them to Community. It is important that community support be tied to user-facing documentation. ○ The SST/CET should provide feedback to the development teams about where documentation needs to be improved. Further discussion should be redirected to #dm-sst on Slack. We expect the CET to play a coordination role in documentation, but will require inputs from the Pipelines and Algorithms teams. ○ Detailed breakdown of responsibilities is TBD. ○ CET is already working on t
10:20			Progli	
10:30			Break	
Moderator: Lean	ne Guy			

11:00	Improvement s to the build and release system	Kian-Tat Lim	 The Architecture team is working towards a series of improvements in the build and release system. What is planned? What is the implementation schedule? 	KTL Build+Package DMLT F2F 2020-09-15. pdf John asks about LSST-dev which can probably be fixed using Isstinstall. Are there other depencancies on newinstall? Seems not (most use containers which embed newinstall; changing container build fixes all of these). RHL asks about Telescope and Site - they build on top of our containers so should be ok GPDF asks about long term stability /availability of conda-forge? KT thinks it has a multi year horizon, conda has interesting history and future partially supported by commercial company. Conda-forge is much more community. John - who is the product owner for the build system? - Unfortunately it's KT owning and Managing. Does KT understand who all the stakeholders are? KT is confident he knows the people with Jenkins jobs and who the user base for Isstsw and newinstall - will go to community in any case.
12:00	DMTN-148	John Swinbank	 This is the long-discussed calibration products policy document. Can we sign off on it by this point? If not, what's needed to get us to that point? 	

Move to have DMLT accept this document. Its a good overview of the situation/plan.

KT shows diagram asks is this the flow?

- DMTN-148 Calibration Diagram Hand-Edited. pdf
- DMTN-148 Calibration Diagram External pdf
- DMTN-148 Calibration Diagram Standard.pdf
- ✓ Kian-Tat Lim attach diagram to this confluence page 18 Sep 2020

How are validity ranges stored: Tim - uses the directory structure and filename. QE curves come from Camera directly and are imported. Jim - big wall in gen 3 be tween certified and those not yet certified. Export and import deserve the ??? we need more research on that.

RHL not sure squash in there for e.g. images. CamGeom deprecation was slipped in the document .. though Jim and TIm want to do this but surprised to see it in here. Otherwise happy with Document.

John - if there are technical comments it does not need all DMLT but then we are back to the outstanding action.

Colin - found it difficult to get a feel for what its describing - KTs diagram is a huge help. This may be partially why DMLT have not commented in detail. John agrees on the contend gave similar feedback to Chris - but nothing from DMLT was taken as all ok not befuddlement. If the latter we should include diagram and update.

Tim - defects easy to handle perhaps its worth having a worked example. Jim asks if KT diagram works for defects .. Tim says yes but there may be other approaches.

Jim - technote is good for the products which are fairly automatic (human yes/no) not the merged by human ones. John - we need write down we do not know when that is the case. This is somewhat the case in this doc

GPDF crosstalk corrections are handled? Timyes. In a given CDB3 instance when you replace a calibration is it replaced (is it bi-temporal). Jim its not but the idea would be to have a new collection not to actually replace the old one (new

RHL - all the special cases for detectors are not covered - it may not be a uniform and nice as this makes it out to be. It could be messier when we get to it ... so hesitate to sign off. Back to CameraGeom

John Swinbank Arrange focused brainstorming meeting with RHL, TIm, Chris , Jim, Yusra, John - to get DMTN-148 further updated . Should at least list all calibration cases even if not solved. 30 Sep 2020

Jim - how we access calibrations is different to how they are written - may need Robert to propose an alternate design. There is a feasability issue.

KT - best way forward?

Christopher Waters Kian-Tat Lim Modify DMTN-148 with more diagrams (from KT) and explicit statements about which products it applies to .. and which it does not apply to (and when).

From zoom:

John - where were we commenting on this document? From John Daniel Swinbank to Everyone: (8:59 p. m.) https://github.com/lsst-dm/dmtn-148/pull/3 From Gregory Dubois-Felsmann to Everyone: (8: 59 p.m.) Is what Jim said a couple of minutes ago about what happens in BG3 when a calibration is certified going to be included in DMTN-148? From Tim J to Everyone: (9:13 p.m.) I think one of the things is that pipelines just need to be configured to use specific dataset types – that's the optimal approach for a pipeline. Having every pipeline instead require a composite cameraGeom is overkill From Tim J to Everyone: (9:14 p.m.) but from a commissioning perspective it's clearly easier for Robert to have access to everything in From Robert Lupton to Everyone: (9:17 p.m.) I'm worried about notebooks, not pipelines. It's possible that pulling out a set of n parallel data products with the same datald is OK, but it pushes the book-keeping onto the code. That's not too bad until the code starts by updating some of the values (e.g. the gain). Then the code becomes much more complicated, but if we just allowed setting values on the camera and doing a "put" makes the user's job much simpler. So it's a tradeoff.So that notebook may become a calibproducts "pipeline". But a weird one QE 12:30 Break Moderator: Wil O'Mullane 12:45 Kian-Tat Lim Security trade-offs / Background: RFC-723 NCSA has instituted a 2FA requirement for the new Isst-login servers. ■ Either SSH with password + DUO Or Kerberos + DUO o After authentication, a control connection can be used to avoid further authentication. O Kerberos renewable tickets can be used for 25 hours / one week without further renewal. But DUO is still required. o At Princeton, it's possible to use DUO + an SSH keypair. Concerns from NCSA that SSH keys stored without passphrases are less secure Use of DUO at NCSA is required UIUC.
 Question before the DMLT: how much should we care? We presume that Wil has the authority to define policy and accept risks based on such a tradeoff. It's not clear that this could overrule UIUC policy, though.

We assume there is a fair bit of discretion on behalf of NCSA security staff about how that policy is implemented. We could make functional requests of NCSA ("we want persistent connections"), or implementation requests ("we want SSH keys"). Unknown User (mbutler) — understand the parameter space for getting a "long term lease" on an SSH connection to NCSA, and discuss with Wil O'Mullane what wiggle room we have. 28 Sep 2020

13:15	Generation 3 middleware plans and acceptance criteria	Tim Jenness / Robert Gruendl	Present the criteria which have been developed for Gen3 achieving "feature parity" with Gen2, the associated test plan, and the associated timelines	Roadmap to Deprecation of Gen2 Butler. Aiming for "Gen 3 ready for general use" by November 1st. Do not anticipate formal acceptance testing on this date; handover will be based on completed Jira tickets, rather than a test campaign. However, functionality is regularly tested in Cl. First priority is schema changes; aim to resolve them quickly, since they are maximally disruptive (may require re-ingest). Following this milestone, we should discourage use of Gen2 whenever possible. This milestone will rely on a shared database. However, it is expected that the system is usable at this stage; some things might still be easier in Gen2, but not many. QuantumGraph generation time is being addressed before hitting this milestone. Note that "feature parity" here is explicitly for middleware; Science Pipelines features available in Gen3 will be later, but is currently a high priority. But outputs from Gen2 pipelines can be converted to Gen3 for analysis. Leanne Guy — agree Gen3 acceptance tests for November 1, 28 Sen 2020 DM-26798 - Getting issue details STATUS Yusra AlSayyad — provide a timeline for complete pipeline conversion to Gen3. 28 Sep 2020
14:30			Close	
			Day 2: 2020-09-16	
Moderator: K-T	Lim		Day 3: 2020-09-17	
09:00	Milestones	John Swinbank	In discussion at the JDR, a couple of issues emerged surrounding DM's milestones: • The review recommended that our milestone tracking being more automated / streamlined; • Existing milestones being poorly defined (to the extent that the responsible T/CAMs don't know what they mean). How can we address these?	Recording is on by consent of all for internal use. Frossie says she did not hear it quite the same (for first point of slide 2)- automation would be good. But we need a coherent story. Would be great to have automation for Levl3 milestones - but unlikely to get it. From chat: problem is that the milestones are not written in quantifiable ways Question about lag - yes updates lag by a month. How do you know which milestones are dependened on by others in DMTN-158 which show predecessors and successors. Could add line for predecessors, sucessors Michelle/Yusra would like that. John Swinbank add predecessor successor line to milestones in DMTN-158 — 30 Sep 2020

09:30 Team status John Swinbank Each group please provide (~10 minutes total): SQuaRE: · A brief retrospective on what's happened o Commercial EFD replicator is too since our last meeting. expensive from Confluent (even at Plans for the next few months. Following past griping, order is now determined O Adding the visit number to the EFD will by the magic of Python... be handled as part of OWL, but is not an explicit goal of this demicycle. DAX: [ins] In [2]: import random Slides [ins] In [3]: random.shuffle(teams) Wil suggests using "cloud bucks" at NCSA for APDB scale testing; may [ins] In [4]: teams also be able to go through IDF. Fritz Out[4]: will follow-up with Michelle. ['SQuaRE (Frossie Economou)', Also possible to push this as a 'DAX (Fritz Mueller)', POC on a cloud provider; action on Fritz to write up a statement of 'Data Facility (Michelle Butler)', work. 'Alert Production (John Swinbank)', Note that we need to be careful to 'DM Science (Leanne Guy)', distinguish the colour of money: ops money pays for DP0, not construction 'Data Release Production (Yusra money. AlSayyad)', Everybody is encouraged to think 'Architecture (Kian-Tat Lim)'] about the impact of effort being expended on ops activities on construction milestones. • LDF: (Sorry Frossie!) o slides for NCSA Alerts: Slides o KT AP Gen3 assumes all raws etc all in butler - Yes o KT Alert packet cutout sizes are limited ? yes - more work to be done o Tim - WCS is it AP or DRP ? Formally its AP. Dave Berry contract to modify AST to export Yaml ASDF format, WCS understandable by AstoPy. Means any AstroPy user can download Calexp and use our WCS. o GPDF - still outputting approx WCS in FITS standard as well as the YAML? Yes no change - ASDF has fits translation format will try to use their scheme. O Michelle - running any AP pipelines at NCSA ? Should NCSA start running them. - That would be great trying to move more to the DRP mode but there have been a lot of things holding the team back. In next few months... Ian Fric Fritz Mueller — write a SOW for APDB POC on a cloud provider. 05 Oct 2020 10:30 Break

Moderator: John Swinbank

11:00	Team status	John Swinbank	Continued from above.	DM Science Slides Is there a plan to update estimated object counts? Yes, although this primarily comes through the PST. No progress recently, but should look at this on a 6 month timescale. DRP: Seeing similar burnout issues to those reported by other teams. Note that it's hard for Tim Jenness as middleware manager to keep track of what DRP (and other) team members are doing in their non-middleware time (including personal issues, etc); consider having Tim attend T/CAM meetings, or sprint planning with DRP (and other) team members. Architecture: Slides Do we have a clear understanding of who is responsible for solving "the TAP schema problem"? Getting data ingested into the database visible in the TAP service. Architecture has provided some tooling for this. But linking those tools and providing appropriate metadata is the responsibility of Pipelines and DAX teams. DAX will provide a Felis description of catalog data for ingestion. Requires further work in FY21. Wil will look further into how the responsibilities break down here; this may be an update to DMTN-155 (or it may be elsewhere;
				operational procedures?). ▼ T/CAMs — at the next T/CAM call, consider plans for appropriately tracking schedule /variance in the era of Covid. 25 Sep 2020
				Wil O'Mullane — follow up on the "TAP schema problem" with Fritz Mueller , Frossie Economou , Yusra AlSayyad , Leanne Guy , Colin Slater . 05 Oct 2020

11:30	Quiet Day	Wil O'Mullane	Following our experimental quiet day should we repeat? weekly? Monthly? Should it be "quiet, no messages" or "quiet, no meetings"? Should it apply to everyone in DM? A "maker" subset but not a "manager" subset? Should we try to spread this beyond DM to other parts of the organization?	Feedback broadly positive (from "it was ok" to "it was absolutely fantastic"). Worry that it might precipitate "large walls" of meetings; might be better with a "less draconian" approach allowing some requests for help. Knowing when it would be well in advance would help people take advantage. Be clear about expectations: days off and focused work days should not be the same thing. Juggling commitments to other groups /projects who were not doing quiet days. Appreciate not having to read the Slack backlog! Introducing "variety" is helpful. What does the perceived pressure to keep up tell us about the overall DM (LT) "bus factor"? Forcing people to take a vacation day is not appropriate. The same quietness schedule may not be appropriate to everybody; maybe different people should have quiet days on different cadences.
12:00	Wrap up	Wil O'Mullane	 weekly? Monthly? Should it be "quiet, no messages" or "quiet, no meetings"? Should it apply to everyone in DM? A "maker" subset but not a "manager" subset? Should we try to spread this beyond DM to 	 Worry that it might precipitate "large walls" of meetings; might be better with a "less draconian" approach allowing some requests for help. Knowing when it would be well in advance would help people take advantage. Be clear about expectations: days off and focused work days should not be the same thing. Juggling commitments to other groups /projects who were not doing quiet days. Appreciate not having to read the Slack backlog! Introducing "variety" is helpful. What does the perceived pressure to keep up tell us about the overall DM (LT) "bus factor"? Forcing people to take a vacation day is not appropriate. The same quietness schedule may not be appropriate to everybody; maybe different people should have quiet days on different cadences. It should be understood that you can
12:00	vvrap up	wii O Muliane	ScreengrabDMLT Photo Review actions from this meeting. Upcoming meetings: Virtual, 2020-11-17/19. Tucson, 2021-02-22/25. MCR booked. Please remember to upload any slides you presented at this meeting to Confluence!	February meeting will be virtual. Wil O'Mullane — send out Doodle polls for calendar 2021 DMLT meetings. 21 Sep 2020

Attached Documents

File Modified

Sep 15, 2020 by Kian-Tat Lim
Sep 15, 2020 by Kian-Tat Lim
Sep 15, 2020 by Kian-Tat Lim
Sep 15, 2020 by Kian-Tat Lim
Sep 16, 2020 by Kian-Tat Lim
Sep 16, 2020 by John Swinbank
Sep 17, 2020 by mbutler
Sep 17, 2020 by Fritz Mueller
Sep 17, 2020 by Leanne Guy
Sep 17, 2020 by Yusra AlSayya
Sep 17, 2020 by Kian-Tat Lim
Sep 17, 2020 by Wil O'Mullane
Oct 12, 2020 by John Swinbank

Download All

Action Item Summary

Description	Due date	Assignee	Task appears on
Frossie Economou Will recommend additional Level 3 milestones for implementation beyond just the DAX-9 Butler provenance milestone. 15 Mar 2022	15 Mar 2022	Frossie Economou	DM Leadership Team Virtual Face-to-Face Meeting, 2022-02- 15 to 17
Kian-Tat Lim Convene a meeting with Colin, Tim, Robert, Yusra to resolve graph generation with per-dataset quantities (likely based on Consolidated DB work). 18 Mar 2022	18 Mar 2022	Kian-Tat Lim	DM Leadership Team Virtual Face-to-Face Meeting, 2022-02- 15 to 17
Frossie Economou Write an initial draft in the Dev Guide for what "best effort" support means 17 Nov 2023	17 Nov 2023	Frossie Economou	DM Leadership Team Virtual Face-to-Face Meeting - 2023- Oct-24
Convene a group to redo the T-12 month DRP diagram and define scope expectations Yusra AlSayyad30 Nov 2023	30 Nov 2023	Yusra AlSayyad	DM Leadership Team Virtual Face-to-Face Meeting - 2023- Oct-24
Gregory Dubois-Felsmann Complete DMTN-105 defining the goal for "Prompt Products Release Ops" 11 Dec 2023	11 Dec 2023	Gregory Dubois- Felsmann	DM Leadership Team Virtual Face-to-Face Meeting - 2023- Oct-24
Frossie Economou - you have some text for PSTN-017 02 May 2024	02 May 2024	Frossie Economou	DMLT Meeting - 2024-04-22

DMLT Meeting - 2024-04-22 UKDF part in data facilities for PSTN-017 22 May 2024	22 May 2024	DMLT Meeting - 2024-04-22
Richard Dubois USDF part in data facilities for PSTN-017 and distrib processing ? 22 May 2024	22 Richard May Dubois 2024	DMLT Meeting - 2024-04-22
Fabio Hernandez FrDF part in data facilities for PSTN-017 22 May 2024	22 Fabio May Hernandez 2024	DMLT Meeting - 2024-04-22
Tim Jenness - section on middleware for PSTN-017 22 May 2024	22 Tim May Jenness 2024	DMLT Meeting - 2024-04-22
Cristián Silva - section on summit/data acquisition for PSTN-017 22 May 2024	22 Cristián May Silva 2024	DMLT Meeting - 2024-04-22

Pre-Meeting Planning

Topic	Requested by	Time required (estimate)	Notes
Build system status	Leanne Guy	30 minutes	In May 2020 we were unable to make a 19.0.1 patch release because of incompatible changes to the build and release system since the 19.0.0 release. The Architecture team were tasked with updating and simplifying the build and release system to ensure that this couldn't happen again (ie, whatever changes are made to the underlying infrastructure, we should always – within reason – be able to reproduce and update old releases). This session is an opportunity to review the plans that were made and the progress towards implementing them.
Commu nity support	John Swinbank	30 minutes	As we move closer to operations, members of both Science Collaborations and the wider scientific community are taking an increasing interest in using our Science Pipelines and other software. We need to be able to provide them with technical support, without imposing an unreasonable burden on our on-project staff. In particular, in May of this year, specific concerns were noted about members of the community using Slack channels which were originally indented for technical discussion on the DM system to ask for technical support. Providing a coherent approach to support is challenging, given the wide range of interests and skills in the community, limited on project resources, and the need to provide a system which both supports the construction project now and which fully transitions into the System Performance department's Community Engagement team in the future.
			How much progress have we made since May? Do we now have a coherent message on what support we are providing, and through which channels? Have we clearly communicated that message to the leadership of the various science collaborations?
			Melissa Graham I (Leanne) might call on you to join this session
L3 mileston es	John Swinbank	45 minutes	In discussion at the JDR, a couple of issues emerged with L3 milestones: The review recommended that our milestone tracking being more automated / streamlined; Existing milestones being poorly defined (to the extent that the responsible T/CAMs don't know what they mean). How can we address these?
G3 middlew are accepta nce	Robert Gruendl / Yusr a AlSayyad	1 hour	Present the criteria which have been developed for Gen3 achieving "feature parity" with Gen2, the associated test plan, and the associated timelines.
Jenkins futures	John Swinbank	30 minutes	The AP team would like to be able to run ap_verify in Jenkins against ticket branches in other packages. Kian-Tat Lim tells us this would involve a substantial retooling of Jenkins, but that some work in this direction is already in place. It'd be useful to understand what changes are planned. (This may be the same as "build system status" above; Kian-Tat Lim and/or Unknown User (gcomoretto) might wish to comment.)
DMTN- 148	Jim Bosch & R obert Lupton	30 minutes	We need to work out a way of finally signing off on DMTN-148. Development is assuming it is accepted but it's still technically in limbo.