AP Pipeline Meeting, 2022-05-16

2pm Pacific Time

Zoom: https://washington.zoom.us/j/98846655020

attending:

- Eric Bellm
- Ian Sullivan
- John Parejko
- Krzysztof Findeisen
- Nima Sedaghat

regrets

Topics for discussion:

- Project updates (Eric Bellm , Ian Sullivan):
 - two new AP team members!
 - Bruno Sanchez (at IN2P3)
 - Brianna Smart (at UW, Aug 1)
 - Pipeline Performance sprint (Eric Bellm , John Parejko , Meredith Rawls):
 - kicked off today

Umbrella ticket:
 DM-34623 - Jira project doesn't exist or you don't have permission to view
 it.

- Pipelines Infrastructure (Krzysztof Findeisen , John Parejko):
 - Krzysztof: almost got a refactor of the ap_pipe pipeline ready to merge. Next working on standardization of annotations—Dashboards will have a link to the confluence.
 - ² "ap_verify in Prompt Processing": there is a successor to Squash planned for operations ("Sasquatch", still influxDB/Chronograf). Let's discuss what it would take to push metrics from PP.
 - KF: not true that metrics handling is baked into ap_verify! In gen3, metrics are handled within the pipelines themselves. Currently pipelines with metrics live in ap_verify, but no reason we couldn't compute metrics in prompt processing (at cost of additional latency etc.)
 - uploading to squash might be harder: square worried about
 - in prompt processing, could defer some of this to a central worker/service
 - ap_pipe could be minimally instrumented (e.g., timing, very cheap metrics), with the rest as afterburners
 - KF: right now metricTask has to re-read all of the inputs-middleware had been thinking about caching of input datasets
 - EB: timing metrics should be fast? KF: still have to read in the metadata, but it should (?!) be fast.
- Precursor processing (Meredith Rawls, Kenneth Herner):
 - Ken: ready to test refactored diffim when it's available.
 - o Meredith: testing Krzysztof's refactor, then ready for HiTS rerun (+ performance sprint)
- Image differencing algorithms, DCR (lan Sullivan):
 - o replicated diffim in standard configuration to machine precision w/ refactored diffim
 - o a few differences in other places, but due to bugs in original ip_diffim
 - o running on HiTS, hit some bugs due to metadata name changes
 - JP: we now don't have imageDifferenceTask. so timingImageDifference is looking for metadata that doesn't exist.
 - KF: so we'll need to create some new metrics.
 - JP: thinks there are some name changes (anything with ImageDifference). Old image difference will continue to work with existing configs, but we'll need to
 - JP: had to manually exclude any diffim metrics due to failures. KF: thinks it's a bug, likely in verify-should be None rather than

fail if Task doesn't run. Has

it.

to use new optional inputs facility

- still trying to run full ap_pipe, failing somewhere in dia_pipe with some kind of filterName issue. Hopes to try to debug this later this week if others are available.
- $^{\circ}\,$ filterLabel warnings: KF: we need to update the templates to newer versions.
- also, butler uses alphabetical task names to order tasks it thinks can happen at the same time, which messed up QG generation (since getTemplateTask only needs a portion of the calexp, not the whole data product)
 - getTemplateTask fails, retrieveTemplateTask works

■ DM-34811. see also

⚠ DM-32725 - Jira project doesn't exist or you don't have permission to view it.

- transinet (Nima Sedaghat, Eric Bellm, John Parejko):
 - trained transinet now finding SNe in science & templates from DC2
 was actually hard to verify injected SNe by eye at all!

 - o JP reminds us that DC2 sims injected to very faint magnitudes-so delta flux is not enough to be sure that it's detectable
 - Nima: wants to understand how to apply calibration to the two images
 - JP: sent the command
 - NS: need to understand how to inject sources on the fly. JP: it's just nJy after calibration. We don't know what delta flux is from DC2
 - $^{\circ}~$ started to design interface for applying classification to DIASources, working with JP on interfaces
- alert distribution (Eric Bellm):
 - o no update. Frossie reminds me that the service is bitrotting-square has changed phalanx configurations
- Review CI (https://chronograf-demo.lsst.codes/)
 Review outstanding action items
- QA meeting in June:
 - Performance sprint update
 - Report on diffim refactor
- AOB
- o none

Action Items

Description	Due date	Assignee	Task appears on
Eric Bellm write up retention policy and sizing for APDB 17 Jul 2023	17 Jul	Eric	AP Pipeline Meeting,
	2023	Bellm	2023-06-26
Eric Bellm dig into alert serialization test in ap_association and ticket ways to improve it 11 Sep 2023	11 Sep	Eric	AP Pipeline Meeting,
	2023	Bellm	2023-08-21
☐ Eric Bellm review broker communication channels 25 Sep 2023	25 Sep	Eric	AP Pipeline Meeting,
	2023	Bellm	2023-08-14