


DM Requirements Gap Analysis

This page is a place to gather up missing or underspecified requirements that would prevent or hinder us from delivering construction.

- What are the open science questions that we must answer in order for the institutional science leads to deliver their products?
- What in the DMSR (i.e. misspecified or underspecified requirements) impairs our ability to deliver on the institutional requirements, and to verify that we've done so?
- How do we want to prioritize these?

What	Detailed Description	DMSR requirements (if any)	Prioritization	Applicable Ticket(s)	Status
Clear specification of the capabilities or at least use cases for the Alert Database	<p>Called the "(Historical) Alert Archive" in requirements. Use cases have never been clearly established.</p> <p>(Eric Beilm wrote Alert Database Use Cases and Draft Requirements but it has never been formalized)</p>	DMS-REQ-0094 (1b)		<div>  DM -19711 - Jira project doesn't exist or you don't have permissi on to view it. </div> <div>  DM -23767 - Jira project doesn't exist or you don't have permissi on to view it. </div>	
Specification of the image and image cutout services	In progress by Gregory Dubois-Felsmann and Simon Krughoff .				In progress https://dmt-n-139.lsst.io/v/DM-22746/index.html

Specification of user-facing bulk download services, if any	(data-center-to-data-center bulk transfer is the only part originally captured in the requirements) In progress by Unknown User (mbutler) and Gregory Dubois-Felsmann with the aim of enabling a considered decision by the project to accept, or not, an upscope in this area.				
Specification of the user-facing batch services	Is this just "traditional batch" access by ssh-ing to a central batch control node and submitting a traditional job specification (essentially, a request to run a particular command line on a batch worker node)? Or something more API-friendly? A UWS service? Something integrated with notebooks? Something PipelineTask-aware?				In progress https://dmtn-202.lsst.io/
Proposed capability for generation of DOIs for queries	It has been proposed to enable the creation of DOIs (possibly by a third party acting on our behalf) for queries: for query <i>specifications</i> and/or for query <i>results</i> (as lists of Object/Source/image IDs).	DMS-REQ-0291 (1b), Query Repeatability, in the discussion states that the ability to create DOIs for query specifications would be desirable			
Requirements on masking satellite trails	Just masking? Do we need to add model fitting? How will the wings of the trails behave?	None. PST consensus is that we need to add some	Wait til we can get a update from Clare when she is back		
Alerts on sub-threshold DIASources	The DPDD says Also, the system will have the ability to measure and alert on a limited (It will be sized for no less than $\sim 10\%$ of average DIASource per visit rate) number of sources detected below the nominal threshold for which additional criteria are satisfied. For example, a $\text{transSNR} = 3$ source detection near a gravitational keyhole may be highly significant in assessing the danger posed by a potentially hazardous asteroid. The initial set of criteria will be defined by the start of LSST operations.	DMS-REQ-0270(2), "Faint DIASource Measurements"			