

Item #	Description	Submitted By	Action / Response From Team
1	Regarding the Operations HW Architecture show on page 8, Ted has commented that we need to figure out a way to send out operational data (health and safety) from the command/telemetry computer to a web page accessible easily by team members (like the HMI website).	Jerry	<p><u>Jerry's Response:</u> I will talk with John Serafin about how we might do this and add that to the charts for the GS CDR. I need to talk more with Ted to see if command information is needed. If not, a different machine might be used to update telemetry although the one in the MOC should have the highest percentage of up time (if it goes down it will have to be dealt with promptly).</p> <p><u>Ted's Response:</u></p> <ol style="list-style-type: none"> <li>1. In addition to health and status data on open web pages, we need to get the actual housekeeping and diagnostic channel data onto a workstation which also has images, for simultaneous analysis. For example, this is needed for the GT &amp; ISS calibration activities which attract so much attention. So this needs to happen reasonably quickly though not real time. HMI leg adjustment is another activity which would benefit from quick access to images and HK data; though maybe the HK data in the image channel would suffice for that.</li> <li>2. I don't see why detailed command information would be needed on these pages, beyond what is in the HK (command count, last non-valid command, etc.). Though the solution which works for HK should also work for command history type of info. On MDI we have access from the health monitor web page to operator logs (simple text), which has proven quite useful.</li> </ol>
2	Concerning the LMSAL EGSE software (pages 12 - 20), there were a lot of questions from the NASA people, in particular Tom Anderson.	Jerry	<p><u>Jerry's Response:</u> I believe that they had sufficient time to question this area in the level of detail they wanted and that Roger Chevalier adequately answered their questions.</p>
3	On page 21, Operations Software Configuration Items.	Jerry	<p><u>Jerry's Response:</u> We need to add the STOL procedures to the list of items that need to be configuration controlled.</p>
4	On page 37, HMI Operations, the phrase "on station" in the last bullet needs definition.	Jerry	<p><u>Jerry's Response:</u> Need definition for "on station"</p>
5	What kind of access control do you provide through the export system?	Karen	
6	What do you know about the browsing/searching patterns of external users?	Karen	
7	It all seemed smooth. No major concerns expressed about design, performance or implementation schedule.	Jim	

8	Have you designed a test-suite of typical user queries that may be submitted to the DRMS system?	Rasmus	<p><u>Rasmus response:</u>                  No, but we intend to do so. We have done simple tests of the performance of queries typically used for lev0 processing as well as collecting lev0 data records for lev1 processing. We believe these particular queries will constitute the bulk of the query load on the database, since the lev0 data has the highest cadence and will have the largest number of records.</p>
9	How do you guarantee that queries submitted by external (or internal users) do not slow down the database system to the point where it affects the timely processing of standard dataproducts?	Rasmus	<p><u>Rasmus's response:</u>                  There are several techniques to deal to this problem:                  (a) Isolate pipeline-production from external queries by routing internal queries to a primary DB server, while routine external queries to a replication server(s).The primary database can be mirrored by setting up a database replication system, either as a cluster or in a master-slave configuration. Data products will be visible on the replication server slightly later on the replication server, but since the delay is probably less than 10 seconds,(wild guess) we do not consider this a problem.                  (b) Pre-screen incoming queries and reject or delay those likely to put an unreasonable load on the system. Return a message to the user indicating the problem and possibly have them confirm or retract their query.                  (c) Providing good browsing facilities and other automated data querying tools will make it easier for the user to issue narrower queries which tend to put less load on the system.                  (d) We will want to monitor the query patterns arising in actual production and tune the database accordingly by adding or removing table indices, modifying table structures,changing buffer sizes etc.  <u>Jesper's Response to above:</u>                  e) Limit the number of active queries to the database from outside users. Should be doable since we control the interface.                  f) Don'e the database folks have ways of setting priorities?                  g) ...Or some sort of combination.</p>
10	<p>SECURITY PLAN REFERENCE IN OUR DOCUMENTS:                  - Jerry referenced a NPR 2810 Nasa Security document as reference for developing security plan requirements. We need to reference this document in our documents and slides.</p>	Carl	<p><u>Carl's Response:</u> I need to reference document in applicable documents used for the SDP Requirements document.  <u>Phil's Response:</u> It is already referenced in the SDP IT Security Document.</p>
11	<p>ICD BETWEEN SDP AND JOC(from Jerry's Presentation slides)                  - Tom Anderson discussed need for ICD between Lockheed and Stanford.</p>	Carl	

12	<p>HOUSEKEEPING DATA</p> <p>-Jerry's slides showed 1 socket going from JOC to SDP for AIA and another socket going from JOC to SDP for HMI (Slide 17 )</p>	Carl	<p><u>Carl's Response:</u> Need to confirm these two feeds are defined in the SDP Requirements document.</p>
13	<p>NETWORK SECURITY:</p> <p>(From Jerry's presentation slides)</p> <p>- Concern over connections of network to Nasa systems from Nasa team.</p>	Carl	
14	<p>SECURITY BACKGROUND CHECK TAKE 7-12 MONTHS-(SCHEDULE ISSUE):</p> <p>- Jerry pointed out in slide the requirement to have 7-12 months to do agency background checks( Slide on about page 37)</p> <p>-Need to determine ""when"" access to NASA systems requires "Agency Background Check".( I.e., early tests, later test, integration test, end to end tests, pre-launch test, post launch test, etc.)</p>	Carl	<p><u>Phil's Response:</u> This probably affects at most Rock and Jesper. Maybe only Lockheed folks since Rock, Jesper, Sebastien et al will help decide what sequences to run but need not be the ones at the keyboard. And after launch there is no reason for any of us to be at the keyboard.</p>
15	<p>SHARED EMAIL ALERTS FOR SUPPORTABILITY (From Roger's Presentation)</p> <p>-Eliane discussed possibility of sharing email alerts from Lockheed and Nasa Systems</p>	Carl	<p><u>Carl's Response:</u> If appropriate, the Stanford team should be also part of these alerts.</p>
16	<p>FLOW OF FDS PRODUCT DATA NOT CLEAR.( From Roger's Presentation)</p> <p>-Tom discussed diagrams not showing flow of FDS product data to JOC.</p> <p>-Rock suggested we would use the Planning tool to get data.</p>	Carl	

17	DEVELOP SET OF CASES TO TEST USER USAGE OF QUERIES TO TEST PROTOTYPE (From Rasmus's Presentation slides): -Tom commented on if we developed a set of scenarios to test how user's will use new querying interface to HMI and AIA data. (Comment were on Slide 121)	Carl	
18	RESTRICTING ACCESS OR PRIORITIZING RUNTIME FOR USER REQUESTS (from Rasmus's Presentation slides) -Team discussed controlling load on pipeline processing system by restricting access. Maybe restrict public access.	Carl	
19	SCREEN OR FILTER USERS REQUESTS TO CONTROL LOAD (From Rasmus's Presentation Slides): -Tom discussed this option.	Carl	
20	BENEFITS OF NEW DESIGN FOR PROCESSING AND STORING DATA (From Rasmus's Presentation slides)	Carl	<u>Carl's comment:</u> After hearing Rasmus presentation, I thought a slide showing the key benefits of new design would show audience why we are doing this new design rather than using the old design and old code.
	<u>Prepared By:</u>		Carl 
	<u>Inputs for this document were from following people:</u>		Phil Scherrer Jerry Drake Ted Tarbell Jesper Schou Rasmus Larsen Karen Tien Jim Aloise Carl