|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CSSM S24 Mtg Summary** | | | | | | **April 29 – May 03, 2024, Washington, DC, USA** | | |
|  | **1. CDE Publication Check** | | |  | | Conclusion: minor updates needed and will be ready to issue TC. | | |
|  |  | Items to address | | | |  | | |
|  |  |  | a. Need to trim note on planningInfoType (Table 3-7). Just state only the extensibility, but do not name. Rationale: allow flexibility in Green Book/Concept to identify future types without introducing inconsistencies in CDE. | | | | | |
|  |  |  | b. Update ModResParm in line with FRIN "resolution" (see item 9c) | | | | | |
|  |  |  | c. Table 3-12, description fields all read "Line 0" (vs. Line 1 and Line 2) | | | | | |
|  |  |  | d. VLBI as service type -- table 3-25 -- not sure if we will ever have VLBI service requests (and of course this applies to SSF too);needs further checking; agreed to leave as is for now | | | | | |
|  |  |  | e. Double check navigation schema references (B2.1) | | | | | |
|  |  |  | f. Need to get GitHub reference included | | | | | |
|  | **2. SMURF Prototype Review** | | |  | | Conclusion: Very minor updates to apply; test report in good shape. | | |
|  |  | Findings | |  | |  | | |
|  |  |  | a. Unused time for arbitrary aperture location is not supported (add a note to indicate this) (aka antenna free time) | | | | | |
|  |  |  | b. Handover to single aperture -- is not quite supported -- but there can be a use case for long RTLT cases likes voyager (SMU-P3-6) | | | | | |
|  |  |  | c. Conclusion: test report is sufficiently complete to support publication polling | | | | | |
|  | 3**. SPDF Prototyping** | |  |  | | Conclusion: Change to Orange book and publish | | |
|  |  | a. Not complete | | | |  | | |
|  |  | b. Unlikely to be completed in timely manner; no ESA funds available to complete | | | | | | |
|  |  | c. Readout on testing progress: -- progress appears to have stopped as March 18; about 50% complete | | | | | | |
|  |  |  | i. Need to check with \_C. Haddow to get best readout | | | | | |
|  |  | d. Sufficient prototyping done by DLR to put SPDF on orange book track | | | | | | |
|  |  | e. Agreed to ask for CESG vote at CESG meeting for orange book track | | | | | | |
|  | **4. SACP -- Configuration profile** | | | | |  | | |
|  |  | Current agency examples | | | | Conclusion: Can make more user friendly; more parameters likely. | | |
|  |  |  | [AI]: W. Eddy to provide summary from big documentation already submitted | | | | | |
|  |  |  | Walk through of DSN (XML) configuration profile example: | | | | | |
|  |  |  |  | i. Applicability time to be handled via mission phases in service agreement | | | | |
|  |  |  |  | ii. Discussion on identifying antennas onboard of the spacecraft -- we should try to accommodate this (it helps user understand definition of configuration profile from their (spacecraft’s) perspective | | | | |
|  |  |  |  | iii. Discussed various minimum-time needed parameters and hand over allowed type parameters -- to some extent covered by the SMURF | | | | |
|  |  |  |  |  | | 1)Will need to keep this in mind developing SACP | | |
|  |  |  |  | Agreed that there are likely lots more parameters to capture (loop bandwidth?  We also need to review the FRM carefully | | | | |
|  | **5. SACP -- Svc Agreement Parameters** | | | | | Conclusion: No significant change from March 2024 version | | |
|  |  | Walked through the presentation from March (no changes/updates).  Noted that Storage service agreement parameters there could be some considerations if utilizing cloud computing | | | | | | |
|  |  | Noted that for Service latency there could be some considerations of utilizing cloud computing | | | | | | |
|  | **6. Developer's Forum Teleconference** | | | | |  | | |
|  |  | Many goals not fully met | | | |  | | |
|  |  | Presentation from P. Crump/GES | | | | | | |
|  |  |  | a. Desire for zero-latency in response to requests noted (cf. latency re file exchange) | | | | | |
|  |  |  | b. Plans to have SPDF implemented within the next 12 months | | | | | |
|  |  |  | c. JSON is more palatable to customers | | | | | |
|  |  |  |  | i. Goonhilly to put in a XSLT (XML --> JSON) in GitHub | | | | |
|  |  | M. Unal inputs: | | | | | | |
|  |  |  | a) Distinction between timeliness needed for near-earth and cislunar vs deep space | | | | |
|  |  |  | b) With ReST API how are unilateral changes communicated (provider --> client) | | | | |
|  |  |  | c) Cybersecurity vs ReST –concerned that different agency-specific approach are being pursued | | | | |
|  |  |  |  | | a) Approach is to engage the SE Security WG to help with recommended common approach | | |
|  |  |  |  | | | | | |
|  | **7. SMASH** | |  |  | | Conclusions: Address ReST and FTP; put on orange book track | | |
|  |  | a. FTP vs ReST API | |  | |  | | |
|  |  |  | i. See revised outline and considerations in Figure 1 below | | | | | |
|  |  |  | ii. Leverage TGFT for file transfer interface | | | | | |
|  |  |  | iii. Include state machine in the SMASH | | | | | |
|  |  | b. As orange book – justification: allow for more co-implementation and co-development | | | | | | |
|  |  |  | i. Maybe make use of industry standards for API definition such that a commercial partner could help iterate in a GitHub repository | | | | | |
|  |  | [AI]: H. Kelliher -- produce draft outline for SMASH book; due at the time of the London meetings | | | | | | |
|  | **8. SSF 5-year refresh** | | |  | | Conclusion: Agreed that translation approach developed by C. Haddow is good; follow up as implementing in CDE pending | | |
|  |  | a. Made some minor comments to SSF disposition spreadsheet (see 240501-SSF-5Y-Refresh-Items.xlsx) | | | | | | |
|  |  | b. We agree that Colin's name translation approach is okay | | | | | | |
|  |  |  | Given that this could also be in service agreement, should we consider this going into the CDE? -- need to talk with \_C. Haddow about this | | | | | |
|  | **9. SACP UML/XML Schema review** | | | | | Conclusion: Generation of schema from UML seems to be working well | | |
|  |  | a. UML model currently in a branch in gitHub | | | | | | |
|  |  | b. Appears that ability to convert from UML --> XML Schema has been more or less achieved | | | | | | |
|  |  | c. Need to square a definition of FRIN re FRM vs CSSM -- mini-oid vs simple integer [done] | | | | | | |
|  |  | d. Auto-generated schemas are showing up in a separate repository | | | | | | |
|  |  |  | i. There is a configuration profile for setting up the auto generation | | | | | |
|  |  |  | ii. Overall effort does not yet include generation of the UML from the FRM | | | | | |
|  |  | Bottom line here -- C. Haddow has done some very good work | | | | | | |
|  | **10. SACP book review** | | |  | | Conclusion: | | |
|  |  | Reviewed draft book developed to date | | | | | | |
|  |  | Discussion -- FRM gating definition of parameters for SACP will need a good, coherent area-wide control of the FRM | | | | | | |
|  |  | [AI]: M. Gnat, C. Haddow: As soon as FRIN clarified and UML diagrams clarified, provide SACP schemas to the WG | | | | | | |
|  | **11. Joint Session with SIS-DTN WG** | | | | |  | | |
|  |  | Presented CSS Area Standards likely to be of most interest/use in support DTN | | | | | | |
|  |  | Requested that SIS DTN take a look the standards presented | | | | | | |
|  |  |  | Noted that SSF already has ability add additional metadata -- maybe no need to add anything for DTN support, but could be added if DTN WG has a strong “need” | | | | | |
|  |  |  | Also requested if operational scenarios could be identified | | | | | |
|  |  |  | Noted that FF-CSTS can be useful for multiplexing DTN and non-DTN traffic slong with closing re-transmission protocols (eg., CFDP Class 2, LTP) directly | | | | | |
|  |  |  | Some discussion on use of YANG models and their production from the FRM – SIS-DTN WG would like to investigate (will have to be AD discussion to see what happens further) | | | | | |
|  | **12. Plenary Session** | |  |  | |  | | |
|  |  | a. Created CCSDS-FRM organization GitHub account (please see [CCSDS-FRM · GitHub](https://github.com/ccsds-frm)) | | | | | | |
|  |  | b. FRINs |  |  | |  | | |
|  |  |  | i. Agreed that for service management, we "globally" assign FRINs -- not "sub-FRINs" ? (ie. “1”, “2”, etc., not “1.1”, “2.3.1”, etc.) | | | | | |
|  |  |  | ii. configuration of MD-CSTS service instance itself also needs to be in the FRM (presumably a mission could configure the monitor data that they want to see – in practice, it might get fixed at the level of a service catalog) | | | | | |
|  |  |  | iii. Similar considerations applies to SC-CSTS | | | | | |
|  |  | c. Configuration level | | | |  | | |
|  |  |  | i. Tooling is now available in a public repository | | | | | |
|  |  |  | https://github.com/esa/ccsds-css-frm-editor | | | | | |
|  |  |  | ii. [AI]: E. Barkley, M. Gnat by the time of London meetings -- can we get configuration levels defined for the FRM parameters that need to be surfaced in a managed service context and suppress those that do not make sense in a managed service context | | | | | |
|  |  |  | iii. [AI]: Send H. Dreihahn a copy of the referential framework diagram | | | | | |
|  | 13**. DDOR WG/CSSM WG joint session** | | | | | | Conclusion: Good discussion – further exchange at London meetings | |
|  |  | a. C. Volk walks through the DDOR service request (from DDOR WG) | | | | | | |
|  |  | b. DDOR WG agrees to send XML samples and descriptions to CSSM WG | | | | | | |
|  |  | c. CSSM WG will look at inputs from DDOR WG and check for fitting into CSSM standards and also look at update the FRM with DDOR information/resources (by London meeting) [AI] | | | | | | |
|  | **14. Concept Book Overhaul** | | |  | | Conclusion – agreed on revised outline and subsequent actions | | |
|  |  | a. Agreed to have a simplified referential framework diagram -- in management service section | | | | | | |
|  |  | b. Action: E. Barkley -- generate simplified referential framework diagram | | | | | | |
|  |  | c. Created Green-2 folder on CWE (has revised outline) | | | | | | |
|  |  | d. Action: M. Gnat -- perform initial edit on green book to bring into conformance with new outline and eliminate "superfluous" sections and handover to \_H. Kelliher by time CSSM 2 telecon, (July 2) | | | | | | |
|  |  | e. Action: H. Keliher --- generate draft next version of the concept book by London Meetings | | | | | | |
|  |  |  | i. Note -- SMASH takes priority (in case of resource conflict) | | | | | |
|  |  |  | | | | | | |

Graphical user interface, application, Word

Description automatically generated

Figure 1 SMASH Outline and Considerations