

Minutes of Meeting for CSDT#16

SPIRE-RAL-MOM-001523

CSDT Meeting #16 was held on the 6th February 2003 in CR3, RAL.

Participants

A. de Jonge
J. Brumfitt
K. Galloway
M. Graham
S. Guest
D. Kester
M. Huang
S. Ott
C. Porrett
J. Riedinger
H. Siddiqui
B. Vandebussche
R. Zondag

1. Welcome, Agenda

No changes were made to the agenda.

2. Status of Actions (JR)

181001/3: RZ to investigate the latest XML editors. **Action dropped.**

120402/5: SG & AdJ to analyse router SPRs. **AdJ to close by end of week.**

260602/1: JB to look at SG prototype to generate wrapper scripts. **JB to convert to SCR.**

250902/1: Core class restructuring for ICC products. **Closed.**

080103/8: DK to clarify SPR#169. **Leave open.**

080103/10: SG to chase MG for missing User Manual. **Closed.**

3. Action Item tracking (raised by BV)

The current system for tracking Action Items used by JR is based on an Excel spreadsheet. PACS have a Web-based system similar to the SPR/SCR system. There is also a means of doing this with Livelink. There is a desire to be able to easily see the mail or document that closed an action.

Action: JR to investigate the options by end-next-week.

4. CVS structure and renaming of packages in the HCSS (HS/RZ)

HS presented a proposed reorganisation of the CVS tree into production and prototype areas. The “user” area, which was intended as a “playground”, will no longer exist. This was a problem for RZ in that it was seen as a personal private area, and a prototype area instead would make it clear that it was intended to be shareable. JB remarked that it was not a good idea to have the same package names in both trees, though there were some differences of opinion on this, as it would make migration from prototype to production easy. SO insisted that parts of the tree containing HCSS code have to be clearly identified to ensure that these routines follow the quality standards agreed for HCSS production code. *The CSDT accepted the general principle of the proposed structure.* RZ will start migration to the new structure after the release of HCSS 0.1.2.

SG asked if the instrument-specific systems could be built and made available for download in the same way as the HCSS. JR stated that management had discussed this, and that it could be done. RZ confirmed this, and would move the SPIRE code after the main CVS migration. Both HIFI and SPIRE would put all of their Java-based systems into this tree, while PACS do not plan to do this. It was agreed that *all* the code under the main production tree would be built; code in the prototype tree would not. Test harnesses are recommended for ICC code but are not enforced.

5. Property/configuration (raised by AdJ)

AdJ presented some ideas about improvements to the property/configuration scheme. It was agreed that a “verbose” mode would be very useful, so that when a parameter is used, it can be identified which one it is, what its value is, and from which file it was loaded.

Action: HS to raise a verbose-mode SCR by Feb 10th.

Action: HS to list all properties used in the HCSS and check if they are consistent with the HCSS naming convention.

There was some discussion on namespaces. At the moment the configuration mechanism is implemented using a “flat” namespace. Would it be better implemented as a tree?

6. Status of non-IA work packages raised by IA-WG (raised by SG)

- Non persistent CCM

JB will start work on this at the end of the month.

- Configuration editor (similar to property editor to save configurations, e.g. the desktop topology, plotting style,...)

This is basically the same as the property/configuration agenda item. It was noted that the ability for users to save configurations in different ways for different applications cannot be implemented in a flat namespace. JB thought that the basics of this could be implemented with three weeks work. SO remarked that this was a “nice-to-have” and hoped there might be additional manpower available for such things. SG reminded the CSDT that a stated goal of the IA group is to produce a system that is better than IDL.

Action: BV to raise an SCR by end-next-week.

- User accepted sandbox prototype

No progress since CSDT #15.

Action: CP to resend instructions to AdJ and HIFI to investigate if the current tool is OK by end-March.

- Exception handling and catching

JB pointed out that there is a section on this in the Developer’s Guide. He was also planning on adding more support into the HCSS. SG commented that exception chaining was supported in Java 1.4 (which JB was not aware of), so this might no longer be necessary.

- Logging

Java 1.4 contains a logging API. SG felt that the current HCSS logging support is inadequate and that the Java API more than meets the requirements.

Action: HS to investigate Java 1.4 logging by the end of the month.

7. Help system (AdJ; this was also discussed at IA-WG#9)

AdJ was not aware that this had been discussed at the IA-WG meeting as he had already left at the time, and presented his own views on the subject. It was pointed out that RRF#7/1 had at least partially addressed this subject and identified JavaHelp as a promising candidate to implement this.

Action: RH to distribute the output of RRF#7/1 to the CSDT.

It was agreed that a help system should be uniform across the project. SG said that the ability to turn tooltips on/off should be a system-wide configuration parameter and that SPIRE had a user with a very strong opinion on this. SPIRE will implement a context-sensitive help system in their IA/QLA and it was agreed that this should be common. KG commented that SIRTf had the help and tool tip texts provided by a user.

Action: SPIRE to look at JavaHelp and how it fits in with their current QLA implementation by the next IA-WG meeting (February 26th).

8. Candidates for commonality (raised by SG)

It was suggested and agreed that this topic should be a permanent CSDT agenda item. SG mentioned support for printing, saving images and context-sensitive help that SPIRE were developing. BV suggested that attitude was also a suitable candidate, and that PACS had some code for this. SG remarked that general telemetry handling services had been a prime candidate for commonality, but SPIRE and PACS had both developed something independently without knowledge of the other. AdJ stated that HIFI as yet do not have a means of doing this and will look at the two available systems. KG agreed to place this topic on the agenda for the next CSDT meeting.

9. CCM enhancements (Mission class, registries) (JB)

JB presented his plans to add classes such as Mission to the CCM that are in the problem domain but are not in the model. There is a prototype of this that dates back to last April. He also plans to remove singleton persistent objects such as registries that cause problems with database locking. KG noticed that the EGSE was missing in the new scheme and asked how it fitted in. A note will be sent around in a couple of week's time.

10. How are 3rd party libraries introduced into the system (JB)

JB presented a proposal for how 3rd party libraries are introduced into the system. *This proposal was approved by the CSDT.* In addition it was agreed that information on the 3rd party libraries in the system should be placed on the HSCDT web site. Any developer proposing a new library should raise an SCR on the HCSS, as high priority if necessary (it might even be the norm for them to be high priority).

11. Reference platform / Supported platforms (RZ, raised by AdJ)

RZ presented the contents of the reference platform for HCSS 0.1.2. There was some discussion of whether we need an installer (for example using Install Anywhere). JB stated that command-line installation should also be supported. Any installer should contain the optional selection of instrument-specific code. RZ said that all the current third party libraries in use could be distributed as jar files as part of the system with the exception of Versant and TCLBlend, and only Test Control uses the latter. It was reiterated that all instruments require "deversantification" of the HCSS. RZ agreed that installation on all common platforms should be supported, and would send a note around detailing his plans. RZ then described the Linux Standard Base (<http://www.linuxbase.org>). RedHat is immediately compliant, but SuSe requires kernel updates to be. It was agreed to place an HCSS System Administration splinter on the agenda of the next meeting.

Action: JB to ask Versant about support for Linux Standard Base by Feb 14th.

12. Future CSDT meetings (raised by JR)

JR presented the HCSSMG proposal on the future of the CSDT. JR would also support holding smaller face-to-face meetings where necessary. SO remarked that the most efficient methods for information exchange should be sought, and this will include face-to-face meetings.

It was generally felt that the proposed frequency of meetings was not frequent enough. It was agreed that the CSDT coordinator would call meetings whenever he/she deemed it necessary, and that in order to get dates in people's diaries, a baseline of bi-monthly would be adopted. Whenever possible, these meeting should be coordinated with IA-WG meetings to save travel costs and because there is some overlap between them. *The CSDT accepted the HCSSMG proposal with a caveat about the frequency and elected KG as its coordinator.*

13. AOB

- Agreement of date of CCB

The CCB will take place at 15:00 GMT February 10th. SPR-017 was reaffirmed as being critical and will be in HCSS 0.1.2.

- MIB Tailoring Note (HS)

As soon as ICCs have a new MIB, they will make it available to the HSC by uploading it to the CVS repository and tagging it.

- Sizes of database objects (SG)

SG mentioned that persistent objects that are too large cause memory problems. He had had a problem with some Planck HFI data where a large (~100MB) double[][] array resulted in "out of memory" errors. It appears that Versant (unlike Java) treats this sort of construct as a single large object. Breaking it up into an array of "Row" objects solved the problem. It was pointed out that this has implications on Product and Dataset design, i.e. defining data objects without considering database issues could lead to problems. KG will flag this as an Open Issue.

- Profiler (SO)

SO asked about interest in the HSC buying a Java profiler that would be available for the ICCs to use when necessary as well. JB pointed out that the standard JSDK contains a profiling tool that might be adequate for our needs.

Action: JB to send a note about this to the CSDT by end-next-week.

- DONM, if there is one

April 9-10 at ESTEC. If the decision is taken to continue a common IA development, IA WG#11 will be held April 8th. KG and SO to agree upon agenda.

SG, February 11th 2003