

Protocol 25. Meeting Di, 31.05.12 14.00 – 15.00

Participants: Udo Krause, Ludwig Hechler, Solveigh Matthies, Matthias Wiebel, Harald Bräuning, Alexander Schwinn(Protokoll)

1 News from CERN

- Current CERN-FESA team
 - The CERN fesa team expanded alot. Detailed info can be found here: <https://www-acc.gsi.de/wiki/FESA/Members>
- Plans at CERN for the near future
 - Since Stephan wants to have a final release until end of the summer, the mayor goal is to get the trunk-version stable again.
- Service Locator
 - In RT and Server-Actions, services of the framework now can be (have to be) accessed via the service-locator of the action. Code-auto copletion allows to directly see which services are offered. (E.g. accessing fields, manual notifications, etc.)

As well see: http://en.wikipedia.org/wiki/Service_locator_pattern
- New priority management system
 - It is now possible to assign real prorities for each thread in FESA. These priorities can be configured per FEC. This allows proper re-configuration of FESA-binaries, running in parallel with foreign threads and as well makes the prio-management transparent
 - For this change (and as well for other reasons) it was necessary to move the FEC-instantiation to the deploy-unit level. All FEC-dependent data is now stored there. Now only one instantiation-file exists per FEC when using inheritance/composition.
- New CERN timing library
 - CERN provides a new timing library, which has many advantages over the old one (exceptions instead of hard exits, object orientation, nice API ...). The plan is, that this library as well will be used for White Rabbit in the future.
 - To be checked with the Timing-Group if we can/will use this library as well well for GSI, since we not only have stand-alone timing-receivers, but as well the SCU(Which emulates the TR-logic on a FPGA)
 - For the first we stay with the old CERN-Timing library, since it seems to be stable for us Our beam-diagnostics group, which provides the TimingConverters (GSITiming->CERNTiming) is not in need to upgrade, and would prefer to stay with the current version.
 - Alex will get the API of the new Timing Library, in order to compare it with the API-blueprint of the GSI-timing team.

- Transactional Properties
 - If a property is "transactional", one can set it on different FEC's synchronously, by using a predefined (hardware)-event.
 - This Fesa2.10 service is not yet properly implemented in FESA3. According to Stephan the service could be fixed after the final release. (Jutta Fitzek pointed out that this service will be needed at GSI)
- Database
 - Alex will investigate what tasks need to be done regarding a DB-integration. If the necessary amount of work is big enough to keep one person busy, the possibility to employ a student will be checked.
- Possible Simplification of Events mapping
 - A investigation will be made in the CERN-wiki in order to check how it is possible to improve the events-mapping configuration in the instantiation-file. Current problems:
 - connection of many HW-events to one logical-event
 - obsolete "event-field"
 - unused "multiple" modifier in the class-design.
- XSD v1.1
 - The new W3C recommendations of XSD v.1.1 could allow us to get rid of Clix (XDV)
 - As soon as eclipse supports XSD1.1 validation, this can be evaluated.

2 64 Bit FESA

- Currently our disk-space for the fesa-mount is very limited. ~30GB which are nearly filled (mainly by the BeamDiagnostics group) The infrastructure-team proposed to mount a partition with sufficient size, after moving the cluster to Redhat6/ScientificLinux6.
- Getting all cmw-libraries, etc. For 64Bit will possibly tighten the current situation, so the support of 64Bit-FESA will be postponed until we have enough disc-space.

3 Propdesk – Property

- Harald uses a global property for his classes, which returns the collection of devices, which are used on this FEC. (Like the "Device-Description" Property in the old system)
- One could think about to have this Property per default, together with a "Property-Description"-property, which returns all provided properties and their value-items.
- In the next FE-Int meeting, a decision will be made, if this is a feature which we want to have. If yes, Stephan will be asked, if this is as well interesting for CERN in order to see if we can have this feature in the core, or if a lab-specific implementation will be required.

4 New Project Structure

- Since SVN- tagging per class for multi-class and multi-deploy-unit project in eclipse is tricky with the current project structure, the decision was made to have only one class/deploy-unit per eclipse-fesa-project in the future.
- Solveigh implemented all necessary changes in the eclipse-plugin. Some xslt-changes, regarding the makefile-generation (Taking into account changed folder-levels) have to follow now.
- For the same reasons, deployment-units can only be added as separate projects now.

5 FESA Environment for Cosylab

- Cosylab would like to develop FESA-classes on foreign systems.
- All code-files need to be tagged with licencing-information (Alex will talk to Stephan / open an issue)
- Solveigh raised the idea to provide a virtual-maschine-image on which a preinstalled FESA can be used (currently v3.0-beta)
- Solveigh will check with Christoph, if/how we can go for this.

6 SCU & ACU

- SCU Tests, using the C++ API from the hardware-team will be performed by alex starting by next week.
- Ludwig will evaluate when we will get an ACU installed in the software-development-chamber. As well he will check if we can get a real power-supply for testing, or if we only get some kind of dummy-power-supply.

7 Misc

- France Mini-Control-System
 - Still there are drivers/FESA-classes for which it is not clear yet who will write them.
- Udo will organize a meeting in order to exchange unit-test knowledge between Matthias, Solveigh and Alex. Matthias plans to do a presentation in the "FAIR technik forum".
- NFS CMW-tree:
 - New location: /common/cmw
 - Need to wait until movement to SLC6/Redhat6 is finished, since this will be a separate mount-point & Christoph does not want to introduce bigger changes before movement.
 - Move all cmw-files which are used by FESA3 to the new location
 - Remove old tree, as soon as the last FESA 2.10 class is ported to FESA3