

FESA
Accelerator Complex Controls
Renovation Workshop

FESA Team

Agenda

- Motivations
- Work Packages
 - Scope
 - Objectives
 - Who
 - Deadline
- Summary

Motivations

- Common solution deployed across all accelerators:
 - The time for retirement has come for GM after 20 years of “Long and Loyal service”.
 - Under corrective maintenance only.
 - FESA is the RT Framework supported by CO.
- Scope:
 - Technical issues were discussed into a dedicated meeting with Equipment Groups.
 - This presentation consist to explain what will be the main FESA work packages in direct relationship with this Controls Renovation project.



Work Package 1

- Scope: porting GM classes using FESA 2.10.
- Objectives : FESA 2.10 needs to be “INCAified”. In practice INCA expects from FESA class definition, some “metadata” used to provide high level services (device status computation, ...).
- Who:
 - FESA Team
 - Extension of the metamodel: the current release FESA 2.10 will be patched.
 - DM Team
 - Support the extension for FESA 2.10.
 - FESA Developers
 - No additional work.
- Deadline: begin of March 2009.

Work Package 2

- Scope : porting GM classes using FESA 3.0.
- Objectives: The experience of a large deployment of FESA on the LHC has shown areas for important improvement. The main issues are:
 - Reassign roles and responsibilities between FESA and the Configuration Database in order to enforce configuration data consistency:
 - FESA tools are meant for FESA class development and testing.
 - Configuration database is responsible for operational data.
 - Provide well defined relationship between FESA classes:
 - Association.
 - Composition.
 - Inheritance.
 - Provide support to define dependencies between devices.

Work Package 2(cont.)

- Objectives(cont.):
 - Improve the FESA development workflow by providing an **Integrated Development Environment**.
 - Defining a generic model providing the capability to define the **logical hardware address** of any piece of hardware we want to access from a Front-End through any hardware topology supported at CERN.
 - Implement all the pending issues reported by the developers which cannot be injected in the current release by means of a patch.
- Who:
 - FESA Team.
 - DM Team.
- Deadline
 - End of 2009.

Summary

Deadlines & Human Resources

| | Deadline |
|-----------------------------------|---------------------|
| Work Package 1 (2.10 “INCAified”) | Begin of March 2009 |
| Work Package 2 (3.0) | End of 2009 |

| | 2009 |
|-----------------|-------|
| FESA | 3 FTE |
| Data Management | 2 FTE |

FAQ

- When can I start ?
 - CO will start begin of 2009 (provided the new platform and the device drivers are available) to port the GM classes under its responsibility.
- Do I have to wait for FESA 3.0 ?
 - It's mainly a question of when do you have resources to migrate your system. An other consideration could be that the system you are migrating can take advantage of the new features provided by FESA 3.0.
- If I start with 2.10 would it be easy to move to 3.0 ?
 - A script will provide you with an automatic retrofit of your class from 2.10 to 3.0. However, we can't exclude completely the need of doing some manual editing.