Feedback on Soleil usage of Passerelle as a sequencer

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Synopsis

Passerelle
Usage at Soleil
The current status
Next Step
Conclusion
PASSERELLE allow to graphically design sequences by drag and drop and execute them.

- PASSERELLE is provided by a company called ISENCIA
  - That realized process driving for industrial companies.
- PASSERELLE is based on an environment for scientific modelisation and simulation: PTOLEMY (developed by the Berkeley University)
  - [http://ptolemy.eecs.berkeley.edu/ptolemyII/](http://ptolemy.eecs.berkeley.edu/ptolemyII/)

ICALEPS 2005
We connect « boxes » and « wires »:
- The « boxes » are called **ACTORS**, they execute an action.
- The « wires » are called **MESSAGES**, they transfer data.

The graphic language for editing sequences provided all functionalities to build complex logics:
- Loops
- Comparison
- Error management
- Parameterization

Every actor is configurable with parameters.

Our team is developing actors that control Tango devices.

**ICALEPS 2005**
IDE: development, configuration, execution, debugging.
Graphical panel on top of *any* Passerelle sequence.

- Possibility for users to customize the configuration panel:
  - Selection of the visible parameters.
  - Parameters’ labels.
  - Panels organization.

- Allow to launch it, and visualize User logs.
Passerelle users' environments: Bossanova

➢ Is a batch editor:
  ✓ Can be batch several Passerelle sequences
Passerelle users’ environments: Passerelle Manager

- A web server to remotely:
  - Configure/launch /stop sequences
  - Monitor all running sequences
  - Search for history in logs

- Do also versioning management of the sequences
Passerelle integration within GlobalScreen

GenericHMIBean

BossanovaBean

ICALEPS 2005

13th January 2011 – ESRF BIS WORKSHOP
Transparent access to Nexus Data Storage service

Configurable Error Strategy handling

Configurable take care of beamline status

Parameter Validation

Logging
Beamline initialisation:

- E.g. set all motors in reference position
- Reset Optical devices to a given Beamline setup
- Check Machin beam position
Beamline alignment

- E.g. find the good position of the beamline depending on the position of the beam

**Routine to find peak, centroid and values for standard slit opening** – P. Gourhant and O. Rudenko.

**Horizontal beam scans, 5th harmonic, 9mm gap**

**Vertical beam scans, 5th harmonic, 9mm gap**
Acquisition
- CCD acquisitions,
- Scans
- EXAFS
- SAXS
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Towards working with ESRF on a common Passerelle Repository: To be planned

- First Find an agreement between Soleil/Esrf/Isencia on a common Project Definition for the Codehouse source code
- Migrate Soleil Passerelle V5 svn source code to the Passerelle V6 Codehouse source Code
- Join Data Analysis Workbench project from ESRF
Use of Passerelle/EDNA for On line Data Analysis:

- with CDM integration
- Find Collaboration on Passerelle Extensions
- Share Passerelle Actors Library
THANKS FOR ATTENTION

✓ Questions ?