Passerelle Usage at Soleil

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Synopsis

- Introduction: Soleil Strategy for User Applications Development
- The Soleil process driving tool: Passerelle
- Globalscreen/Passerelle Integration
➢ To avoid developing an entire system from scratch but to use existing applications.

➢ Provide tools to allow users to develop as much as possible their own application without any programming knowledge for:

  ✓ Acquisition sequences: Passerelle
  ✓ Supervision: ATK Widgets
  ✓ Integration for supervision and acquisition sequences: GlobalScreen
The Soleil software architecture

ATKPanel
ATKTuning
DeviceTree

Passerelle

Archiving

Salsa

GlobalScreen

Jive

Astor

Python

TangORB, ATK (Application Tool Kit)
Java, JavaBean

TANGO Software bus

Device

Device
PASSERELLE

The Soleil Process Driving system
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 simulation: PTOLEMY (developed by the Berkeley University)

http://ptolemy.eecs.berkeley.edu/ptolemyII/
IDE: development, configuration, execution, debugging:
Passerelle users’ environments: Generic HMI

- Graphical panel on top of any Passerelle sequence.
- Possibility for users to customize it:
  - 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
Main Soleil Sequences

- Beamline initialization:
  - E.g. set all motors in reference position
- Beamline alignment:
  - E.g. find the good positions of the equipments depending of the position of the beam
- Beamline Acquisition:
  - E.g. CCD acquisitions, scans…
- Machine initialization
  - E.g. Setting power supplies
GlobalScreen/Passerelle integration
The current state of the project

- for 6 applications BL the acquisition is also integrated: Diffabs, Cristal, Ode, Swing, Proxima1 and Tempo.
Alignment on Proxima 1
Acquisition on ODE Beamline