
ELETTRA Status

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Status of Elettra

laboratory organization

booster, FERMI@Elettra

Status of Controls and Tango

Global Orbit Feedback - “Libera” devices

HDB developments

Laboratory organization

Major reconfiguration!

new: Gruppo Informatica (*Computing Group*)

Beamline and Machine Controls belong to
Computing Group

see <http://www.elettra.trieste.it/organisation/index.html>

Booster

- booster building under construction
- Tango devices for SLS type power supply ready to
- Tango devices for pre-injector linac under development
- Vacuum devices ready
- Diagnostics devices under development

FERMI@Elettra

- excavation of new tunnel under way
- conceptual design to be published very soon
 - Tango will be the control system for the 4th generation machine including beamlines

Status of Controls and Tango

- transition from HP-UX to Linux almost complete !
- Tango: 74 servers, 173 devices in operation
- developments:
 - QtControls, Qtango: Qt-4 based, graphs, full integration with designer, “helper applications”. Stable release
 - Canone: AJAX based widgets, support for Users
- feasibility study for beamlines migration to Tango

Global Orbit Feedback - “Libera” devices

- major development for the storage ring
- goal : sub-micron resolution – 2 kHz bandwidth
- BPM detector upgrade with Libera devices
- 30 out of 96 already installed (and growing...)
- fully Tango based
- “bridge” servers for manging old and new BPMs and keep old programs running

Global Orbit Feedback - “Libera” devices

- Still some work to do and problems to be solved
- The goal (in sight - end 2006) : 96 Libera devices with embedded Tango Device server for “normal” operations
- Global Orbit Feedback based on dedicated gigabit Ethernet links and real time Linux

Global Orbit Feedback - “Libera” devices

- Tango Collaboration at its best !
 - Libera device server : Soleil
 - omnioORB for ARM Linux: Elettra, ESRF, Alba, D. Grisby
 - Tango on Libera : Elettra
 - embedded Libera device: Soleil, Elettra

HDB

- Support for events added to HDB
 - G. Strangolino report
- We plan to deploy logging in a few months
 - dedicated server just purchased
 - going to upgrade to Tango-5.5 and configure events
 - write Tango wrappers for existing rpc devices

Last hour warning

- We suffered a MySQL malfunction!
 - Databases could not start
 - Tango-5.3, MySQL 4.1.18
- recovered with drop/create/source sequence
 - we had a fresh dump of the tango database
 - we tested the recovery procedure on a test machine

Lesson ~~forgotten~~ learned

monitor your MySQL (and watch for bug reports!)

keep some up-to-date dumps on hand

test and document your recovery procedures

cluster configuration of any use in case of db engine bug ?