



Elettra Sincrotrone Trieste



Tango “lib” upgrade

moving to Tango-8

summary

- motivation
- starting / actual situation
- problems
- efforts
- open questions

motivation

- we do want to use events
- get rid of notifd: memory leaks, stability...
- exploit all enhancements of Tango-8
- benefit of the bug fixes in the core of Tango

starting situation

We had a mix of Tango releases in use: 5.5.2
6.1.1.b 7.2.6

A mix of *Device_3Impl* and *Device_4Impl*
devices

On running machines

actual situation

Migration of FERMI controls to Tango-8 done almost completely. Took about 1 year.

Migration of the Elettra controls: done about 30%, effort is ramping up.

problems

Some Databases configuration had to be corrected

- polling thread configurations
- Attribute range specification for some types

Polling on State, Status, Boolean and String attributes automatically generate change events

- before one had to configure some Event fields

problems

during the transition phase:

No events from Tango-5 servers to Tango-8 clients
(notifd running)

No ZMQ events from Device_3Impl devices compiled
with Tango-8 : need to modify the source !

efforts

- Compiling and upgrading the sources was just a part of the effort.
- Impossible to handle without source repository.
 - Strong indication to adopt continuous integration methodology.
- The hardest part was deployment, testing and tuning of the “renovated” plant.

open questions

Perform meaningful tests without the real equipment.

Perform integration tests of complex and large systems during shutdown or maintenance periods.

N.B.: these problems appear also during the initial building of the plant. In the case of software upgrades it is more difficult to ask for resources (time, manpower), to solve them.



Elettra
Sincrotrone
Trieste



www.elettra.eu