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# QTango:

## a Qt and Tango framework

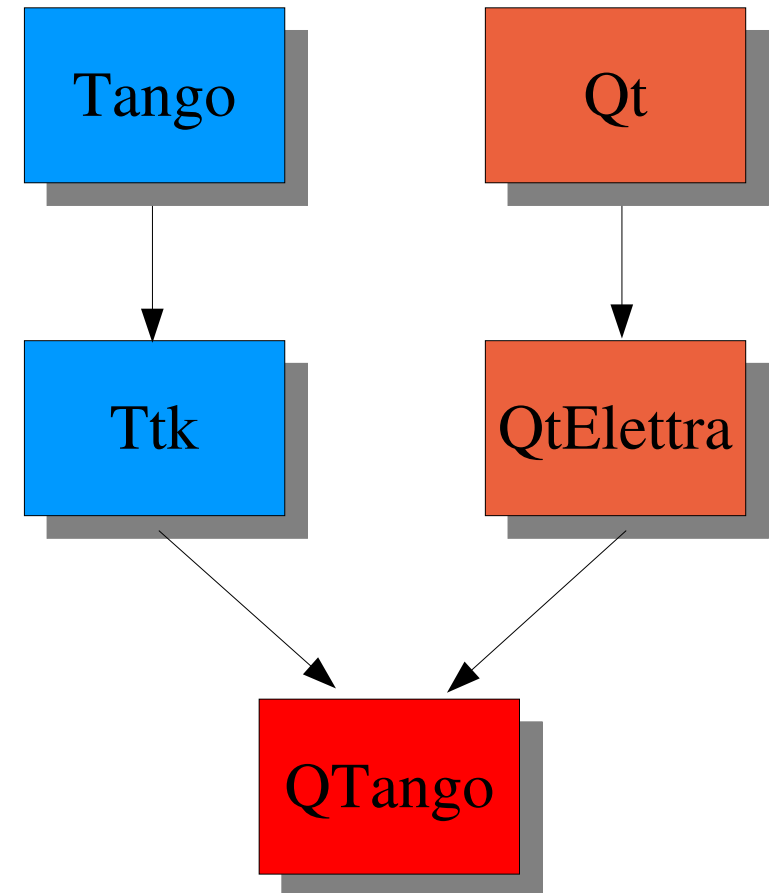
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# QTango: What is it?

Tango Meeting  
26-27/05/2005



- Goal: integrate Tango and Qt:
- Qtango is Built on top of 2 libs:
  - Ttk: C++ lib that manages proxies and reading threads;
  - QtElettra: Qt lib of custom widgets.



# QTango: What is it? (2)

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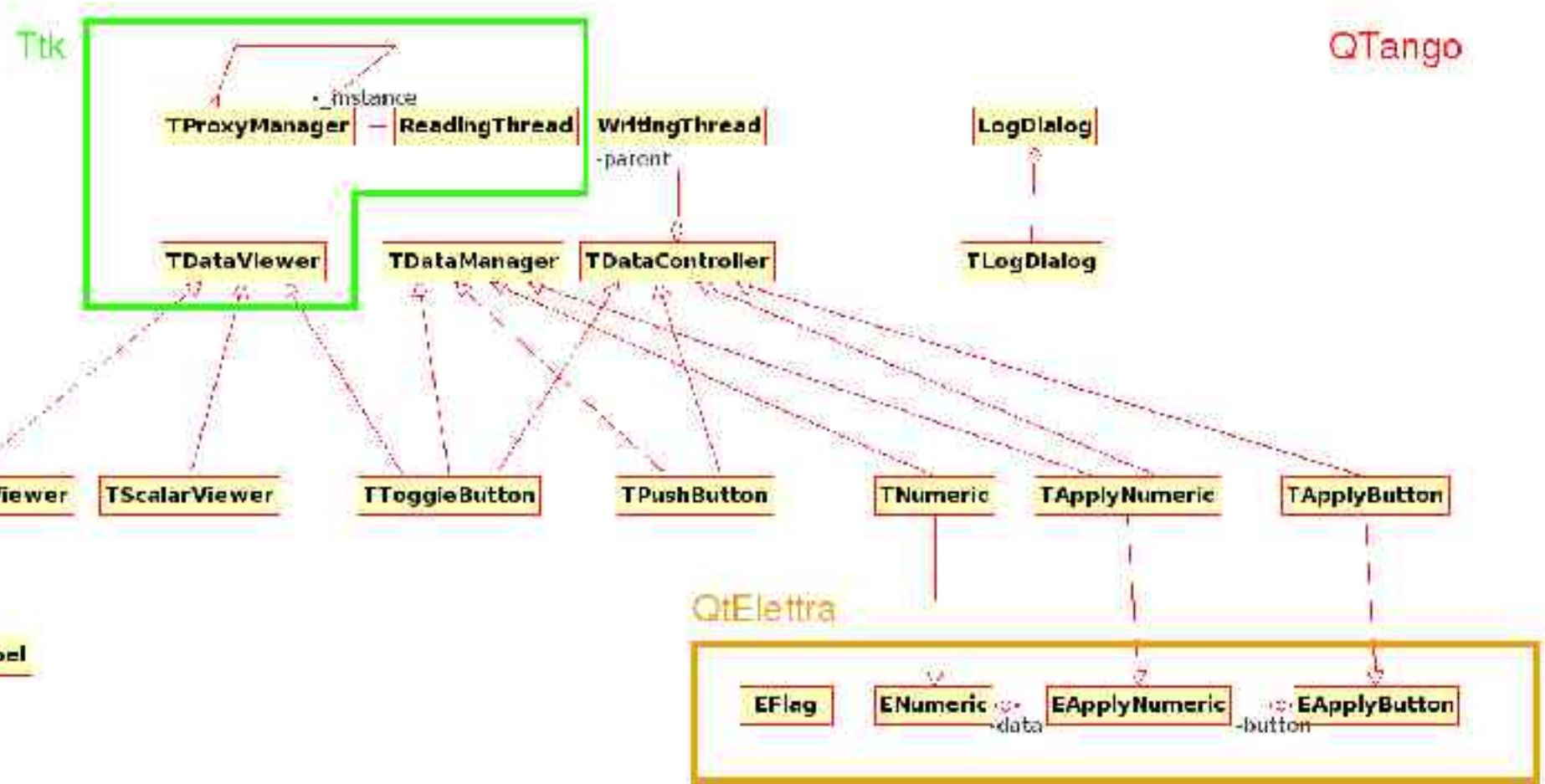


## ➤ QTango features:

- manages connections to devices;
- manages reading and writing threads;
- automatically subscribes to events or polls attributes
- polls commands with return value (and eventually an input value)
- configurable polling period for each attribute/command polled;
- includes a set of custom widgets to read/write attributes/commands;
- automatically manages logs.

# QTango: UML model

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# QTango: Usage

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## Integration with Qt designer:

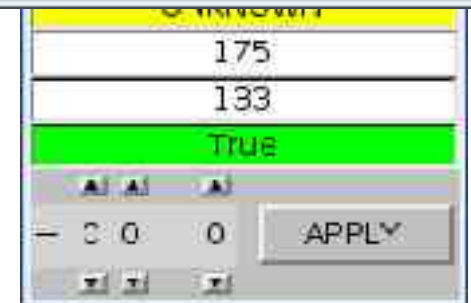


### Error Log

| Time                     | Origin                        | Reason                  | Severity | Description                         |
|--------------------------|-------------------------------|-------------------------|----------|-------------------------------------|
| Thu May 19 14:28:34 2005 | Connection::connect           | API_CantConnectToDevice | ERROR    | Failed to connect to device tango   |
| Thu May 19 14:28:34 2005 | Connection::connect           | API_CorbaException      | ERROR    | TRANSPORT CORBA system exception    |
| Thu May 19 14:28:34 2005 | DeviceProxy::read_attribute() | API_AttributeFailed     | ERROR    | Failed to read_attribute on device  |
| Thu May 19 14:28:34 2005 | DeviceProxy::read_attribute() | API_CommunicationFailed | ERROR    | Failed to read_attribute on device  |
| Thu May 19 14:28:34 2005 | DeviceProxy::read_attribute() | API_CorbaException      | ERROR    | COMM_FAILURE CORBA system exception |
| Thu May 19 14:28:35 2005 | Connection::command_inout()   | API_CommunicationFailed | ERROR    | Failed to execute command_inout     |
| Thu May 19 14:28:35 2005 | Connection::command_inout()   | API_CorbaException      | ERROR    | TRANSPORT CORBA system exception    |
| Thu May 19 14:28:36 2005 | Connection::command_inout()   | API_CommandFailed       | ERROR    | Failed to execute command_inout     |
| Thu May 19 14:28:36 2005 | Connection::connect           | API_CantConnectToDevice | ERROR    | Failed to connect to device tango   |
| Thu May 19 14:28:36 2005 | Connection::connect           | API_CorbaException      | ERROR    | TRANSPORT CORBA system exception    |

OK

## Sample application with log window:



# QTango: TODO

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- Lots of widgets, especially for spectrum controllers;
- support for asynch calls;
- QTango is currently a beta version, so it needs a lot of debug and testing;
- any suggestion is welcome.

# QTango:

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*Thanks to:*  
Claudio Scafuri