



>>>TANGO Controls on GitHub



Tango Control System

The official place for Tango kernel related projects

<http://www.tango-controls.org> info@tango-controls.org

Repositories

People **21**

Teams **3**

Projects **1**

Settings

Pinned repositories

Customize pinned repositories

≡ [TangoTickets](#)

The official place to create an issue/ticket related to Tango when it impacts several repositories or you don't know where to create your issue

≡ [cppTango](#)

TANGO kernel c++ implementation

● C++ ★ 14 🍴 13

≡ [JTango](#)

TANGO kernel Java implementation

● Java ★ 2 🍴 5

≡ [pytango](#)

Python binding to Tango C++

● Python ★ 21 🍴 12

≡ [rest-api](#)

Tango REST API specification

● Java ★ 2

≡ [TangoDatabase](#)

● C++ ★ 1 🍴 4

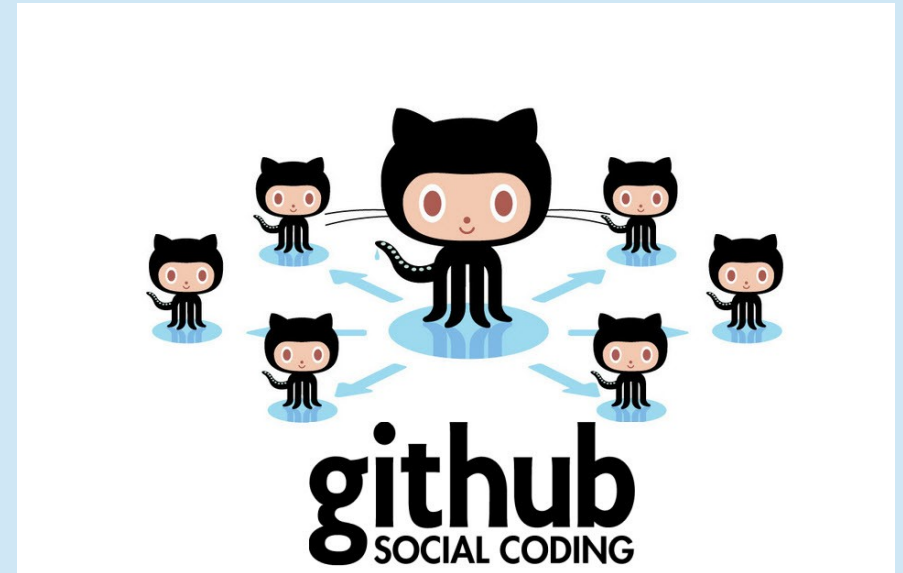
Search repositories...

Type: **All** ▾

Language: **All** ▾

New

- [GitHub.com/tango-controls](https://github.com/tango-controls)
- Migrated projects
 - C++
 - PyTango
 - JTango
 - Built-in tools
 - REST API et al
 - PANIC et al
 - HDB++
 - ...



What about devices?!

- In general devices reside in their own repositories e.g. SourceForge/svn
- Accessible for browsing on the Tango web site via Device Catalogue

The screenshot displays the Tango website's interface. At the top, there is a navigation bar with the Tango logo and links for 'About us', 'Downloads', 'Resources', 'Community', 'Partners', and 'Contact'. Below this, a breadcrumb trail shows 'Resources > Classes Catalogue > TangoRestServer'. The main content area features a 'TangoRestServer' header with 'Edit' and 'Delete' options. Below the header, the following information is provided: 'Development status: Released', 'Information status: Verified', 'Repository: https://bitbucket.org/hzgwpm/mtangorest_server/', and 'Contact: igor.khokhriakov@hzg.de'. A 'Download' button is also visible. To the right of the main content is a 'Recent activities' sidebar listing updates from May 6, 2017, and April 29, 2017, for various device classes like AttributeMonitor, PILTriggerGenerator, SmarActMCSMotor, TangoVimba, and EigerHIDRAclient. At the bottom of the page, there are tabs for 'TangoRestServer', 'History', and 'Documentation'. The 'Class Description' section is partially visible, starting with 'Tango REST API implementation'.

TANGO roadmap FR#2 ✓



>>>TANGO kernel development

C++ kernel library status report

- C++
 - Bintray debian repo
 - Docker containers for testing
- DevEnum labels in commands
- Others (???)

JTango library status report

- Synchronized with SourceForge/svn in April 2017
- Single assembly
- Bintray maven repo



JTango
★★★★★
Aggregated TANGO Java API library

9.3.1
May 09, 2017

```
</dependency>  
<dependency>  
  <groupId>org.tango-controls</groupId>  
  <artifactId>JTango</artifactId>  
  <version>9.3.1</version>  
</dependency>  
<dependency>
```




**>>>TANGO Kernel
ROADMAP**

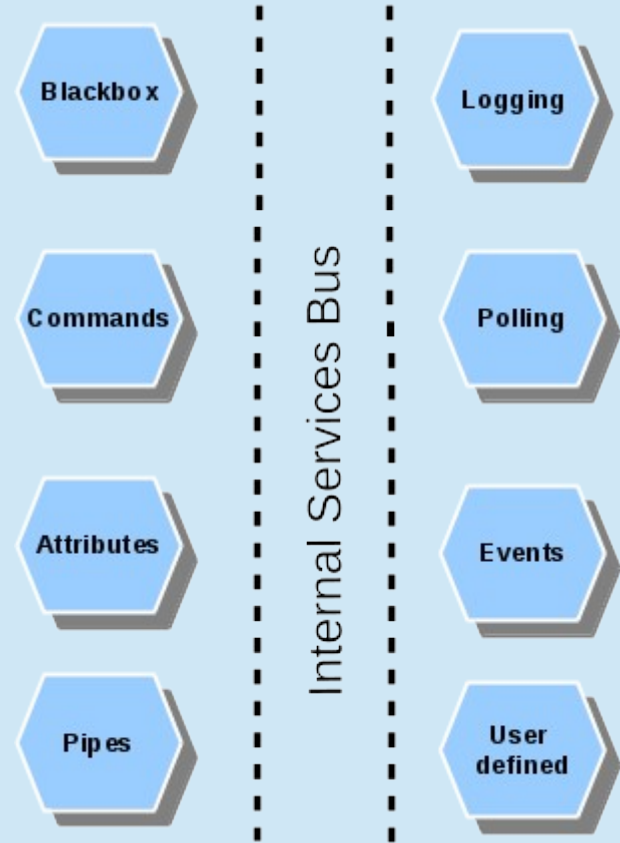
- TANGO 9 LTS
- TANGO 10 minor releases to bintray
- TANGO 10 Refactoring 0: code clean up (end of 2017)
- TANGO 10 Refactoring 1: Protocol API (end of 2019)
 - Absorbing CORBA
- TANGO 10 Refactoring 2: Internal bus architecture (end of 2020)
 - Pluggable services

C++

- Implement features
 - DevEnum labels in commands
 - DevPipeBlob in commands
- Improve event subscription
- Refactorings
 - Main mid-term goal: Tango protocol API

C++

- Long-term refactoring:
Internal Services Bus



JTango

- Refactor TangORB
- Jacorb free version
- Integrate ez into TangORB
- Extract JClientLang
- Put into maven central

```
DeviceProxy proxy = new DeviceProxy("some-device");
DeviceAttribute attribute = proxy.read_attribute("some-attribute");
if(result.hasFailed()){
    throw new Exception("Can not read attribute.");
}
int dataFormat = result.getDataFormat()
int dataType = result.getType()
double result;
switch(dataType){
    case Tango_DEV_Double:
        switch(dataFormat){
            case _SCALAR:
                result = attribute.extractDouble()
                ...
        }
    ...
}
...
```

>>>Call for arms!

- Contribution
 - Code review
 - Bug fixes
 - Guidelines
 - AskTangoControls
- Subcontracting
 - Windows support
 - Documentation
 - Web site