



**TANGO**  
Device  
Server

# Shutter Tango interface User's Guide

## Petra3Shutter Class

Revision: - Author: tere29  
Implemented in C++

### Introduction:

Class collecting all the information for shutters in a given beamline

### Class Inheritance:

- Tango::Device\_4Impl
  - Petra3Shutter

### Properties:

Device Properties		
Property name	Property type	Description
<b>Beamline</b>	Tango::DEV_LONG	Beamline number
<b>Nb_bs</b>	Tango::DEV_LONG	Number of shutter in the beamline
<b>BranchP07</b>	Tango::DEV_STRING	Select branch A or B in p07

Device Properties Default Values:

Property Name	Default Values
Beamline	No default value
Nb_bs	0
BranchP07	A

**There is no Class properties.**

**States:**

States	
Names	Descriptions
<b>ON</b>	No errors
<b>ALARM</b>	No devices defined

**Attributes:**

<b>Scalar Attributes</b>			
<b>Attribute name</b>	<b>Data Type</b>	<b>R/W Type</b>	<b>Expert</b>
<b>StateAbs0:</b> 0 -> close, 1 -> open, 2 -> unknown, 3 -> element not existing in beam line	DEV_LONG	READ	No
<b>StringStateAbs0</b>	DEV_STRING	READ	No
<b>StateBS0:</b> 0 -> close, 1 -> open, 2 -> unknown, 3 -> element not existing in beamline	DEV_LONG	READ	No
<b>StringStateBS0</b>	DEV_STRING	READ	No
<b>StateBS1:</b> 0 -> close, 1 -> open, 2 -> unknown, 3 -> element not existing in beamline	DEV_LONG	READ	No
<b>StringStateBS1</b>	DEV_STRING	READ	No
<b>StateBS2:</b> 0 -> close, 1 -> open, 2 -> unknown, 3 -> element not existing in beamline	DEV_LONG	READ	No
<b>StringStateBS2</b>	DEV_STRING	READ	No
<b>StateBS3:</b> 0 -> close, 1 -> open, 2 -> unknown, 3 -> element not existing in beamline	DEV_LONG	READ	No
<b>StringStateBS4</b>	DEV_STRING	READ	No
<b>StateBS4:</b> 0 -> close, 1 -> open, 2 -> unknown, 3 -> element not existing in beamline	DEV_LONG	READ	No
<b>StateBS5:</b> 0 -> close, 1 -> open, 2 -> unknown, 3 -> element not existing in beamline	DEV_LONG	READ	No
<b>StringStateBS5</b>	DEV_STRING	READ	No
<b>StringStateBS3</b>	DEV_STRING	READ	No
<b>GeneralStateBL:</b> 0 -> all BS close, 1 -> all BS open, 2 undefined	DEV_LONG	READ	No
<b>StringGeneralStateBL</b>	DEV_STRING	READ	No

## Commands:

More Details on commands....

Device Commands for Operator Level		
Command name	Argument In	Argument Out
<b>Init</b>	DEV_VOID	DEV_VOID
<b>State</b>	DEV_VOID	DEV_STATE
<b>Status</b>	DEV_VOID	CONST_DEV_STRING
<b>CloseOpenABS_BS_0</b>	DEV_LONG	DEV_VOID
<b>CloseOpen_BS_1</b>	DEV_LONG	DEV_VOID
<b>CloseOpen_BS_2</b>	DEV_LONG	DEV_VOID
<b>CloseOpen_BS_3</b>	DEV_LONG	DEV_VOID
<b>CloseOpen_BS_4</b>	DEV_LONG	DEV_VOID
<b>CloseOpen_BS_5</b>	DEV_LONG	DEV_VOID

## 1 - Init

- **Description:** This commands re-initialise a device keeping the same network connection.  
After an Init command executed on a device, it is not necessary for client to re-connect to the device.  
This command first calls the device *delete\_device()* method and then execute its *init\_device()* method.  
For C++ device server, all the memory allocated in the *nit\_device()* method must be freed in the *delete\_device()* method.  
The language device destructor automatically calls the *delete\_device()* method.
- **Argin:**  
**DEV\_VOID** : none.
- **Argout:**  
**DEV\_VOID** : none.
- **Command allowed for:**
  - Tango::ON
  - Tango::ALARM

## 2 - State

- **Description:** This command gets the device state (stored in its *device\_state* data member) and returns it to the caller.
- **Argin:**  
**DEV\_VOID** : none.
- **Argout:**  
**DEV\_STATE** : State Code

- **Command allowed for:**

- Tango::ON
- Tango::ALARM

### 3 - Status

- **Description:** This command gets the device status (stored in its *device\_status* data member) and returns it to the caller.

- **Argin:**

**DEV\_VOID** : none.

- **Argout:**

**CONST\_DEV\_STRING** : Status description

- **Command allowed for:**

- Tango::ON
- Tango::ALARM

### 4 - CloseOpenABS\_BS\_0

- **Description:** Close/Open BS by sending 0/1

- **Argin:**

**DEV\_LONG** : 0-> close, 1 -> open

- **Argout:**

**DEV\_VOID** :

- **Command allowed for:**

- Tango::ON
- Tango::ALARM

### 5 - CloseOpen\_BS\_1

- **Description:** Close/Open BS by sending 0/1

- **Argin:**

**DEV\_LONG** : 0-> close, 1 -> open

- **Argout:**

**DEV\_VOID** :

- **Command allowed for:**

- Tango::ON
- Tango::ALARM

## 6 - CloseOpen\_BS\_2

- **Description:** Close/Open BS by sending 0/1
- **Argin:**  
**DEV\_LONG** : 0-> close, 1 -> open
- **Argout:**  
**DEV\_VOID** :
- **Command allowed for:**
  - Tango::ON
  - Tango::ALARM

## 7 - CloseOpen\_BS\_3

- **Description:** Close/Open BS by sending 0/1
- **Argin:**  
**DEV\_LONG** : 0-> close, 1 -> open
- **Argout:**  
**DEV\_VOID** :
- **Command allowed for:**
  - Tango::ON
  - Tango::ALARM

## 8 - CloseOpen\_BS\_4

- **Description:** Close/Open BS by sending 0/1
- **Argin:**  
**DEV\_LONG** : 0-> close, 1 -> open
- **Argout:**  
**DEV\_VOID** :
- **Command allowed for:**
  - Tango::ON
  - Tango::ALARM

## 9 - CloseOpen\_BS\_5

- **Description:** Close/Open BS by sending 0/1
- **Argin:**  
**DEV\_LONG** : 0-> close, 1 -> open
- **Argout:**  
**DEV\_VOID** :
- **Command allowed for:**
  - Tango::ON
  - Tango::ALARM

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