



**TANGO
Device
Server**

Threaded device toolbox example User's Guide

MPurete Class

**Revision: release_1_1_1 - Author: le
Implemented in C++**

Introduction:

Gives an example of a device threaded by inheritance

Class Inheritance:

- Tango::Device_3Impl
 - MPurete

Properties:

**There is no Class properties.
There is no Device Properties.**

States:

States	
Names	Descriptions
FAULT	Initialization failed or runtime error
RUNNING	Device is up and running

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
maxRatio : Max value in spectrum attribute loResBunchFillingRatio	DEV_DOUBLE	READ	No
inputDataRate : Input dat rate in evts per second	DEV_DOUBLE	READ	No
maxRatioIndex : Position of in	DEV_LONG	READ	No

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
hiResBunchFilling : High resolution bunch filling histogram	DEV_LONG	32000	No
loResBunchFilling : Low resolution bunch filling histogram	DEV_LONG	32000	No
loResBunchFillingRatio : This spectrum contains the ratio - in term of bunch filling - between bunch n and bunch n+1	DEV_DOUBLE	32000	No

Commands:

More Details on commands....

Device Commands for Operator Level

Command name	Argument In	Argument Out
Init	DEV_VOID	DEV_VOID
State	DEV_VOID	DEV_STATE
Status	DEV_VOID	CONST_DEV_STRING
Reset	DEV_VOID	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 desctructor automatically calls the *delete_device()* method.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_VOID : none.
- **Command allowed for:**
 - Tango::FAULT
 - Tango::RUNNING

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::FAULT
 - Tango::RUNNING

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::FAULT
- Tango::RUNNING

4 - Reset

- **Description:** Reset the data

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_VOID :

- **Command allowed for:**

- Tango::RUNNING

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Device Commands Description

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- **Argout:**

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- Tango::RUNNING

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