





TANGO Device Server

## BeamImageAnalyzerTest User's Guide

## **BeamImageAnalyzerTest Class**

Revision: release\_1\_0\_1 - Author: julien\_malik Implemented in C++

#### **Introduction:**

#### **Class Inheritance:**

- Tango::Device\_3Impl
  - BeamImageAnalyzerTest

## **Properties:**

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

## **States:**

States	
Names	Descriptions
RUNNING	*
FAULT	

## **Attributes:**

Scalar Attributes				
Attribute name	Data Type	R/W Type	Expert	
ImageSizeX: the width of the output image	DEV_LONG	READ_WRITE	No	
ImageSizeY: the height ofthe output image	DEV_LONG	READ_WRITE	No	
<b>mX</b> : the mean x-coordinate of the gaussian distribution	DEV_DOUBLE	READ_WRITE	No	
<b>mY</b> : the mean y-coordinate of the gaussian distribution	DEV_DOUBLE	READ_WRITE	No	
<b>sXX</b> : the covariance against x axis of the gaussian distribution	DEV_DOUBLE	READ_WRITE	No	
<b>sXY</b> : the correlation between x and y axis of the gaussian distribution	DEV_DOUBLE	READ_WRITE	No	
sYY: the covariance against y axis of the gaussian distribution	DEV_DOUBLE	READ_WRITE	No	
A	DEV_DOUBLE	READ_WRITE	No	
GaussianNoiseLevel: the standard deviation of the gaussian noise added to the theorical gaussian image	DEV_DOUBLE	READ_WRITE	No	
SaltAndPepperNoiseLevel: the amount of salt and pepper noise added to the theorical gaussian image	DEV_DOUBLE	READ_WRITE	No	

Image Attributes					
Attribute name	Data Type	X Data Length	Y Data Length	Expert	
Image: the output image	DEV_USHORT	131072	131072	No	

#### **Commands:**

More Details on commands....

<b>Device Commands for Operator Level</b>					
Command name Argument In Argument Out					
Init	DEV_VOID	DEV_VOID			
State	DEV_VOID	DEV_STATE			
Status	DEV_VOID	CONST_DEV_STRING			

#### 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 <code>delete\_device()</code> method and then execute its <code>init\_device()</code> method.

For C++ device server, all the memory allocated in the <code>nit\_device()</code> method must be freed in the <code>delete\_device()</code> method.

The language device descructor automatically calls the <code>delete\_device()</code> method.

• Argin:

**DEV\_VOID** : none.

• Argout:

DEV\_VOID: none.

Command allowed for:

O Tango::RUNNING
O Tango::FAULT

#### 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:

O Tango::RUNNING

O Tango::FAULT

	3 - Status		
•	<b>Description:</b> This command gets the device status (stored in its <i>device_status</i> data member) and returns it to the caller.		
•	Argin: DEV_VOID: none.		
•	Argout: CONST_DEV_STRING: Status description		
þ	Command allowed for: Tango::RUNNING Tango::FAULT		
	ESRF - Software Engineering Group		

Frame Alert
This document is designed to be viewed using the frames feature. If you see this message, you are using a non-frame-capable web client.  Link to Non-frame version.









TANGO Device Server

# BeamImageAnalyzerTest Device Commands Description BeamImageAnalyzerTest Class

Revision: release\_1\_0\_1 - Author: julien\_malik

#### 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 descructor automatically calls the *delete\_device()* method.

• Argin:

**DEV\_VOID**: none.

• Argout:

**DEV\_VOID**: none.

• Command allowed for:

Tango::RUNNINGTango::FAULT

#### 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::RUNNINGTango::FAULT

### 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::RUNNINGTango::FAULT

### **ESRF** - Software Engineering Group