



**TANGO
Device
Server**

Tango Device Server User's Guide

TangoParser Class

**Revision: 1.16 - Author: slim_ayadi
Implemented in Java**

Introduction:

This device server class defines an attribute the value of which is an expression of other Tango attributes. The expression can be defined at runtime in a mathematical syntax.

Class Inheritance:

- fr.esrf.TangoDs.Device_Impl
 - TangoParser

Properties:

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

States:

States	
Names	Descriptions
ALARM	Any of the attributes is in an ALARM state
RUNNING	Internal polling of remote value is active

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
SetExpression	DEVVAR_STRINGARRAY	DEV_VOID
EvaluateExpression	DEV_STRING	DEV_DOUBLE
GetExpression	DEV_STRING	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 *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::ALARM
- 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::ALARM
- 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::ALARM
- Tango::RUNNING

4 - SetExpression

- **Description:** of a given output variable. An array of two string elements, the first is an output variable name, the second being\nits associated expression An array of two string elements, the first is an output variable name, the second being\nits associated expression

- **Argin:**
DEVVAR_STRINGARRAY : An array of two string elements, the first is an output variable name, the second being its associated expression
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ALARM
 - Tango::RUNNING

5 - EvaluateExpression

- **Description:**
- **Argin:**
DEV_STRING :
- **Argout:**
DEV_DOUBLE :
- **Command allowed for:**
 - Tango::ALARM
 - Tango::RUNNING

6 - GetExpression

- **Description:** expression is looked for. variable name for which the expression is looked for.
 - **Argin:**
DEV_STRING : variable name for which the expression is looked for.
 - **Argout:**
DEV_STRING : expression literal
 - **Command allowed for:**
 - Tango::ALARM
 - Tango::RUNNING
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- **Argout:**
DEV_STATE : State Code

- **Command allowed for:**

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- Tango::RUNNING

3 - Status

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- **Argin:**

DEV_VOID : none.

- **Argout:**

CONST_DEV_STRING : Status description

- **Command allowed for:**

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- **Argout:**

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- **Command allowed for:**

- Tango::ALARM
- Tango::RUNNING

5 - EvaluateExpression

- **Description:**

- **Argin:**

DEV_STRING :

- **Argout:**

DEV_DOUBLE :

- **Command allowed for:**
 - Tango::ALARM
 - Tango::RUNNING

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