



TANGO
Device
Server

Tango Device Server User's Guide

StateComposer Class

Revision: release_4_0_0 - Author: katyho
Implemented in Java

Introduction:

This device provides a resum state from a given list of devices state.

Class Inheritance:

- fr.esrf.TangoDs.Device_2Impl
 - StateComposer

Properties:

Device Properties		
Property name	Property type	Description
DeviceNameList	Array of string	The list of device name used to composed the resum state.
PriorityList	Tango::DEVVAR_SHORTARRAY	The priority number of a state (the greater is the most important ex: 14 for FAULT) Call GetTangoStates to know the list of the Tango State order.
CommandNameList	Array of string	The reported commands
PropertyNameList	Array of string	The reported propertis

Device Properties Default Values:

Property Name	Default Values
DeviceNameList	No default value
PriorityList	No default value
CommandNameList	No default value
PropertyNameList	No default value

There is no Class properties.

Attributes:

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
runningDevicesList: The list of the running devices.	DEV_STRING	1000	No
unknownDevicesList: The list of unknown devices.	DEV_STRING	1000	No
devicesStateList: The list of the devices state in string format. Call GetDeviceForIndex to know which device corresponds to an index of the spectrum	DEV_STRING	1000	No
devicesNumberStateList: The list of the devices state in number format. Call GetDeviceForIndex to know which device corresponds to an index of the spectrum. Call GetTangoStates to know the values of tango states.	DEV_SHORT	1000	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
GetTangoStates	DEV_VOID	DEVVAR_STRINGARRAY
GetDeviceForIndex	DEV_SHORT	DEV_STRING
GetPriorityForState	DEV_STRING	DEV_SHORT
UpdateAllProperties	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:**

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:**

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:**

4 - GetTangoStates

- **Description:** This command return the list of the TANGO states and their associated values. Ex : ON = 0, OFF=1
- **Argin:**
DEV_VOID :
- **Argout:**
DEVVAR_STRINGARRAY : The list of the state
- **Command allowed for:**

5 - GetDeviceForIndex

- **Description:** This command the device name for a given index of the spectrum attributes (devicesStateList or devicesNumberStateList)
- **Argin:**
DEV_SHORT : The index of the spectrum attribute
- **Argout:**
DEV_STRING : The name of the associated device
- **Command allowed for:**

6 - GetPriorityForState

- **Description:** This command return the priority associated to a given State.
- **Argin:**
DEV_STRING : The State name (ex:ON, OFF, FAULT)
- **Argout:**
DEV_SHORT : The priority of the state
- **Command allowed for:**

7 - UpdateAllProperties

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

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