



TANGO
Device
Server

TANGO Device Server User's Guide

TangoSpec Class

Revision: - Author: andy.gotz
Implemented in Python

Introduction:

A TANGO device server for SPEC based on SpecClient.

Class Identification:

- **Contact** : at esrf.fr - andy.gotz
- **Class Family** : Sequencer
- **Platform** : All Platforms
- **Bus** : Not Applicable

Class Inheritance:

- PyTango.Device_4Impl
 - TangoSpec

Properties:

Device Properties		
Property name	Property type	Description
Spec	Tango::DEV_STRING	Spec session e.g. localhost:spec
Motors	Tango::DEVVAR_STRINGARRAY	List of spec motors to create e.g. tth, energy, phi
Counters	Tango::DEVVAR_STRINGARRAY	List of SPEC counters to create e.g. mon, det, i0

Device Properties Default Values:

Property Name	Default Values
Spec	localhost:spec
Motors	No default value
Counters	No default value

There is no Class properties.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Output	DEV_STRING	READ	No

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
Motors	DEV_STRING	512	No
Counters	DEV_STRING	512	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
ExecuteCmd	DEVVAR_STRINGARRAY	DEV_STRING
SpecClientPoll	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 - ExecuteCmd

- **Description:**
- **Argin:**
DEVVAR_STRINGARRAY :
- **Argout:**
DEV_STRING :
- **Command allowed for:**

5 - SpecClientPoll

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
- **Polled every 20 ms**

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Device Servers : CVS repository on tango-ds project