



TANGO
Device
Server

MultiFastSteerer

User's Guide

MultiFastSteerer Class

Revision: - Author: peru
Implemented in C++ - CVS repository: ESRF

Introduction:

This class is dedicated to the control of multiple fast steerers, enabling global settings like "set all to ON" or "set all to OFF".

Class Inheritance:

- Tango::Device_4Impl
 - MultiFastSteerer

Class Description:

This class is dedicated to the control of multiple fast steerers, enabling global settings like "set all to ON" or "set all to OFF".

Properties:

Device Properties		
Property name	Property type	Description
FSDeviceList	Array of string	This property is the list of the controlled fast steerers for an instance of a MultipleFastSterer.
LastAction	Tango::DEV_STRING	Describes what was the last global action. Values should be on, off or unknown.
DBCheckedDevices	Array of string	This property is a backup for the attribute CheckedDevices. It is used at startup time.

Device Properties Default Values:

Property Name	Default Values
FSDeviceList	No default value
LastAction	unknown
DBCheckedDevices	No default value

There is no Class properties.

States:

States	
Names	Descriptions
ON	Set when all of the controlled fast steerers are ON.
OFF	Set when all of the controlled fast steerers are OFF.
ALARM	Set when at least one of the controlled fast steerers is not in the state that it should be.
FAULT	Set when at least one of the controlled fast steerers is in the FAULT state.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Alarm	DEV_BOOLEAN	READ	No

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
CheckedDevices	DEV_STRING	200	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
On	DEV_VOID	DEV_VOID
Off	DEV_VOID	DEV_VOID
Reset	DEV_VOID	DEV_VOID
Reconfigure	DEV_VOID	DEV_VOID
GetFaultyDevList	DEV_VOID	DEVVAR_STRINGARRAY
GetLastAction	DEV_VOID	DEV_STRING
AllSteerersAreRemote	DEV_VOID	DEV_BOOLEAN

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 destructor automatically calls the *delete_device()* method.

- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_VOID : none.
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - 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:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - Tango::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::ON
 - Tango::OFF
 - Tango::ALARM

- Tango::FAULT

4 - On

- **Description:** Set all of the controlled fast steerers to the ON state.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - Tango::FAULT

5 - Off

- **Description:** Set all of the controlled fast steerers to the OFF state.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - Tango::FAULT

6 - Reset

- **Description:** Reset all of the controlled fast steerers.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

- Tango::ON
- Tango::OFF
- Tango::ALARM
- Tango::FAULT

7 - Reconfigure

- **Description:** This command reconfigures the device server after a change in the properties.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - Tango::FAULT

8 - GetFaultyDevList

- **Description:** Returns a list of the faulty devices (ex. devices which are ON after a OFF).
- **Argin:**
DEV_VOID :
- **Argout:**
DEVVAR_STRINGARRAY :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - Tango::FAULT

9 - GetLastAction

- **Description:** Returns the last global action as a string.
- **Argin:**
DEV_VOID :
- **Argout:**

DEV_STRING :

- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - Tango::FAULT

10 - AllSteerersAreRemote

- **Description:** Returns true if all fast steerers are REMOTE, else returns false.
- **Argin:**
DEV_VOID :

- **Argout:**
DEV_BOOLEAN :

- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::ALARM
 - Tango::FAULT

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