



TANGO
Device
Server

SY900S_Channel User's Guide

SY900S_Channel Class

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Implemented in C++ - CVS repository: tango-ds

Introduction:

this device controls one channel of the SY900S rack

Class Inheritance:

- Tango::Device_4Impl
 - SY900S_Channel

Properties:

Device Properties		
Property name	Property type	Description
GroupNumber	Tango::DEV_LONG	one group is consisted of severals channels. this property assigns the group number.
ChannelNumber	Tango::DEV_LONG	one channel is contained inside one group. this property assigns the channel number
SY900SGenericProxyName	Tango::DEV_STRING	

Device Properties Default Values:

Property Name	Default Values
GroupNumber	No default value
ChannelNumber	No default value
SY900SGenericProxyName	No default value

There is no Class properties.

States:

States	
Names	Descriptions
ON	channel is activated and the voltage is applied
OFF	channel is not activated and the voltage is not applied
FAULT	a communication problem occurred or out of memory
RUNNING	voltage is changing

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
voltage: is the output voltage of the channel	DEV_DOUBLE	READ_WRITE	No
deltaVoltage: This is a differential voltage = current voltage + delta voltage	DEV_DOUBLE	WRITE	No
targetVoltage: This is the Voltage to reach. This voltage is not applied after setting it. this is the set voltage command group which set the output voltage	DEV_DOUBLE	WRITE	No
channel: channel number	DEV_LONG	READ	No
group: group number	DEV_LONG	READ	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

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 *init_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::FAULT
- 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::ON
 - Tango::OFF
 - Tango::FAULT
 - 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::ON
 - Tango::OFF
 - Tango::FAULT
 - Tango::RUNNING

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