



TANGO
Device
Server

Rohde and Schwarz signal generator device server. User's Guide

RohdeSchwarzSml Class

Revision: start - Author: vedder
Implemented in C++ - CVS repository: tango-ds

Introduction:

This class handles Rohdes and Schwarz signal generators. Supported model is: -SML01

Class Identification:

- **Contact** : at esrf.fr - vedder
- **Class Family** : Instrumentation
- **Platform** : All Platforms
- **Bus** : GPIB
- **Manufacturer** : RohdeSchwarz
- **Reference** : Sml

Class Inheritance:

- Tango::DeviceImpl
 - SignalGenerator
 - RohdeSchwarzSml

Properties:

Device Properties		
Property name	Property type	Description
Gpib_device_name	Tango::DEV_STRING	This is the gpib device exported by gpibDeviceServer that will be controlled.
Mult_factor	Tango::DEV_DOUBLE	Multiplicator factor. Warning Freq mul_factor should never be greater than signed 32bits integer max value.

Device Properties Default Values:

Property Name	Default Values
Gpib_device_name	No default value
Mult_factor	No default value

There is no Class properties.

States:

States	
Names	Descriptions
ON	The device is generating the signal.
OFF	The device is NOT generating the signal.
FAULT	The device is in Fault.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Frequency	DEV_DOUBLE	READ_WRITE	No
Voltage	DEV_DOUBLE	READ_WRITE	No
VoltageOffset	DEV_DOUBLE	READ_WRITE	No
Function	DEV_STRING	READ_WRITE	No
SweepStartFrequency	DEV_DOUBLE	READ_WRITE	No
SweepStopFrequency	DEV_DOUBLE	READ_WRITE	No
SweepTime	DEV_DOUBLE	READ_WRITE	No
TriggerSource	DEV_STRING	READ_WRITE	No
BurstCycles	DEV_LONG	READ_WRITE	No
BurstPhase	DEV_DOUBLE	READ_WRITE	No
Mode	DEV_STRING	READ_WRITE	No
SweepStep	DEV_DOUBLE	READ_WRITE	No
BurstRate	DEV_DOUBLE	READ_WRITE	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

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

4 - On

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::FAULT

5 - Off

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::FAULT

6 - Reset

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::OFF
 - Tango::FAULT

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