



TANGO
Device
Server

Bruker MultiChannel Power Supply User's Guide

BrukerMch Class

Revision: BrukerMch-Release_1_1 - Author: vedder
Implemented in C++ - CVS repository: ESRF

Introduction:

Bruker MultiChannel Power Supply Class

Class Inheritance:

- Tango::Device_4Impl
 - BrukerMch

Properties:

Device Properties		
Property name	Property type	Description
Channels_list	Array of string	List of the channels device names
Taco_device_name	Tango::DEV_STRING	name of the corresponding taco device

Device Properties Default Values:

Property Name	Default Values
Channels_list	No default value
Taco_device_name	NOTACO

There is no Class properties.

States:

States	
Names	Descriptions
ON	*
OFF	*
FAULT	*
UNKNOWN	

Attributes:

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
Current	DEV_DOUBLE	18	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
SetCurrent	DEV_VOID	DEV_VOID
ZeroCurrent	DEV_VOID	DEV_VOID
GetCurrentSetPoints	DEV_VOID	DEVVAR_DOUBLEARRAY
GetChannelsList	DEV_VOID	DEVVAR_STRINGARRAY

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
 - Tango::UNKNOWN

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::UNKNOWN

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::UNKNOWN

4 - On

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

- Tango::OFF
- Tango::FAULT
- Tango::UNKNOWN

5 - Off

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

6 - Reset

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

7 - SetCurrent

- **Description:** This command will apply the setpoint of the Current Attribute of each channel.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :

- **Command allowed for:**

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

8 - ZeroCurrent

- **Description:** set the Current to 0 on each channel. If the power supply is OFF or FAULT, do nothing.

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_VOID :

- **Command allowed for:**

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

9 - GetCurrentSetPoints

- **Description:** This command will read all the current set points on the Bruker single channel devices.

- **Argin:**

DEV_VOID :

- **Argout:**

DEVVAR_DOUBLEARRAY : current set points

- **Command allowed for:**

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

10 - GetChannelsList

- **Description:** This command will return the list of channels controlled by this multichannels device.

- **Argin:**

DEV_VOID :

- **Argout:**

DEVVAR_STRINGARRAY : list of channels controlled by this device

- **Command allowed for:**

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

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