



TANGO
Device
Server

Wrapper for Bpmonup taco device server. User's Guide

TacoBpmonup Class

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

Introduction:

This device is a Tango wrapper for the Taco Bpmonup device server.

Class Inheritance:

- Tango::Device_4Impl
 - TacoBpmonup

Properties:

Device Properties		
Property name	Property type	Description
TacoDeviceName	Tango::DEV_STRING	The TACO device name.

Device Properties Default Values:

Property Name	Default Values
TacoDeviceName	No default value

There is no Class properties.

Attributes:

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
BpmStatus	DEV_BOOLEAN	300	No
ElectrodeA	DEV_FLOAT	300	No
ElectrodeB	DEV_FLOAT	300	No
ElectrodeC	DEV_FLOAT	300	No
ElectrodeD	DEV_FLOAT	300	No
PosX	DEV_FLOAT	300	No
PosZ	DEV_FLOAT	300	No
HardwareStatus	DEV_SHORT	100	No
Incoherence	DEV_FLOAT	300	No
CalibrationA	DEV_FLOAT	300	No
CalibrationB	DEV_FLOAT	300	No
CalibrationC	DEV_FLOAT	300	No
CalibrationD	DEV_FLOAT	300	No
HistoryElectrodeA	DEV_FLOAT	500	No
HistoryElectrodeB	DEV_FLOAT	500	No
HistoryElectrodeC	DEV_FLOAT	500	No
HistoryElectrodeD	DEV_FLOAT	500	No
HistoryIncoherence	DEV_FLOAT	500	No
HistoryDate	DEV_LONG	500	No
PositionsFile	DEV_STRING	2000	No
ElectrodesFile	DEV_STRING	2000	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
SetCalibration	DEVVAR_FLOATARRAY	DEV_VOID
SetIncoherence	DEV_SHORT	DEV_VOID
GetHeadHistory	DEV_SHORT	DEV_VOID
GetPositions	DEV_VOID	DEV_VOID
GetElectrodes	DEV_VOID	DEV_VOID
GetCalibrations	DEV_VOID	DEV_VOID
GetCalibration	DEV_SHORT	DEVVAR_FLOATARRAY

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 - SetCalibration

- **Description:** argin[0] = Bpm head number argin[1] = Calibration value to be set
- **Argin:**
DEVVAR_FLOATARRAY :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

5 - SetIncoherence

- **Description:** Set incoherency reference for the relevant head. If head number is set to 0 then incoherency reference is set for all of the Bpm heads.
- **Argin:**
DEV_SHORT : Bpm head number (0-224)
- **Argout:**
DEV_VOID :
- **Command allowed for:**

6 - GetHeadHistory

- **Description:** Get the history for the relevant Bpm head.
- **Argin:**
DEV_SHORT : Bpm head number (1-224)
- **Argout:**
DEV_VOID :
- **Command allowed for:**

7 - GetPositions

- **Description:** Get fresh position values and store data to dedicated vectors.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

8 - GetElectrodes

- **Description:** Get fresh electrode values and store data to dedicated vectors.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

9 - GetCalibrations

- **Description:** Get fresh calibration values and store data to dedicated vectors.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :

- **Command allowed for:**

10 - GetCalibration

- **Description:** Get the mux calibration factor for the 4 blades of the considered head.
- **Argin:**
DEV_SHORT : Head number (1-224)
- **Argout:**
DEVVAR_FLOATARRAY : Mux calibration factors for blades A to D
- **Command allowed for:**

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