



TANGO
Device
Server

Change the libera database parameters User's Guide

LiberadbControl Class

Revision: Release_1_2 - Author: davidbeltran
Implemented in C++ - CVS repository: tango-ds

Introduction:

This device server allows an easy access to the libera configuration parameters in the database. Any change in the attribute values is stored in the database. A command is provided to reload the parameters from the database (ReloadDb). This server maps any libera device parameter to an attribute.

Class Inheritance:

- Tango::Device_4Impl
 - LiberadbControl

Class Description:

This device server allows an easy access to the libera configuration parameters in the database. Any change in the attribute values is stored in the database. A command is provided to reload the parameters from the database (ReloadDb). This server maps any libera device parameter to an

attribute.

Properties:

Device Properties		
Property name	Property type	Description
LiberaDeviceName	Tango::DEV_STRING	The libera device which parameters will be changed [No default value]

Device Properties Default Values:

Property Name	Default Values
LiberaDeviceName	No default value

There is no Class properties.

States:

States	
Names	Descriptions
UNKNOWN	The device is not initialized yet
ON	The device is initlized and it can connect to the libera device

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Q_OFFSET_1	DEV_DOUBLE	READ_WRITE	No
A_OFFSET_E	DEV_DOUBLE	READ_WRITE	No
B_OFFSET_E	DEV_DOUBLE	READ_WRITE	No
C_OFFSET_E	DEV_DOUBLE	READ_WRITE	No

D_OFFSET_E	DEV_DOUBLE	READ_WRITE	No
X_OFFSET_1	DEV_DOUBLE	READ_WRITE	No
X_OFFSET_2	DEV_DOUBLE	READ_WRITE	No
Z_OFFSET_1	DEV_DOUBLE	READ_WRITE	No
Z_OFFSET_2	DEV_DOUBLE	READ_WRITE	No
Q_OFFSET_2	DEV_DOUBLE	READ_WRITE	No
A_OFFSET_C	DEV_DOUBLE	READ_WRITE	No
B_OFFSET_C	DEV_DOUBLE	READ_WRITE	No
C_OFFSET_C	DEV_DOUBLE	READ_WRITE	No
D_OFFSET_C	DEV_DOUBLE	READ_WRITE	No
X_OFFSET_3_FT	DEV_DOUBLE	READ_WRITE	No
X_OFFSET_3_TT	DEV_DOUBLE	READ_WRITE	No
X_OFFSET_3_BN	DEV_DOUBLE	READ_WRITE	No
X_OFFSET_4	DEV_DOUBLE	READ_WRITE	No
X_OFFSET_5	DEV_DOUBLE	READ_WRITE	No
Z_OFFSET_3_FT	DEV_DOUBLE	READ_WRITE	No
Z_OFFSET_3_TT	DEV_DOUBLE	READ_WRITE	No
Z_OFFSET_3_BN	DEV_DOUBLE	READ_WRITE	No
Z_OFFSET_4	DEV_DOUBLE	READ_WRITE	No
Z_OFFSET_5	DEV_DOUBLE	READ_WRITE	No
Kx	DEV_DOUBLE	READ_WRITE	No
Kz	DEV_DOUBLE	READ_WRITE	No
NSamples	DEV_LONG	READ_WRITE	No
Attenuator1	DEV_SHORT	READ_WRITE	No
Attenuator2	DEV_SHORT	READ_WRITE	No
LiberaDeviceNameStr: It displays the device which is being changed	DEV_STRING	READ_WRITE	No
LiberaDeviceNumber: It indicates the device number to be changed. The number comes from the order in the device parameters property	DEV_SHORT	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
ReloadDb	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::UNKNOWN
 - Tango::ON

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::UNKNOWN

- Tango::ON

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::UNKNOWN
 - Tango::ON

4 - ReloadDb

- **Description:** When this command is executed, the libera device executes the function "Init", so the new values from the database are reloaded to the device
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::UNKNOWN
 - Tango::ON

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