PowerSupply abstract class User's Guide

PowerSupply Class

Revision: keyword substitution - Author: jensmeyer
Implemented in C++ - CVS repository: tango-ds

Introduction:

This is the abstract class for power supplies. It will be the superclass for all concrete implementations of power supplies in TANGO.

Class Inheritance:

- Tango::Device_4Impl
  - PowerSupply

Properties:

There is no Class properties.
There is no Device Properties.

States:

States	
Names	**Descriptions**
ON	The power supply is switched ON
OFF	The power supply is switched off.
FAULT	The power supply indicates a FAULT.

Attributes:

Scalar Attributes			
Attribute name	**Data Type**	**R/W Type**	**Expert**
Current: The powersupply current in amphere	DEV_DOUBLE	READ_WRITE	No
Voltage: The powersupply voltage in volt.	DEV_DOUBLE	READ_WRITE	No
CurrentSetPoint: The current set value as stored in the powersupply.	DEV_DOUBLE	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
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:** Switch the power supply ON.

- **Argin:**
DEV_VOID :

- **Argout:**
DEV_VOID :

- **Command allowed for:**
○ Tango::OFF

5 - Off

- **Description:** Switch the power supply OFF.

- **Argin:**
DEV_VOID :

- **Argout:**
DEV_VOID :

- **Command allowed for:**
○ Tango::ON

6 - Reset

- **Description:** Reset the power supply after a FAULT. It should be in OFF state afterwards.

- **Argin:**
DEV_VOID :

- **Argout:**
DEV_VOID :

- **Command allowed for:**
○ Tango::OFF

○ Tango::FAULT