



TANGO
Device
Server

TANGO Device Server User's Guide

IonPump Class

Revision: keyword substitution - Author: sergi_rubio
Implemented in Python

Introduction:

Tango pseudo-Abstract Class for Ion Pumps, it's a firendly and minimalistic interface to each of the pumps managed through a DUAL or Splitter Device Server. Last update: srubio@cells.es, 2007/09/20

Class Inheritance:

- PyTango.Device_4Impl
 - IonPump

Properties:

Device Properties		
Property name	Property type	Description
IonPumpController	Tango::DEV_STRING	IonPumpController used to read the pump measure
Channel	Tango::DEVVAR_STRINGARRAY	Channel of the IonPumpController used to read this pump

Device Properties Default Values:

Property Name	Default Values
IonPumpController	No default value
Channel	P1

There is no Class properties.

States:

States	
Names	Descriptions
INIT	
ON	Everything works fine
UNKNOWN	It's impossible to communicate with the device
ALARM	Pressure Interlock
FAULT	Cable Interlock
DISABLE	Manual Interlock
OFF	Channel switched off, it is the only state that doesn't rely on parent device state

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Pressure	DEV_DOUBLE	READ	No
Current	DEV_DOUBLE	READ	No
Voltage	DEV_DOUBLE	READ	No
ChannelStatus	DEV_STRING	READ	No
Controller	DEV_STRING	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

Device Commands for Expert Level Only		
Command name	Argument In	Argument Out
On	DEV_VOID	DEV_VOID
Off	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::INIT
 - Tango::ON
 - Tango::UNKNOWN
 - Tango::ALARM
 - Tango::FAULT
 - Tango::DISABLE
 - Tango::OFF

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::INIT
 - Tango::ON
 - Tango::UNKNOWN
 - Tango::ALARM
 - Tango::FAULT
 - Tango::DISABLE
 - Tango::OFF

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::INIT
 - Tango::ON

- Tango::UNKNOWN
- Tango::ALARM
- Tango::FAULT
- Tango::DISABLE
- Tango::OFF

4 - On (for expert only)

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

5 - Off (for expert only)

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

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