

PsImpl Tango Cpp Class

Contents :

- [Description](#)
- [Properties](#)
- [Commands](#)
 - [State](#)
 - [Status](#)
 - [Reset](#)
 - [Off](#)
 - [On](#)
- [Attributes](#)
 - [Current](#)
 - [Voltage](#)
 - [CurrentSetPoint](#)
- [States](#)

PsImpl Class Identification :

Contact : at null - null
Class Family :
Platform :
Bus :
Manufacturer :
Manufacturer ref. :

PsImpl Class Inheritance :

- [Tango::DeviceImpl](#)
 - PowerSupply
 - PsImpl

PsImpl Class Description :

An implementation of a power supply which uses the abstract PowerSupply interface.

PsImpl Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
InterfaceBoard	The interface board to be used. Can be 1 to 8.	short	1
Channel	The channel on the interface board to be used. Can be 0 to 4.	short	0
DefaultVoltage	The default voltage setting to be applied to the power supply	double	120.3

Pslmpl Class Commands				
Name	Input type	Output type	Level	Description
State	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its <i>device_state</i> data member) and returns it to the caller.
Status	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its <i>device_status</i> data member) and returns it to the caller.
Reset	DEV_VOID	DEV_VOID	OPERATOR	Reset a fault on the power supply.
Off	DEV_VOID	DEV_VOID	OPERATOR	Switch off the power supply.
On	DEV_VOID	DEV_VOID	OPERATOR	Switch on the power supply.

Command State :

This command gets the device state (stored in its *device_state* data member) and returns it to the caller.

State Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::DEV_STATE	State Code
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Status :

This command gets the device status (stored in its *device_status* data member) and returns it to the caller.

Status Definition		
Input Argument	Tango::DEV_VOID	none.
Output Argument	Tango::CONST_DEV_STRING	Status description
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Reset :

Reset a fault on the power supply.

Reset Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	<ul style="list-style-type: none">• ON• OFF• ALARM	..

Command Off :

Switch off the power supply.

Off Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	<ul style="list-style-type: none">• OFF• FAULT• MOVING	..

Command On :

Switch on the power supply.

On Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	<ul style="list-style-type: none">• ON• FAULT• MOVING• ALARM	..

Psimpl Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
Current	true	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	The current of the power supply
Voltage	true	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	The voltage value of the power supply
CurrentSetPoint	true	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	The current set value as stored in the powersupply.

There is no dynamic attribute defined.

Attribute Current :

The current of the power supply

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	true
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	Not set
Read allowed for	All states

Attribute Properties	
label	Current
unit	A
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false

Write allowed for	All states
-------------------	------------

Push DataReady event by user code	Not set
-----------------------------------	---------

Attribute Voltage :

The voltage value of the power supply

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	true
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	Voltage
unit	V
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute CurrentSetPoint :

The current set value as stored in the powersupply.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	true
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	Current Set Point
unit	A
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Pslmpl Class States	
Name	Description
ON	The power supply is switched on
OFF	The power supply is switched off
FAULT	The power supply has detected a fault.
MOVING	The power supply is ramping up or down.
ALARM	Powers supply indicates an alarm