SimPowerSupply Tango Cpp Class

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SimPowerSupply Class Identification :

Contact	: at esrf.fr - yohann.lavigne
Class Family	: PowerSupply
Platform	: Unix Like
Bus	: Not Applicable
Manufacturer	: none
Manufacturer ref.	:

SimPowerSupply Class Inheritance :

- Tango::DeviceImpl
  - SimPowerSupply

SimPowerSupply Class Description :

This class is able to simulate a power supply

SimPowerSupply Properties :

There is no class properties

Device Properties			
Name	**Description**	**Type**	**Default Value**
Impedance	Charge impedance	double	10
DecayTime	decay Time of simulate curse	double	50

SimPowerSupply Class Commands				
Name	**Input type**	**Output type**	**Level**	**Description**
State	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its *device_state* data member) and returns it to the caller.
Status	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its *device_status* data member) and returns it to the caller.
On	DEV_VOID	DEV_VOID	OPERATOR	Switch powersupply ON.
Off	DEV_VOID	DEV_VOID	OPERATOR	Switch powersupply OFF.
Reset	DEV_VOID	DEV_VOID	OPERATOR	Reset the powersupply to a well known state.

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	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command On :

Switch powersupply ON.

On Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Off :

Switch powersupply OFF.

Off Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Reset :

Reset the powersupply to a well known state.

Reset Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

SimPowerSupply Class Attributes							
Name	**Inherited**	**Abstract**	**Attr. type**	**R/W type**	**Data type**	**Level**	**Description**
Current	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	The simulated power supply current
Voltage	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	The simulated power

							supply voltage
WaterFault	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	set a water fault on simulated power supply.
OverCurrent	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	set a over current fault on simulated power supply.
OverTemperature	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	set a over temperature fault on simulated power supply.

There is no dynamic attribute defined.

Attribute Current :

The simulated power supply current

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

Attribute Properties	
label	
unit	mA
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	

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	

for	

delta_val	

code	false
Push Archive event by user code	false
Push DataReady event by user code	Not set

Attribute Voltage :

The simulated power supply voltage

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

Attribute Properties	
label	
unit	Volt
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 WaterFault :

set a water fault on simulated power supply.

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

Attribute Properties
label
unit
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 OverCurrent :

set a over current fault on simulated power supply.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_BOOLEAN
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled

Attribute Properties
label
unit
standard unit
display unit
format
max_value
min_value
max_alarm

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
	Not

~~Memorized~~	~~Not set~~
Read allowed for	All states
Write allowed for	All states

min_alarm
max_warning
min_warning
delta_time
delta_val

Archive Relative Change	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 OverTemperature :

set a over temperature fault on simulated power supply.

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

Attribute Properties
label
unit
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

SimPowerSupply Class States	
Name	**Description**
ON	The simulated power supply is ON.
OFF	The simulated power supply is OFF.
ALARM	The simulated power supply is ALARM
FAULT	The simulated power supply is FAULT