LomEnergy Tango Cpp Class

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LomEnergy Class Identification :

Contact	: at desy.de - thorsten.kracht
Class Family	: Motion
Platform	: Unix Like
Bus	: Not Applicable
Manufacturer	: none
Manufacturer ref.	:

LomEnergy Class Inheritance :

- Tango::DeviceImpl
  - LomEnergy

LomEnergy Class Description :

a server that operates the Lom axes to set the energy

LomEnergy Properties :

There is no class properties

Device Properties			
Name	**Description**	**Type**	**Default Value**
SimulationMode		int	0

LomEnergy 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.
StopMove	DEV_VOID	DEV_VOID	OPERATOR	stop the Lom
Calibrate	DEV_DOUBLE	DEV_LONG	OPERATOR	calibrates the Lom axes
ResetMotor	DEV_VOID	DEV_VOID	OPERATOR	reset one of the Lom axes

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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	false	..
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 StopMove :

stop the Lom

StopMove 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 Calibrate :

calibrates the Lom axes

Calibrate Definition		
Input Argument	Tango::DEV_DOUBLE	
Output Argument	Tango::DEV_LONG	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• MOVING • FAULT	..

Command ResetMotor :

reset one of the Lom axes

ResetMotor 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	..

LomEnergy Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
Position	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	the energy of the Lom monochromator
ConstantExit	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	vertical difference between the

							xtals, about 1250 mm
PositionSim	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	no moves involved, setting PositionSim sets the Lin1Sim, \nLin2Sim, Pitch1Sim and Pitch2Sim
D_Crystal	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	the crystal spacing. from lat1, lat2
UnitLimitMin	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	the energy of the Lom monochromator
UnitLimitMax	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	the energy of the Lom monochromator
ResultSim	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	stores the result of PositionSim, pairs of motor\nnames and positions

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There is no dynamic attribute defined.

Attribute Position :

the energy of the Lom monochromator

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	

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

~~Polling Period~~	~~Not polled~~
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

min_value
max_alarm
min_alarm
max_warning
min_warning
delta_time
delta_val

	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 ConstantExit :

vertical difference between the xtals, about 1250 mm

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	true
Write hardware at init.	true
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 PositionSim :

no moves involved, setting PositionSim sets the Lin1Sim, \nLin2Sim, Pitch1Sim and Pitch2Sim

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 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 D_Crystal :

the crystal spacing. from lat1, lat2

Attribute Definition	
Attribute Type	Scalar

Attribute Properties
label

Attribute Event Criteria	
Periodic	Not set
	Not

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

unit
standard unit
display unit
format
max_value
min_value
max_alarm
min_alarm
max_warning
min_warning
delta_time
delta_val

Relative Change	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 UnitLimitMin :

the energy of the Lom monochromator

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	true
Write hardware at init.	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 UnitLimitMax :

the energy of the Lom monochromator

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	true
Write hardware at init.	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 ResultSim :

stores the result of PositionSim, pairs of motor\nnames and positions

Attribute Definition	
Attribute Type	Spectrum (100)
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read 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

LomEnergy Class States	
Name	**Description**
ON	
MOVING	
FAULT	