

PicoScaleAxis Tango Cpp Class

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PicoScaleAxis Class Identification :

Contact : at desy.de - johannes.blume
 Class Family : Instrumentation
 Platform : Unix Like
 Bus : Not Applicable
 Manufacturer : SmarAct
 Manufacturer ref. : <http://www.smaract.de/index.php/products/picoscale>

PicoScaleAxis Class Inheritance :

- o [Tango::DeviceImpl](#)
 - PicoScaleAxis

PicoScaleAxis Class Description :

PicoScaleAxis Properties :

There is no class properties

Device Properties			

Name	Description	Type	Default Value
AxisNumber	Axis number (0-2)	int	none
Controller	Name of PicoScaleCtrl device	String	none
DynAttrList	for internal use only	String[]	none

PicoScaleAxis 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.

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	Device state
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	Device status
DisplayLevel	OPERATOR	..

Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

PicoScaleAxis Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
ChannelEnabled	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	
ChannelValid	false	false	Scalar	READ	Tango::DEV_BOOLEAN	OPERATOR	
QuadOutEnable	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	
QuadOutStepSize	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	
QuadOutFrequency	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	

PicoScaleAxis Class Dynamic Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
DoubleDynAttr	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	
UShortDynAttr	false	false	Scalar	READ	Tango::DEV_USHORT	OPERATOR	
BoolDynAttr	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	
DevDoubleArrayDynAttr	false	false	Spectrum	READ	Tango::DEV_DOUBLE	OPERATOR	

Attribute ChannelEnabled :

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	

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

Memorized	true
Write hardware at init.	Not set
Read NOT allowed for	<ul style="list-style-type: none"> • FAULT • MOVING
Write NOT allowed for	<ul style="list-style-type: none"> • RUNNING • ALARM • FAULT • EXTRACT • MOVING

max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

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	false

Attribute ChannelValid :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_BOOLEAN
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> • FAULT • MOVING

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	false

Attribute QuadOutEnable :

Attribute	

Attribute	

Attribute Event Criteria	

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

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

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	false

Attribute QuadOutStepSize :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
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	false

Attribute QuadOutFrequency :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
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	false

Dynamic attribute DoubleDynAttr :

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

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
Archive Relative Change	Not

Read allowed for	All states

min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

	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	false

Dynamic attribute UShortDynAttr :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_USHORT
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	false

Dynamic attribute BoolDynAttr :

Attribute Definition	

Attribute Properties	

Attribute Event Criteria	
	Not

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

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

Periodic	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	false

Dynamic attribute DevDoubleArrayDynAttr :

Attribute Definition	
Attribute Type	Spectrum (2147483647)
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	
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	false

PicoScaleAxis Class States	
Name	Description
ON	Everything ok
RUNNING	Data collection is running
ALARM	Something is wrong, check status
FAULT	Something is wrong, check status
EXTRACT	Data collection has finished, data are being processed / written to file
MOVING	Adjustment procedure is running