

## KohzuSCMultiAxis Tango Cpp Class

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### KohzuSCMultiAxis Class Identification :

Contact : at desy.de - maria-teresa.nunez-pardo-de-vera  
 Class Family : Motion  
 Platform : Unix Like  
 Bus : GPIB  
 Manufacturer : none  
 Manufacturer ref. :

### KohzuSCMultiAxis Class Inheritance :

- [Tango::DeviceImpl](#)
  - KohzuSCMultiAxis

### KohzuSCMultiAxis Class Description :

Perform multiple movements of Kohzu axes.

### KohzuSCMultiAxis Properties :

There is no class properties

Device Properties			

Name	Description	Type	Default Value
KohzuSCCtrlDevice	KohzuSCCtrl server for GPIB interface	String	none
PrintDebugInfo	If 1 the debug info is printed	int	none
SimulationMode	0 -> real mode, 1 -> simulation mode	int	none
Axis1Device	Tango Device name of the axis 1.	String	none
Axis2Device	Tango device name of axis 2.	String	none
Axis3Device	Tango device name of axis 3.	String	none
Axis4Device	Tango device name of axis 4.	String	none

KohzuSCMultiAxis Class Commands				
Name	Input type	Output type	Level	Description
<a href="#">State</a>	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.
<a href="#">Status</a>	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.
<a href="#">MultiAxisDrive</a>	DEV_VOID	DEV_VOID	OPERATOR	Performs multiaxis position drive. Number of motors and positions to go read from attributes.
<a href="#">LinearAxisDrive</a>	DEV_VOID	DEV_VOID	OPERATOR	Performs linear interpolation drive. Number of motors and positions to go read from attributes. Maximum 3 axis at a time.

### **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	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

### **Command MultiAxisDrive :**

Performs multiaxis position drive. Number of motors and positions to go read from attributes.

MultiAxisDrive 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 LinearAxisDrive :**

Performs linear interpolation drive. Number of motors and positions to go read from attributes. Maximum 3 axis at a time.

LinearAxisDrive 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	..

KohzuSCMultiAxis Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
<a href="#">Position1</a>	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	Position to move motor 1
<a href="#">Position2</a>	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	Position to move motor 1
<a href="#">Position3</a>	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	Position to move motor 1
<a href="#">Position4</a>	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	Position to move motor 1
<a href="#">MotorsToMove</a>	false	false	Spectrum	READ_WRITE	Tango::DEV_LONG	OPERATOR	If the element of the spectrum is 1, the corresponding motor will be moved in the multiple movement.
<a href="#">ConversionNumerators</a>	false	false	Spectrum	READ	Tango::DEV_LONG	OPERATOR	
<a href="#">ConversionDenominators</a>	false	false	Spectrum	READ	Tango::DEV_LONG	OPERATOR	

**There is no dynamic attribute defined.**

**Attribute Position1 :**

Position to move motor 1

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

Attribute Properties	
label	
unit	
standard unit	grads
display unit	grads

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

Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write allowed for	All states

format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

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 Position2 :**

Position to move motor 1

<b>Attribute Definition</b>	
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

<b>Attribute Properties</b>	
label	
unit	
standard unit	grads
display unit	grads
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

<b>Attribute Event Criteria</b>	
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 Position3 :**

Position to move motor 1

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	grads
display unit	grads
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 Position4 :**

Position to move motor 1

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	grads
display unit	grads
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 code	false

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

**Attribute MotorsToMove :**

If the element of the spectrum is 1, the corresponding motor will be moved in the multiple movement.

Attribute Definition	
Attribute Type	Spectrum ( 4 )
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	1
min_value	0
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 ConversionNumerators :**

Attribute Definition	
Attribute Type	Spectrum ( 4 )
R/W Type	READ
Data Type	Tango::DEV_LONG

Attribute Properties	
label	
unit	
standard unit	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
	Not

Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Absolute Change	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 ConversionDenominators :**

Attribute Definition	
Attribute Type	Spectrum ( 4 )
R/W Type	READ
Data Type	Tango::DEV_LONG
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



<b>KohzuSCMultiAxis Class States</b>	
<b>Name</b>	<b>Description</b>
ON	
MOVING	
FAULT	