

LibXRay Tango Cpp Class

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LibXRay Class Identification :

Contact : at desy.de - johannes.blume
 Class Family : Calculation
 Platform : Unix Like
 Bus : Not Applicable
 Manufacturer :
<https://github.com/tschoonj/xraylib/wiki>
 Manufacturer ref. :

LibXRay Class Inheritance

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

LibXRay Class Description :

Tango device server to interface to xraylib (<https://github.com/tschoonj/xraylib/wiki>)

LibXRay Properties :

There is no class properties

There is no device properties

LibXRay 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.
AtomicWeight	DEV_LONG	DEV_DOUBLE	OPERATOR	None.
ElementDensity	DEV_LONG	DEV_DOUBLE	OPERATOR	None.
CrossSection	DEVVAR_DOUBLEARRAY	DEV_DOUBLE	OPERATOR	None.
NameToNumber	DEV_STRING	DEV_LONG	OPERATOR	Returns element number for element name

NumberToName	DEV_LONG	DEV_STRING	OPERATOR	Returns element name for element number
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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	Device state
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	Device status
DisplayLevel	OPERATOR	..

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

Command AtomicWeight :

AtomicWeight Definition		
Input Argument	Tango::DEV_LONG	Atomic number of element
Output Argument	Tango::DEV_DOUBLE	Atomic weight of element
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command ElementDensity :

ElementDensity Definition		
Input Argument	Tango::DEV_LONG	Element Number
Output Argument	Tango::DEV_DOUBLE	density at room temperature in g/cm3
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..

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

Command CrossSection :

CrossSection Definition		
Input Argument	Tango::DEVVAR_DOUBLEARRAY	0: element number 1: energy (keV) 2: mode, 0 = total absorption cross section 1 = photoionization cross section 2 = Rayleigh scattering cross section 3 = Compton scattering cross section 4 - unit, 0 = cm2/g, 1 = barn/atom
Output Argument	Tango::DEV_DOUBLE	cross section according to input
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command NameToNumber :

Returns element number for element name

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

Command NumberToName :

Returns element name for element number

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

There is no attribute defined.

There is no dynamic attribute defined.

There is no state defined