

## WagoRelay Tango Cpp Class

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### WagoRelay Class Identification :

Contact : at esrf.fr - chaize  
Class Family : InputOutput  
Platform : All Platforms  
Bus : Ethernet  
Manufacturer : none  
Manufacturer ref. :

### WagoRelay Class Inheritance :

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

### WagoRelay Class Description :

A class to handle WAGO digital I/O modules.

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## WagoRelay Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
Modbus_name	Name of the modbus device.	String	none
Channel	Position index of the digital input or output. From 0 for the first input (output) to nb_input_module (nb_output_module) - 1.	short	none
Init_position	Initial relay position wrote at startup : ``OPEN`` or ``CLOSE`` If the property is not set, nothing happens at startup.	String	none
Type	Type of the digital I/O : ``INPUT`` or ``OUTPUT`` or ``INOUT``  Where : INPUT : Read only relay OUTPUT : Write only relay INOUT : Read write relay	String	none
Is_Pulsed	True to authorize this relay to be pulsed.	boolean	none

WagoRelay 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="#">Open</a>	DEV_VOID	DEV_VOID	OPERATOR	Open the relay.
<a href="#">Close</a>	DEV_VOID	DEV_VOID	OPERATOR	Close the relay.
<a href="#">Pulse</a>	DEV_LONG	DEV_VOID	OPERATOR	Make a pulse with the relay. It goes from currentPosition to !currentPosition and then go back to currentPosition. Only PULSED relay supports this command. Does not have effects in other case.
<a href="#">changeState</a>	DEV_STATE	DEV_VOID	OPERATOR	changes the state of the relay to OPEN or CLOSE.

### **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	..

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## Command Open :

Open the relay.

Open Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• MOVING	..

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## **Command Close :**

Close the relay.

<b>Close Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• MOVING	..

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## **Command Pulse :**

Make a pulse with the relay. It goes from currentPosition to !currentPosition and then go back to currentPosition.

Only PULSED relay supports this command. Does not have effects in other case.

<b>Pulse Definition</b>		
Input Argument	Tango::DEV_LONG	width of pulse (millisec)
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..

Command NOT allowed for	• MOVING	..
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**Command changeState :**

changes the state of the relay to OPEN or CLOSE.

changeState Definition		
Input Argument	Tango::DEV_STATE	Only OPEN( = 3) or CLOSE ( = 2)
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• MOVING	..

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**There is no attribute defined.**

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**There is no dynamic attribute defined.**

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## WagoRelay Class States

Name	Description
OPEN	The relay is OPEN. (Channel value=0)
CLOSE	The relay is closed. (Channel value=1)
MOVING	The device is executing a pulse.