



TANGO
Device
Server

Machine interlock device server. User's Guide

MachineInterlock Class

Revision: Release_1_0 - Author: peru
Implemented in C++ - CVS repository: ESRF

Introduction:

This device server is dedicated to the control of the machine interlock system.

Class Inheritance:

- Tango::Device_4Impl
 - MachineInterlock

Properties:

Class Properties		
Property name	Property type	Description
UpdatePeriod	Tango::DEV_SHORT	The rate (in second) at which the PLC is read.

Device Properties		
Property name	Property type	Description
PlcDeviceName	Tango::DEV_STRING	The device name of the modbus device.
LatchWord	Tango::DEV_SHORT	This is the address of the latch word. By default set to 9999 in order to know if there is a latch or not.
LatchBit	Tango::DEV_SHORT	This is the bit index in the latch word. By default set to 9999 in order to know if there is a latch or not.
LiveWord	Tango::DEV_SHORT	This is the address of the live word. By default set to 9999 in order to know if there is a latch or not.
LiveBit	Tango::DEV_SHORT	This is the bit index in the live word. By default set to 9999 in order to know if there is a latch or not.
BitLogic	Tango::DEV_STRING	This defines the behaviour of the logic: - If POSITIVE (default) then a 1 is OK - If NEGATIVE then a 0 is OK.
ResetAddress	Tango::DEV_SHORT	Address at which to write in order to reset.
ResetBit	Tango::DEV_SHORT	Bit at which to write in order to reset.

Class Properties Default Values:

Property Name	Default Values
UpdatePeriod	2

Device Properties Default Values:

Property Name	Default Values
PlcDeviceName	No default value
LatchWord	9999
LatchBit	9999
LiveWord	9999
LiveBit	9999
BitLogic	POSITIVE
ResetAddress	No default value
ResetBit	No default value

Commands:

More Details on commands....

Device Commands for Operator Level		
Command name	Argument In	Argument Out
Init	DEV_VOID	DEV_VOID
State	DEV_VOID	DEV_STATE
Status	DEV_VOID	CONST_DEV_STRING
Reset	DEV_VOID	DEV_VOID
On	DEV_VOID	DEV_VOID

1 - Init

- **Description:** This commands re-initialise a device keeping the same network connection. After an Init command executed on a device, it is not necessary for client to re-connect to the device. This command first calls the device *delete_device()* method and then execute its *init_device()* method. For C++ device server, all the memory allocated in the *nit_device()* method must be freed in the *delete_device()* method. The language device desctructor automatically calls the *delete_device()* method.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_VOID : none.
- **Command allowed for:**

2 - State

- **Description:** This command gets the device state (stored in its *device_state* data member) and returns it to the caller.
- **Argin:**
DEV_VOID : none.
- **Argout:**
DEV_STATE : State Code

- **Command allowed for:**

3 - Status

- **Description:** This command gets the device status (stored in its *device_status* data member) and returns it to the caller.
- **Argin:**
DEV_VOID : none.
- **Argout:**
CONST_DEV_STRING : Status description
- **Command allowed for:**

4 - Reset

- **Description:** Reset the event bit.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

5 - On

- **Description:** Command added for compatibility with the original graphics application. This function calls exactly the same code than the command Reset.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

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