



**TANGO
Device
Server**

Flip/Flop Element Controller User's Guide

FlipFlopElement Class

**Revision: release_1_2_0 - Author: leclercq
Implemented in C++**

Introduction:

Provides support for controlling a flip/flop device using a DIO_7432 [or compatible] board. A flip/flop device abstract any 'on/off' system [i.e. any device for which the 'on/off' semantic is applicable]

Properties:

Device Properties

Property name	Property type	Description
DIODeviceName	Tango::DEV_STRING	Name of the underlying DIO device [DIO_7432 or compatible - no default value]
DIODeviceCtrlLine	Tango::DEV_STRING	DIO device's line used to control the screen [no default value]
Logic	Tango::DEV_STRING	Use "HIGH" for active high or "LOW" for active low [no default value]

Device Properties Default Values:

Property Name	Default Values
DIODeviceName	No default value
DIODeviceCtrlLine	No default value
Logic	No default value

There is no Class properties.

States:

States	
Names	Descriptions
FAULT	The underlying DIO device is in FAULT state or unreachable
ON	The flip-flop element is
OFF	The flip-flop element is

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
On	DEV_VOID	DEV_VOID
Off	DEV_VOID	DEV_VOID
GetDependencies	DEV_VOID	DEVVAR_STRINGARRAY

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:**
 - Tango::FAULT
 - Tango::ON
 - Tango::OFF

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:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

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:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

4 - On

- **Description:**

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEV_VOID : N/A

- **Command allowed for:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

5 - Off

- **Description:**

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEV_VOID : N/A

- **Command allowed for:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

6 - GetDependencies

- **Description:** Returns the list of devices on which this device depends

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEVVAR_STRINGARRAY : The list of devices on which this device depends

- **Command allowed for:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

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- **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:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

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:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

4 - On

- **Description:**

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEV_VOID : N/A

- **Command allowed for:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

5 - Off

- **Description:**

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEV_VOID : N/A

- **Command allowed for:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

6 - GetDependencies

- **Description:** Returns the list of devices on which this device depends

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEVVAR_STRINGARRAY : The list of devices on which this device depends

- **Command allowed for:**

- Tango::FAULT
- Tango::ON
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- **Argout:**

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- **Command allowed for:**

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- Tango::ON
- Tango::OFF

4 - On

- **Description:**

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEV_VOID : N/A

- **Command allowed for:**

- Tango::FAULT
- Tango::ON
- Tango::OFF

5 - Off

- **Description:**

- **Argin:**

DEV_VOID : N/A

- **Argout:**

DEV_VOID : N/A

- **Command allowed for:**
 - Tango::FAULT
 - Tango::ON
 - Tango::OFF

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