MessageTrigger
User's Guide

MessageTrigger Class

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Implemented in C++ - CVS repository: tango-ds

Introduction:

reads attributes on device proxy by using a polled command. Each time a changement of the attribute value is detected, the device triggers the {talk} command of the TalkManager device. Actually, it is the interface between the TextTalker and a device which contains a attribute to evaluate as theTangoParser Device.

Class Inheritance:

- Tango::Device_4Impl
  - MessageTrigger

Class Description:

reads attributes on device proxy by using a polled command. Each time a changement of the attribute value is detected, the device triggers the {talk} command of the TalkManager device. Actually, it is the interface between the TextTalker and a device which contains a attribute to evaluate as

Properties:

Device Properties		
Property name	**Property type**	**Description**
MessageList	Array of string	This property enclosed the list of attributes to evaluate and the true/false associated messages. the pattern of one element is: AttributeProxyName,message_if_condition_true,message_if_condition_false; (don't forget the ' ; ' at the end of the string !!!) If you don't want send a message even if the true / false condition occured you have to fill the concerned field with ' NULL '
LastRecordedState	Array of double	contains the last states of the attributes to control
TextTalkerProxyName	Tango::DEV_STRING	TextTalker device Proxy Name
ParserProxyName	Tango::DEV_STRING	Parser Device Proxy Name

Device Properties Default Values:

Property Name	**Default Values**
MessageList	No default value
LastRecordedState	No default value
TextTalkerProxyName	No default value
ParserProxyName	No default value

There is no Class properties.

States:

States	
Names	**Descriptions**
ON	The polling on the Trigger command is activated
OFF	The polling on the Trigger command is not activated
ALARM	communication with TextTalker is broken

Attributes:

Spectrum Attributes

Attribute name	Data Type	X Data Length	Expert
sentMessageList: list of sent messages to the TexTalkerDevice	DEV_STRING	10000	No

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
Trigger	DEV_VOID	DEV_VOID

Device Commands for Expert Level Only

Command name	Argument In	Argument Out
Start	DEV_VOID	DEV_VOID
Stop	DEV_VOID	DEV_VOID
ClearMessageListAttr	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:**
- Tango::ON
- Tango::OFF
- Tango::ALARM

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::ON
- Tango::OFF
- Tango::ALARM

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::ON
- Tango::OFF
- Tango::ALARM

4 - Start (for expert only)

- **Description:** Start the monitoring of target attributes defined in the MessageList property

- **Argin:**
  DEV_VOID : nothing

- **Argout:**
  DEV_VOID : nothing

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

5 - Stop (for expert only)

- **Description:** Stop the monitoring of target attributes defined in the MessageList property

- **Argin:**
  DEV_VOID : nothing

- **Argout:**
  DEV_VOID : nothing

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

6 - Trigger

- **Description:** triggers the DevTalk command for each attribute of the messageList which has changed

- **Argin:**
  DEV_VOID : nothing

- **Argout:**
  DEV_VOID : nothing

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

- **Polled every 2000 ms**

7 - ClearMessageListAttr (for expert only)

- **Description:** clear the sentMessageList attribute

- **Argin:**

DEV_VOID : nothing

- **Argout:**
  DEV_VOID : nothing

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