



**TANGO
Device
Server**

TANGO Device Server User's Guide

AttributeMonitor Class

**Revision: - Author: peru
Implemented in Python**

Introduction:

This device server is intended to monitor some attributes values, to check the values versus a reference and to trigger a voice alarm when required.

Class Identification:

- **Contact** : at esrf.fr - peru
- **Class Family** : Miscellaneous
- **Platform** : All Platforms
- **Bus** : Not Applicable

Class Inheritance:

- PyTango.Device_4Impl
 - AttributeMonitor

Properties:

Device Properties		
Property name	Property type	Description
VoiceDeviceName	Tango::DEV_STRING	The device name of the voice device server.
DeviceName	Tango::DEV_STRING	The name of the device to monitor an attribute.
AttributeName	Tango::DEV_STRING	The name of the attribute to be monitored.
AlarmTrigger	Tango::DEV_STRING	The formula which will fire the alarm.
AlarmMessage	Tango::DEV_STRING	The message which will be emitted.

Device Properties Default Values:

Property Name	Default Values
VoiceDeviceName	sys/talker/2
DeviceName	No default value
AttributeName	No default value
AlarmTrigger	No default value
AlarmMessage	No default value

There is no Class properties.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
IsAlarm	DEV_BOOLEAN	READ	No
AlarmTrigger	DEV_STRING	READ	No
AlarmMessage	DEV_STRING	READ	No
MonitoredAttribute	DEV_STRING	READ	No
Enabled	DEV_BOOLEAN	READ_WRITE	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
ToggleDebug	DEV_VOID	DEV_VOID
UpdateTrigger	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 - ToggleDebug

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

5 - UpdateTrigger

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

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