



TANGO
Device
Server

Mar345 Controller User's Guide

Mar345Ctrl Class

**Revision: - Author: tnunez
Implemented in C++**

Introduction:

Class for making the socket connection to the Mar345 Server.

Class Identification:

- **Contact** : at mail.desy.de - tnunez
- **Class Family** : Instrumentation
- **Platform** : Unix Like
- **Bus** : Data Socket
- **Manufacturer** : Rayonix
- **Reference** : mar345

Class Inheritance:

- Tango::Device_4Impl
 - Mar345Ctrl

Properties:

Device Properties		
Property name	Property type	Description
IpAddr	Tango::DEV_STRING	Ip address of the server computer.
PortNb	Tango::DEV_LONG	Port Number for connecting to the detector server.
SimulationMode	Tango::DEV_ULONG	0 -> real mode, 1 -> simulation mode

Device Properties Default Values:

Property Name	Default Values
IpAddr	No default value
PortNb	No default value
SimulationMode	0

There is no Class properties.

States:

States	
Names	Descriptions
ON	
FAULT	
MOVING	

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
LastSetMode	DEV_LONG	READ	No
SavingDirectory	DEV_STRING	READ_WRITE	No
SavingPrefix	DEV_STRING	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
WriteReadSocket	DEV_STRING	DEV_STRING
Erase	DEV_VOID	DEV_VOID
Scan	DEV_VOID	DEV_VOID
ChangeMode	DEV_LONG	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::FAULT
- Tango::MOVING

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::FAULT
 - Tango::MOVING

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::FAULT
 - Tango::MOVING

4 - WriteReadSocket

- **Description:** Writes a command to the socket and gets the answer.
- **Argin:**
DEV_STRING : Command
- **Argout:**
DEV_STRING : Answer
- **Command allowed for:**

- Tango::ON
- Tango::FAULT
- Tango::MOVING

5 - Erase

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::FAULT
 - Tango::MOVING

6 - Scan

- **Description:**
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**
 - Tango::ON
 - Tango::FAULT
 - Tango::MOVING

7 - ChangeMode

- **Description:** Change the scanmode to: 1200, 1600, 2000, 2300, 1800, 2400, 3000 or 3450.
- **Argin:**
DEV_LONG : Mode to set.
- **Argout:**
DEV_VOID :
- **Command allowed for:**

- Tango::ON
- Tango::FAULT
- Tango::MOVING

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