



**TANGO**  
Device  
Server

# AxisRawDataReader User's Guide

## AxisRawDataReader Class

Revision: release\_2\_3\_10 - Author: coquet  
Implemented in C++

### Introduction:

provides read-only raw data from the specified axis

### Class Inheritance:

- Tango::Device\_3Impl
  - AxisRawDataReader

### Properties:

**There is no Class properties.**  
**There is no Device Properties.**

## States:

States	
Names	Descriptions
<b>OPEN</b>	communication with CB OK
<b>UNKNOWN</b>	communication with CB failed

## Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
<b>axisNumber</b> : number of the axis to be displayed from 0 (A) to 7 (H)	DEV_USHORT	READ_WRITE	No
<b>axisLetter</b> : Axis letter selected by axis number	DEV_STRING	READ	No
<b>encoder</b> : Main Encoder Position id. TP	DEV_LONG	READ	No
<b>auxiliary</b> : displays the stepper motor position or servo second encoder id TD command	DEV_LONG	READ	No
<b>commandedPos</b> : displays the commanded position (the position requested by the ControlBox) id. RP	DEV_LONG	READ	No
<b>velocity</b> : displays the instantaneous velocity	DEV_LONG	READ	No
<b>analogInput</b> : displays the analog input value id. MG @AN[n]	DEV_DOUBLE	READ	No
<b>homeInput</b> : State of the Home Input	DEV_BOOLEAN	READ	No
<b>latchInput</b> : state of the Latch Input	DEV_BOOLEAN	READ	No
<b>latchOccured</b> : latch of encoder position occurred since last latch arming	DEV_BOOLEAN	READ	No
<b>latchIsArmed</b> : latch is armed, ready to latch the encoder position	DEV_BOOLEAN	READ	No

## Commands:

More Details on commands....

## Device Commands for Operator Level

Command name	Argument In	Argument Out
<b>Init</b>	DEV_VOID	DEV_VOID
<b>State</b>	DEV_VOID	DEV_STATE
<b>Status</b>	DEV_VOID	CONST_DEV_STRING
<b>ReportLatchedPosition</b>	DEV_VOID	DEV_LONG
<b>ArmLatch</b>	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::OPEN
  - Tango::UNKNOWN

### 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::OPEN
  - Tango::UNKNOWN

### 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::OPEN
- Tango::UNKNOWN

## 4 - ReportLatchedPosition

- **Description:** returns the last latched encoder position exception thrown if there is no latched position

- **Argin:**  
**DEV\_VOID** :

- **Argout:**  
**DEV\_LONG** : the encoder value latched

- **Command allowed for:**

- Tango::OPEN
- Tango::UNKNOWN

## 5 - ArmLatch

- **Description:** arms the latch function to capture the encoder position on edge of latch input

- **Argin:**  
**DEV\_VOID** :

- **Argout:**  
**DEV\_VOID** :

- **Command allowed for:**

- Tango::OPEN
- Tango::UNKNOWN

---

**ESRF - Software Engineering Group**

# Frame Alert

This document is designed to be viewed using the frames feature. If you see this message, you are using a non-frame-capable web client.  
[Link to Non-frame version.](#)



TANGO  
Device  
Server

---

# AxisRawDataReader

## Device Commands Description

### AxisRawDataReader Class

Revision: release\_2\_3\_10 - Author: coquet

## 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 *init\_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::OPEN
  - Tango::UNKNOWN

## 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::OPEN
  - Tango::UNKNOWN

### 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::OPEN
  - Tango::UNKNOWN

### 4 - ReportLatchedPosition

- **Description:** returns the last latched encoder position exception thrown if there is no latched position
- **Argin:**  
**DEV\_VOID** :
- **Argout:**  
**DEV\_LONG** : the encoder value latched
- **Command allowed for:**
  - Tango::OPEN
  - Tango::UNKNOWN

### 5 - ArmLatch

- **Description:** arms the latch function to capture the encoder position on edge of latch input
- **Argin:**  
**DEV\_VOID** :
- **Argout:**  
**DEV\_VOID** :
- **Command allowed for:**

- Tango::OPEN
- Tango::UNKNOWN

---

## **ESRF - Software Engineering Group**