Scan 2D Frontage Device Server User's Guide

Scan2dFront Class

Revision: release_2_0_3 - Author: julien_malik
Implemented in C++ - CVS repository: tango-ds

Introduction:

This class is the Frontage (or Display) for the Scan 2D of the Scan Device Server. It allow to display datas in agreement with the 2D Scan (ie cartography).

Class Description:

This class is the Frontage (or Display) for the Scan 2D of the Scan Device Server. It allow to display datas in agreement with the 2D Scan (ie cartography).

Tango Device Server User's Guide

Properties:

Device Properties		
Property name	**Property type**	**Description**
ScanAttachment	Tango::DEV_STRING	Scan device server attached to

Device Properties Default Values:

Property Name	**Default Values**
ScanAttachment	No default value

There is no Class properties.

States:

States	
Names	**Descriptions**
ON	Ready to scan
MOVING	Scanning
FAULT	Scan 2D is waiting for request

Attributes:

Spectrum Attributes			
Attribute name	**Data Type**	**X Data Length**	**Expert**
Actuator1Data: Data of the 1st actuator	DEV_DOUBLE	10000000	No
Actuator2Data: Data of the 2nd actuator	DEV_DOUBLE	10000000	No
Actuator3Data: Data of the 3rd actuator	DEV_DOUBLE	10000000	No
Actuator4Data: Data of the 4th actuator	DEV_DOUBLE	10000000	No
Actuator5Data: Data of the 5th actuator	DEV_DOUBLE	10000000	No
Actuator6Data: Data of the 6th actuator	DEV_DOUBLE	10000000	No
Actuator7Data: Data of the 7th actuator	DEV_DOUBLE	10000000	No
Actuator8Data: Data of the 8th actuator	DEV_DOUBLE	10000000	No
Actuator2_1Data: Data of the 1st actuator of the 2nd level	DEV_DOUBLE	1000000	No
Actuator2_2Data: Data of the 2nd actuator of the 2nd level	DEV_DOUBLE	1000000	No
Actuator2_3Data: Data of the 3rd actuator of the 2nd level	DEV_DOUBLE	1000000	No
Actuator2_4Data: Data of the 4th actuator of the 2nd level	DEV_DOUBLE	1000000	No
Actuator2_5Data: Data of the 5th actuator of the 2nd level	DEV_DOUBLE	1000000	No
Actuator2_6Data: Data of the 6th actuator of the 2nd level	DEV_DOUBLE	1000000	No
Actuator2_7Data: Data of the 7th actuator of the 2nd level	DEV_DOUBLE	1000000	No
Actuator2_8Data: Data of the 8th actuator of the 2nd level	DEV_DOUBLE	1000000	No

Image Attributes

Attribute name	Data Type	X Data Length	Y Data Length	Expert
Sensor1Data: Data of the 1st sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor2Data: Data of the 2nd sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor3Data: Data of the 3rd sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor4Data: Data of the 4th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor5Data: Data of the 5th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor6Data: Data of the 6th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor7Data: Data of the 7th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor8Data: Data of the 8th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor9Data: Data of the 9th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor10Data: Data of the 10th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor11Data: Data of the 11th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor12Data: Data of the 12th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor13Data: Data of the 13th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor14Data: Data of the 14th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor15Data: Data of the 15th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor16Data: Data of the 16th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor17Data: Data of the 17th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor18Data: Data of the 18th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor19Data: Data of the 19th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	No
Sensor20Data: Data of the 20th sensor of the 2d scan	DEV_DOUBLE	1000000	1000000	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
Start	DEV_VOID	DEV_VOID
Abort	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::MOVING
  - Tango::FAULT

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::MOVING
  - Tango::FAULT

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::MOVING
  - Tango::FAULT

4 - Start

- **Description:** Start the 2D Scan

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

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

5 - Abort

- **Description:** Abort the 2D Scan

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

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