



TANGO
Device
Server

Diris data collector device server

User's Guide

DirisCollector Class

Revision: - Author: peru
Implemented in C++ - CVS repository: ESRF

Introduction:

This device server is intended to collect data from Diris slaves connected to a Diris concentrator.

Class Identification:

- **Contact** : at esrf.fr - peru
- **Class Family** : Instrumentation
- **Platform** : Unix Like
- **Bus** : Serial Line
- **Manufacturer** : SOCOMEC

Class Inheritance:

- Tango::Device_4Impl
 - DirisCollector

Class Description:

This device server is intended to collect data from Diris slaves connected to a Diris concentrator.

Properties:

Device Properties		
Property name	Property type	Description
SerialDeviceName	Tango::DEV_STRING	Name of the associated serial line device.
SlavesAddresses	Array of short	An array of shorts containing the addresses of the slaves to be polled.

Device Properties Default Values:

Property Name	Default Values
SerialDeviceName	No default value
SlavesAddresses	No default value

There is no Class properties.

States:

States	
Names	Descriptions
ON	This is the state when everything is Ok.
FAULT	This state is reached when something gets wrong communicating with the concentrator.

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
GetNeutralCurrent	DEV_SHORT	DEV_DOUBLE
GetSumOfActivePower	DEV_SHORT	DEV_DOUBLE
GetSumOfReactivePower	DEV_SHORT	DEV_DOUBLE
GetActiveEnergy	DEV_SHORT	DEV_DOUBLE
GetAllValues	DEV_SHORT	DEVVAR_DOUBLEARRAY

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

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

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

4 - ToggleDebug

- **Description:**

- **Argin:**

DEV_VOID :

- **Argout:**

DEV_VOID :

- **Command allowed for:**

- Tango::ON
- Tango::FAULT

5 - GetNeutralCurrent

- **Description:**

- **Argin:**

DEV_SHORT : Diris address

- **Argout:**

DEV_DOUBLE : Value of the neutral current

- **Command allowed for:**

- Tango::ON
- Tango::FAULT

6 - GetSumOfActivePower

- **Description:**
- **Argin:**
DEV_SHORT : Diris address
- **Argout:**
DEV_DOUBLE : Value of the sum of active powers
- **Command allowed for:**
 - Tango::ON
 - Tango::FAULT

7 - GetSumOfReactivePower

- **Description:**
- **Argin:**
DEV_SHORT : Diris address
- **Argout:**
DEV_DOUBLE : Value for the sum of reactive powers
- **Command allowed for:**
 - Tango::ON
 - Tango::FAULT

8 - GetActiveEnergy

- **Description:**
- **Argin:**
DEV_SHORT : Diris address
- **Argout:**
DEV_DOUBLE : Value for the active energy
- **Command allowed for:**
 - Tango::ON
 - Tango::FAULT

9 - GetAllValues

- **Description:** Get all of the polled values for one Diris in one vector of double
- **Argin:**
DEV_SHORT : Diris address
- **Argout:**
DEVVAR_DOUBLEARRAY : Array of available values.
- **Command allowed for:**
 - Tango::ON
 - Tango::FAULT

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