



TANGO
Device
Server

TACO hdb to TANGO interface

User's Guide

HdbRead Class

Revision: HdbRead-Release_1_2 - Author: verdier
Implemented in C++ - CVS repository: ESRF

Introduction:

This class is able to read data to TACO HDB and return them in TANGO attribute history.

Class Identification:

- **Contact** : at esrf.fr - verdier
- **Class Family** : TACO_Interfaces (ESRF Specific)
- **Platform** : Unix Like
- **Bus** : Not Applicable

Class Inheritance:

- Tango::Device_4Impl
 - HdbRead

Properties:

Device Properties		
Property name	Property type	Description
HdbBrowseDevice	Tango::DEV_STRING	Device to browse HDB. The libhdb is not thread safe and the browsing must be done in another process.

Device Properties Default Values:

Property Name	Default Values
HdbBrowseDevice	No default value

There is no Class properties.

Attributes:

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
DataReady: Used to push an event when data ready. Return the signal read and attribute name to read history.	DEV_STRING	5	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
DeleteAttribute	DEV_STRING	DEV_VOID
GetDomainList	DEV_VOID	DEVVAR_STRINGARRAY
GetFamilyList	DEV_STRING	DEVVAR_STRINGARRAY
GetMemberList	DEVVAR_STRINGARRAY	DEVVAR_STRINGARRAY
GetSignalList	DEVVAR_STRINGARRAY	DEVVAR_STRINGARRAY
ReadHdbData	DEVVAR_LONGSTRINGARRAY	DEV_STRING

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 - DeleteAttribute

- **Description:** Delete the specified attribute.
- **Argin:**
DEV_STRING : attribute name
- **Argout:**
DEV_VOID :
- **Command allowed for:**

5 - GetDomainList

- **Description:** Returns the list of domains found.
- **Argin:**
DEV_VOID :
- **Argout:**
DEVVAR_STRINGARRAY : List of domains.
- **Command allowed for:**

6 - GetFamilyList

- **Description:** Returns the list of families found for specified domain.
- **Argin:**
DEV_STRING : domain name.

- **Argout:**
DEVVAR_STRINGARRAY : List of families.
- **Command allowed for:**

7 - GetMemberList

- **Description:** Returns the list of members found for specified domain and family.
- **Argin:**
DEVVAR_STRINGARRAY : [0]: domain name
[1]: family name
- **Argout:**
DEVVAR_STRINGARRAY : List of members.
- **Command allowed for:**

8 - GetSignalList

- **Description:** Returns the list of members found for specified domain, family and member.
- **Argin:**
DEVVAR_STRINGARRAY : [0]: domain name
[1]: family name
[2]: member name
- **Argout:**
DEVVAR_STRINGARRAY : List of signals.
- **Command allowed for:**

9 - ReadHdbData

- **Description:** Read specified signal data between specified dates. Start a thread to build a temporary attribute and fill his polling buffer with data found in hdb. A change event on DataReady attribute will be sent when the thread has terminated its job.
- **Argin:**
DEVVAR_LONGSTRINGARRAY : arginsvalue[0] signal name
lvalue[0] unix starting date
lvalue[1] unix ending date
- **Argout:**
DEV_STRING : Dynamic attribute name to read its history later.

- **Command allowed for:**

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