









TANGO Device Server

# Tango Device Server User's Guide

# **HdbConfigServer Class**

Revision: start - Author: poncet Implemented in Java

### **Introduction:**

This server allows creation of signals with external filling mode (mode7) in taco HDB. The server can be used by other device servers to create the signals in HDB without any need to do it manually.

## **Class Inheritance:**

fr.esrf.TangoDs.Device\_2ImplHdbConfigServer

## **Class Description:**

This server allows creation of signals in HDB.

# **Properties:**

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

### **States:**

States			
Names	Descriptions		
FAULT	The server failed to log into HDB with the mode7 user and password		
ON	The server is logged in (authentified) by a mode7 user name and password.		

## **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		
IsSignalExisting	DEV_STRING	DEV_BOOLEAN		
CreateSignalMode7	DEVVAR_STRINGARRAY	DEV_VOID		
AddExternalSignal	DEVVAR_STRINGARRAY	DEV_VOID		
CreateArraySignalMode7	DEVVAR_STRINGARRAY	DEV_VOID		

Device Commands for Expert Level Only				
Command name	Argument In	Argument Out		
<b>DeleteExternalSignal</b>	DEV_STRING	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 descructor automatically calls the *delete\_device()* method.

• Argin:

**DEV\_VOID**: none.

• Argout:

**DEV\_VOID**: none.

- Command allowed for:
- O Tango::FAULT

○ Tango::ON

### 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::FAULT

O Tango::ON

#### 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::FAULTTango::ON

### 4 - IsSignalExisting

- **Description:** This command returns true if the given signal exists already in HDB, false otherwise.
- Argin:

**DEV STRING**: The signal name for example: sr/d-radmap/adc-1/value.

• Argout:

**DEV\_BOOLEAN**:

- Command allowed for:
- Tango::FAULTTango::ON

## 5 - CreateSignalMode7

- **Description:** This command is equivalent to CreateSignalMode7 command. Creates one signal in external filling mode (mode7). If the signal already exists in external filling mode this command returns. If the signal exists but not in external filling mode (mode 7) this mode will be added to the existing signal. If the signal does not exist at all, it will be created as a new signal in external filling mode (mode7).
- Argin:

**DEVVAR\_STRINGARRAY** : {\"Signal name\", \"Data type\"}

• Argout:

**DEV\_VOID**:

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

### 6 - AddExternalSignal

- **Description:** Deletes entirely the signal from HDB: the signal name and definition and also all signal data since it's creation will be deleted from the database. If the signal has not the external mode filling defined (mode7) the command will fail.
- Argin:

**DEVVAR\_STRINGARRAY**: Either {\"Signal name\", \"Data type\"} or {\"Signal name\", \"Data type\",\"array length\"}

- Argout: DEV VOID:
- Command allowed for:
- O Tango::ON

### 7 - DeleteExternalSignal (for expert only)

- **Description:** Deletes entirely the signal from HDB: the signal name and definition and also all signal data since it's creation will be deleted from the database. If the signal has not the external mode filling defined (mode7) the command will fail.
- Argin:

**DEV\_STRING**: The signal name for example: sr/d-radmap/adc-1/value.

• Argout:

 $DEV_VOID:$ 

- Command allowed for:
- Tango::ON

## 8 - CreateArraySignalMode7

- Description:
- Argin:

**DEVVAR\_STRINGARRAY**: {\"Signal name\", \"Data type\",\"array length\"}

• Argout: DEV\_VOID:

• Command allowed for:

Tango::FAULTTango::ON

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