



**TANGO**  
Device  
Server

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# **Vdsp71 Wrapper User's Guide**

## **Vdsp71Wrapper Class**

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**Revision: Vdsp71Wrapper-Release\_1\_0 - Author: taurel**  
**Implemented in C++ - CVS repository: ESRF**

### **Introduction:**

This class is able to wrap a Vdsp71\_cs TACO device.

### **Class Inheritance:**

- Tango::Device\_4Impl
  - Vdsp71Wrapper

### **Properties:**

<b>Device Properties</b>		
<b>Property name</b>	<b>Property type</b>	<b>Description</b>
<b>TacoDevice</b>	Tango::DEV_STRING	The taco device name to wrap
<b>SendDspCodeTimeout</b>	Tango::DEV_LONG	Timeout for SendDspCode in seconds

Device Properties Default Values:

<b>Property Name</b>	<b>Default Values</b>
TacoDevice	No default value
SendDspCodeTimeout	10

**There is no Class properties.**

**States:**

<b>States</b>	
<b>Names</b>	<b>Descriptions</b>
<b>ON</b>	Everything OK
<b>FAULT</b>	The DSP program is not running
<b>UNKNOWN</b>	No response from the TACO device.
<b>MOVING</b>	The DSP is loading code program.

**Attributes:**

<b>Scalar Attributes</b>			
<b>Attribute name</b>	<b>Data Type</b>	<b>R/W Type</b>	<b>Expert</b>
<b>DspMode:</b> The DSP mode used by the program running.	DEV_SHORT	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>ReadValues</b>	DEVVAR_USHORTARRAY	DEVVAR_USHORTARRAY
<b>WriteValues</b>	DEVVAR_USHORTARRAY	DEV_VOID
<b>SendDspCode</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 desctructor automatically calls the *delete\_device()* method.
- **Argin:**  
**DEV\_VOID** : none.
- **Argout:**  
**DEV\_VOID** : none.
- **Command allowed for:**
  - Tango::ON
  - Tango::FAULT
  - Tango::UNKNOWN
  - Tango::MOVING

## 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
- Tango::UNKNOWN
- Tango::MOVING

### 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
- Tango::UNKNOWN
- Tango::MOVING

### 4 - ReadValues

- **Description:** Read NB data at Offset in DP ram.

- **Argin:**

**DEVVAR\_USHORTARRAY** : [0] - Offset  
[1] - NB data to read

- **Argout:**

**DEVVAR\_USHORTARRAY** : Read data

- **Command allowed for:**

- Tango::ON

### 5 - WriteValues

- **Description:** Write data at Offset in DP ram.

- **Argin:**

**DEVVAR\_USHORTARRAY** : [0] - Offset

[1] -

.....

[n] - Data to write

- **Argout:**

**DEV\_VOID** :

- **Command allowed for:**

○ Tango::ON

## 6 - SendDspCode

- **Description:** Send program code to DSP.

- **Argin:**

**DEV\_STRING** : DSP code to be executed

- **Argout:**

**DEV\_VOID** :

- **Command allowed for:**

○ Tango::ON

○ Tango::FAULT

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