



TANGO
Device
Server

MachStatWrap User's Guide

MachStatWrap Class

Revision: releasetag - Author: pons
Implemented in C++ - CVS repository: ESRF

Introduction:

A Tango wrapper for machine status Taco device server

Class Inheritance:

- Tango::Device_4Impl
 - MachStatWrap

Properties:

Device Properties		
Property name	Property type	Description
Machstat_devname	Tango::DEV_STRING	Machstat server Taco device name
Modelist	Array of string	List of possible filling pattern.

Device Properties Default Values:

Property Name	Default Values
Machstat_devname	sys/machstat/1
Modelist	uniform multibunch 1/3 multibunch 2/3 multibunch 2*1/3 multibunch 7/8 multibunch 1 bunch 4 bunch 16 bunch 32 bunch 24*8+1bunch 4GeV 5GeV Empty

There is no Class properties.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Countdown	DEV_DOUBLE	READ	No
Filling_mode	DEV_STRING	READ	No
Operator_mesg	DEV_STRING	READ	No
Run_start_date	DEV_LONG	READ	No
Run_stop_date	DEV_LONG	READ	No
Sig_avgpress	DEV_DOUBLE	READ	No
Sig_current	DEV_DOUBLE	READ	No
Sig_dipolefield	DEV_DOUBLE	READ	No

Sig_dipolehall	DEV_DOUBLE	READ	No
Sig_emit1x	DEV_DOUBLE	READ	No
Sig_emit1z	DEV_DOUBLE	READ	No
Sig_emit2x	DEV_DOUBLE	READ	No
Sig_emit2z	DEV_DOUBLE	READ	No
Sig_ict_current	DEV_DOUBLE	READ	No
Sig_ict_lifetime	DEV_DOUBLE	READ	No
Sig_lifetime	DEV_DOUBLE	READ	No
Sig_orbitpeakh	DEV_DOUBLE	READ	No
Sig_orbitpeakv	DEV_DOUBLE	READ	No
Sig_orbitrmsh	DEV_DOUBLE	READ	No
Sig_orbitrmsv	DEV_DOUBLE	READ	No
Sig_pct1_current	DEV_DOUBLE	READ	No
Sig_pct1_lifetime	DEV_DOUBLE	READ	No
Sig_pct2_current	DEV_DOUBLE	READ	No
Sig_pct2_lifetime	DEV_DOUBLE	READ	No
Sig_pct3_current	DEV_DOUBLE	READ	No
Sig_pct3_lifetime	DEV_DOUBLE	READ	No
Sig_tunch	DEV_DOUBLE	READ	No
Sig_tunev	DEV_DOUBLE	READ	No
Since_mesg	DEV_STRING	READ	No
Sr_mode	DEV_SHORT	READ	No
Filling_mode_id	DEV_SHORT	READ	No
EnergySpread	DEV_DOUBLE	READ	No
IAX_emittance	DEV_DOUBLE	READ	No
CombinedEmittance	DEV_DOUBLE	READ	No
Injection_mode	DEV_BOOLEAN	READ	No

Spectrum Attributes			
Attribute name	Data Type	X Data Length	Expert
Bm_status	DEV_SHORT	32	No
Id_status	DEV_SHORT	32	No

Image Attributes				
Attribute name	Data Type	X Data Length	Y Data Length	Expert
Current_history	DEV_DOUBLE	1024	2	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
SetAlarm	DEVVAR_STRINGARRAY	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:**

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 - SetAlarm

- **Description:** Set the alarm of an attribute according to the current filling mode argin[0] = att name
argin[1] = min value argin[2] = max value
- **Argin:**
DEVVAR_STRINGARRAY : (att_name,min,max)
- **Argout:**
DEV_VOID :
- **Command allowed for:**

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