



TANGO
Device
Server

PssEquip device server User's Guide

PssEquip Class

Revision: Release_1_1 - Author: peru
Implemented in C++ - CVS repository: ESRF

Introduction:

Class Inheritance:

- Tango::Device_4Impl
 - PssEquip

Properties:

Device Properties		
Property name	Property type	Description
LinacDevname	Tango::DEV_STRING	This is the device name of the required DS to read linac state.

BpssDevname	Tango::DEV_STRING	This is the device name of the required DS to read BPSS state.
SyrfDevname	Tango::DEV_STRING	This is the device name of the required DS to read SYRF state.
SyExtPssKeyDevname	Tango::DEV_STRING	This is the device name of the required DS to read SY ext Pss key state.
AllFeClosedDevname	Tango::DEV_STRING	This is the device name of the required DS to read ALL FE CLOSED state.
NoBeamlineTripDevname	Tango::DEV_STRING	This is the device name of the required DS to read NO BEAMLINE TRIP state.
ToppingUpDevname	Tango::DEV_STRING	This is the device name of the required DS to read TOPPING UP state.
SrrfCommonDevname	Tango::DEV_STRING	This is the device name of the common DS to read SRRFx state.
Srrf1Devname	Tango::DEV_STRING	This is the device name of the 2nd required DS to read SRRF1 state.
Srrf2Devname	Tango::DEV_STRING	This is the device name of the 2nd required DS to read SRRF2 state.
Srrf3Devname	Tango::DEV_STRING	This is the device name of the 2nd required DS to read SRRF3 state.
SrBeamKillerDevname	Tango::DEV_STRING	This is the device name of the required DS to read SR BEAM KILLER state.
SrMagnetsDevname	Tango::DEV_STRING	This is the device name of the required DS to read SR MAGNETS state.
LinacModule	Tango::DEV_SHORT	Module number for LINAC state relay.
LinacBit	Tango::DEV_SHORT	Bit number for LINAC state relay.
AllFeClosedModule	Tango::DEV_SHORT	Module number for ALL FE CLOSED state relay.
AllFeClosedBit	Tango::DEV_SHORT	Bit number for ALL FE CLOSED state relay.
NoBeamlineTripModule	Tango::DEV_SHORT	Module number for NO BEAMLINE TRIP state relay.
NoBeamlineTripBit	Tango::DEV_SHORT	Bit number for NO BEAMLINE TRIP state relay.
ToppingUpModule	Tango::DEV_SHORT	Module number for TOPPING UP state relay.
ToppingUpBit	Tango::DEV_SHORT	Bit number for TOPPING UP state relay.
SrrfCommonModule	Tango::DEV_SHORT	Module number for SRRF COMMON state relay.
SrrfCommonBit	Tango::DEV_SHORT	Bit number for SRRF COMMON state relay.
StartRaisePermitRelay1	Tango::DEV_STRING	First relay device name for StartRaisePermit.
StartRaisePermitRelay2	Tango::DEV_STRING	Second relay device name for StartRaisePermit.
RaisePermitRelay1	Tango::DEV_STRING	First relay device name for RaisePermit.
RaisePermitRelay2	Tango::DEV_STRING	Second relay device name for RaisePermit.

ResetPssLinacPermitsDev1	Tango::DEV_STRING	First device to be resetted for LINAC permits.
ResetPssLinacPermitsDev2	Tango::DEV_STRING	Second device to be resetted for LINAC permits.
ResetPssAcceleratorInterlocksDev1	Tango::DEV_STRING	First device to be resetted for accelerator interlocks.
ResetPssAcceleratorInterlocksDev2	Tango::DEV_STRING	Second device to be resetted for accelerator interlocks.
BpssDevnameP	Tango::DEV_STRING	
SyrfDevnameP	Tango::DEV_STRING	
SyExtPssKeyDevnameP	Tango::DEV_STRING	
SrBeamKillerDevnameP	Tango::DEV_STRING	
SrMagnetsDevnameP	Tango::DEV_STRING	
Srrf1DevnameP	Tango::DEV_STRING	
Srrf2DevnameP	Tango::DEV_STRING	
Srrf3DevnameP	Tango::DEV_STRING	
FillingPermitModule1	Tango::DEV_SHORT	
FillingPermitModule2	Tango::DEV_SHORT	
FillingPermitBit1	Tango::DEV_SHORT	
FillingPermitBit2	Tango::DEV_SHORT	
FillingPermitDevname	Tango::DEV_STRING	
StoredBeamDevname	Tango::DEV_STRING	
StoredBeamModule1	Tango::DEV_SHORT	
StoredBeamModule2	Tango::DEV_SHORT	
StoredBeamBit1	Tango::DEV_SHORT	
StoredBeamBit2	Tango::DEV_SHORT	

Device Properties Default Values:

Property Name	Default Values
LinacDevname	No default value
BpssDevname	No default value
SyrfDevname	No default value
SyExtPssKeyDevname	No default value
AllFeClosedDevname	No default value
NoBeamlineTripDevname	No default value
ToppingUpDevname	No default value

SrrfCommonDevname	No default value
Srrf1Devname	No default value
Srrf2Devname	No default value
Srrf3Devname	No default value
SrBeamKillerDevname	No default value
SrMagnetsDevname	No default value
LinacModule	No default value
LinacBit	No default value
AllFeClosedModule	No default value
AllFeClosedBit	No default value
NoBeamlineTripModule	No default value
NoBeamlineTripBit	No default value
ToppingUpModule	No default value
ToppingUpBit	No default value
SrrfCommonModule	No default value
SrrfCommonBit	No default value
StartRaisePermitRelay1	No default value
StartRaisePermitRelay2	No default value
RaisePermitRelay1	No default value
RaisePermitRelay2	No default value
ResetPssLinacPermitsDev1	No default value
ResetPssLinacPermitsDev2	No default value
ResetPssAcceleratorInterlocksDev1	No default value
ResetPssAcceleratorInterlocksDev2	No default value
BpssDevnameP	No default value
SyrfDevnameP	No default value
SyExtPssKeyDevnameP	No default value
SrBeamKillerDevnameP	No default value
SrMagnetsDevnameP	No default value
Srrf1DevnameP	No default value
Srrf2DevnameP	No default value
Srrf3DevnameP	No default value
FillingPermitModule1	No default value
FillingPermitModule2	No default value

FillingPermitBit1	No default value
FillingPermitBit2	No default value
FillingPermitDevname	No default value
StoredBeamDevname	No default value
StoredBeamModule1	No default value
StoredBeamModule2	No default value
StoredBeamBit1	No default value
StoredBeamBit2	No default value

There is no Class properties.

Attributes:

Scalar Attributes			
Attribute name	Data Type	R/W Type	Expert
Linac	DEV_SHORT	READ	No
Bpss	DEV_SHORT	READ	No
Syrf	DEV_SHORT	READ	No
SyExtPssKey	DEV_SHORT	READ	No
AllFeClosed	DEV_SHORT	READ	No
NoBeamlineTrip	DEV_SHORT	READ	No
ToppingUp	DEV_SHORT	READ	No
Srrf1	DEV_SHORT	READ	No
Srrf2	DEV_SHORT	READ	No
Srrf3	DEV_SHORT	READ	No
SrBeamKiller	DEV_SHORT	READ	No
SrMagnets	DEV_SHORT	READ	No
Countdown: This is a countdown used by the progress bar of the application.	DEV_SHORT	READ	No
FillingPermit	DEV_SHORT	READ	No
StoredBeamPermit	DEV_SHORT	READ	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
ResetPssOnLinacPermits	DEV_VOID	DEV_VOID
ResetPssOnAcceleratorInterlocks	DEV_VOID	DEV_VOID
DoLinacAnnouncement	DEV_VOID	DEV_VOID
RaiseLinacPermit	DEV_VOID	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 - ResetPssOnLinacPermits

- **Description:** Reset PSS for LINAC.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

5 - ResetPssOnAcceleratorInterlocks

- **Description:** Reset the accelerator interlocks.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

6 - DoLinacAnnouncement

- **Description:** Same as "StartRaisePermit". Implemented for cosmetic purpose.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

7 - RaiseLinacPermit

- **Description:** Same as "RaisePermit". Implemented for cosmetic purpose.
- **Argin:**
DEV_VOID :
- **Argout:**
DEV_VOID :
- **Command allowed for:**

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