Sequencer Server for LINAC
User's Guide

LinacSequencer Class

Revision: LinacSequencer-Release_2_1 - Author: vedder
Implemented in C++ - CVS repository: ESRF

Introduction:

Sequencer server to execute the necessary sequences to start and stop the LINAC.

Class Inheritance:

- Tango::Device_4Impl
  - LinacSequencer

Class Description:

Properties:

Device Properties		
Property name	**Property type**	**Description**
Timeout	Tango::DEV_LONG	Timeout associated with all the DeviceProxies used by the sequencer.

Device Properties Default Values:

Property Name	Default Values
Timeout	3000

There is no Class properties.

States:

States	
Names	**Descriptions**
ON	The sequencer is ready to run a new sequence.
MOVING	A sequence is currently running.
DISABLE	The last sequence failed during execution or was interrupted by the user.

Attributes:

Scalar Attributes			
Attribute name	**Data Type**	**R/W Type**	**Expert**
IsFileLoaded: true => Last loadFile command ended successfully. false => Last loadFile command ended with errors.	DEV_BOOLEAN	READ	Yes

Spectrum Attributes

Attribute name	Data Type	X Data Length	Expert
SequenceHistory: Description of what happened during the execution of the last sequence.	DEV_STRING	500	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
Abort	DEV_VOID	DEV_VOID
LoadFile	DEV_STRING	DEV_VOID
SaveFile	DEV_STRING	DEV_VOID
ForceSave	DEV_STRING	DEV_VOID
On	DEV_VOID	DEV_VOID
Off	DEV_VOID	DEV_VOID
LowHeating	DEV_VOID	DEV_VOID
Standby	DEV_VOID	DEV_VOID
Reset	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:**
- Tango::ON
- Tango::MOVING
- Tango::DISABLE

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::MOVING
- Tango::DISABLE

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::MOVING
- Tango::DISABLE

4 - Abort

- **Description:** Abort the running sequence.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::MOVING
- Tango::DISABLE

5 - LoadFile

- **Description:** Load the configuration file given in parameter.

- **Argin:**
  DEV_STRING : Name of file to load

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::DISABLE

6 - SaveFile

- **Description:** The sequence will save all current settings to a file.

- **Argin:**
  DEV_STRING : Name of the file to be saved

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::DISABLE

7 - ForceSave

- **Description:** This command will force the save of all the present settings in a file even if there was a problem when getting all the current set points. If a set point could not be read, the set point given in the last loaded or saved file will be used. The argin is the name of the file.

- **Argin:**
  DEV_STRING : Name of the file to be saved

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::DISABLE

8 - On

- **Description:** Execute the sequence to bring the LINAC to ON state.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::DISABLE

9 - Off

- **Description:** Execute the sequence to bring the LINAC to OFF state.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::DISABLE

10 - LowHeating

- **Description:** Execute the sequence to bring the LINAC to Low Heating (Tango::INIT) state.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::DISABLE

11 - Standby

- **Description:** Execute the sequence to bring the LINAC to STANDBY state.

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::DISABLE

12 - Reset

- **Description:**

- **Argin:**
  DEV_VOID :

- **Argout:**
  DEV_VOID :

- **Command allowed for:**
- Tango::ON
- Tango::MOVING
- Tango::DISABLE