

MHzDAQp01 Tango Cpp Class

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MHzDAQp01 Class Identification :

Contact : at mail.desy.de - tnunez
Class Family : Acquisition
Platform : Unix Like
Bus : TCP/UDP
Manufacturer : none
Manufacturer ref. :

MHzDAQp01 Class Inheritance :

- [Tango::DeviceImpl](#)
 - MHzDAQp01

MHzDAQp01 Class Description :

MHz DAQ System via TCP connection

MHzDAQp01 Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
HostName	Name of the host	String	none
PortNb	Port number	int	none
SimulationMode	1 if simulation mode	int	0

MHzDAQp01 Class Commands				
Name	Input type	Output type	Level	Description
State	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its device_state data member) and returns it to the caller.
Status	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its device_status data member) and returns it to the caller.
Start	DEV_VOID	DEV_VOID	OPERATOR	Starts acquisition. It uses attributes FilePrefix and NbTriggers
Stop	DEV_VOID	DEV_VOID	OPERATOR	Stops acquisition
CloseRunLoop	DEV_VOID	DEV_VOID	OPERATOR	terminates the run loop of the TCP server, so that it can be shutdown from the Karabo CLI.
ReadChannel	DEVVAR_LONGARRAY	DEV_DOUBLE	OPERATOR	Read mean value or standard desviation for a given channel with or without laser.

Command State :

This command gets the device state (stored in its device_state data member) and returns it to the caller.

State Definition		
Input Argument	Tango::DEV_VOID	none
Output Argument	Tango::DEV_STATE	Device state
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Status :

This command gets the device status (stored in its device_status data member) and returns it to the caller.

Status Definition		
Input Argument	Tango::DEV_VOID	none
Output Argument	Tango::CONST_DEV_STRING	Device status
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Start :

Starts acquisition. It uses attributes FilePrefix and NbTriggers

Start Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Stop :

Stops acquisition

Stop Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command CloseRunLoop :

terminates the run loop of the TCP server,
so that it can be shutdown from the Karabo CLI.

CloseRunLoop Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command ReadChannel :

Read mean value or standard desviation for a given channel with or without laser.

ReadChannel Definition		
Input Argument	Tango::DEVVAR_LONGARRAY	Channel number, laser/nolaser (0,1), mean/std dev(0,1)
Output Argument	Tango::DEV_DOUBLE	Requested value
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

MHzDAQp01 Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
FilePrefix	false	false	Scalar	READ_WRITE	Tango::DEV_STRING	OPERATOR	File prefix, used by the Start command.

NbTriggers	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	Number of acquisitions to take. The acquisition will stop after these number of acquisitions is taken.
FileNum	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	Number added to FilePrefix for creating the file name sent with the Start command to the MHz DAQ. This number is reset to 0 every time the FilePrefix is written and it increments automatically when the Start command is called.

There is no dynamic attribute defined.

Attribute FilePrefix :

File prefix, used by the Start command.

Attribute Definition	
Attribute	

Attribute Properties	
label	

Attribute Event Criteria	
Periodic	Not set

Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

unit
standard unit
display unit
format
max_value
min_value
max_alarm
min_alarm
max_warning
min_warning
delta_time
delta_val

Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

Attribute NbTriggers :

Number of acquisitions to take. The acquisition will stop after these number of acquisitions is taken.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	true

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set

Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

min_warning	
delta_time	
delta_val	

Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

Attribute FileNum :

Number added to FilePrefix for creating the file name sent with the Start command to the MHz DAQ. This number is reset to 0 every time the FilePrefix is written and it increments automatically when the Start command is called.

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
Absolute Change	Not set
Archive Periodic	Not set
Archive Relative Change	Not set
Archive Absolute Change	Not set
Push Change event by user code	false
Push Archive event by user code	false
Push DataReady event by user code	false

MHzDAQp01 Class States	
Name	Description
ON	Idle state
FAULT	
MOVING	Taking data