

## NI6602 Tango Cpp Class

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### NI6602 Class Identification :

Contact : at synchrotron-soleil.fr - langlois  
Class Family : Acquisition  
Platform : Windows  
Bus : Compact PCI  
Manufacturer : NI  
Manufacturer ref. : 6602

### NI6602 Class Inheritance :

- [Tango::DeviceImpl](#)
  - NI6602

### NI6602 Class Description :

## NI6602 Properties :

### There is no class properties

Device Properties			
Name	Description	Type	Default Value
Boards	The name of the boards as specified in Measurement & Automation eXplorer (MAX).	String[]	none
IsMaster	Specify if the board generates the counting signal or if this signal comes from an external input.  - If 1, the counter0 will generate the signal that specify the integration time of the other counters of the board.  -If 0, the integration time will come from the input PFI38.	boolean	none
Slaves	The slaves device names (used only if IsMaster is equals to 1).	String[]	none
NexusNbAcqPerFile	Define the number of acquisition (steps) in each nexus file.	int	1
MemorizedNexusFileGeneration	Allows storage of acquired data into Nexus files.	boolean	false
MemorizedNexusTargetPath	Define the root path for generated nexus files.	String	d:\\target
MemorizedContinuousAcquisition	Allows the auto restart of the acquisition.	boolean	false
NexusMeasureDimension	Dimension of the measure to be pushed into the nexus file, can be : 0 -> for a 0D measure (a scalar value) 1 -> for a 1D measure (a spectrum value)	short	0
MemorizedTotalNbPoint		int	none
MemorizedIntegrationTime		double	none
MemorizedBufferDepth		double	none
NexusSynchronousSaving	Flag saying if the Nexus saving is synchronous or asynchronous. Default = false	boolean	false
TimeoutSec	Timeout of the acquisition in seconds (default = 3)	double	3
	If set to true, the ``n + 1 triggers bug		

NI6602 Class Commands				
Name	Input type	Output type	Level	Description
<a href="#">State</a>	DEV_VOID	DEV_STATE	OPERATOR	This command gets the device state (stored in its <i>device_state</i> data member) and returns it to the caller.
<a href="#">Status</a>	DEV_VOID	CONST_DEV_STRING	OPERATOR	This command gets the device status (stored in its <i>device_status</i> data member) and returns it to the caller.
<a href="#">Start</a>	DEV_VOID	DEV_VOID	OPERATOR	Start acquisition
<a href="#">Stop</a>	DEV_VOID	DEV_VOID	OPERATOR	Stop the current acquisition
<a href="#">GetInfo</a>	DEV_VOID	DEV_STRING	EXPERT	Get driver version, Enumerate available boards with their type
<a href="#">SetBufferedMode</a>	DEV_VOID	DEV_VOID	OPERATOR	switch the device from scalar mode to buffered mode
<a href="#">SetScalarMode</a>	DEV_VOID	DEV_VOID	OPERATOR	switch the device from buffered mode to scalar mode
<a href="#">NexusResetBufferIndex</a>	DEV_VOID	DEV_VOID	EXPERT	Call the nexuscpp function : ResetBufferIndex, which is used to start a new acquisition sequence with index starting at 1

### **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	State Code
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **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	Status description
DisplayLevel	OPERATOR	..
Inherited	true	..
Abstract	true	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command Start :**

Start acquisition

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	..

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### **Command Stop :**

Stop the current 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	..

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### **Command GetInfo :**

Get driver version,  
Enumerate available boards with their type

<b>GetInfo Definition</b>		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_STRING	
DisplayLevel	EXPERT	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

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### **Command SetBufferedMode :**

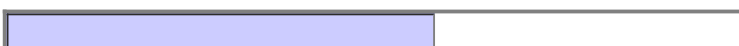
switch the device from scalar mode to buffered mode

<b>SetBufferedMode Definition</b>		
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	..

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### **Command SetScalarMode :**

switch the device from buffered mode to scalar mode





**There is no dynamic attribute defined.**

**Attribute actuators :**

Attribute Definition	
Attribute Type	Spectrum ( 1000 )
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	EXPERT
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read 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	Not set



**Attribute sensors :**

Attribute Definition	
Attribute Type	Spectrum ( 1000 )
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	EXPERT
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read 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	Not set

**Attribute actuatorsProxies :**

Attribute Definition	
Attribute Type	Spectrum ( 1000 )

Attribute Properties	
label	
unit	

Attribute Event Criteria	
Periodic	Not set

B/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	EXPERT
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

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	Not set

NI6602 Class States	
Name	Description
RUNNING	
STANDBY	
FAULT	