

HdbEventSubscriber Tango Cpp Class

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HdbEventSubscriber Class Identification :

Contact : at elettra.eu - graziano.scalamera
Class Family : Miscellaneous
Platform : Unix Like
Bus : Not Applicable

HdbEventSubscriber Class Inheritance :

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

Manufacturer : none

Manufacturer ref. :

HdbEventSubscriber Class Description :

This class is able to subscribe on archive events and store value in Historical DB

HdbEventSubscriber Properties :

Class Properties			
Name	Description	Type	Default Value
SubscribeRetryPeriod	Subscribe event retrying period in seconds.	int	60
DbHost		String	none
DbUser		String	none
DbPassword		String	none
DbName		String	none
DbPort		short	none
StartArchivingAtStartup	Start archiving at startup	boolean	none

Device Properties			
Name	Description	Type	Default Value
SubscribeRetryPeriod	Subscribe event retrying period in seconds.	int	60
AttributeList	List of configured attributes.	String[]	none
DbHost		String	none
DbUser		String	none
DbPassword		String	none
DbName		String	none
DbPort		short	none
StartArchivingAtStartup	Start archiving at startup	boolean	none

HdbEventSubscriber Class Commands				
Name	Input type	Output type	Level	Description
State	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.
Status	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.
AttributeAdd	DEV_STRING	DEV_VOID	OPERATOR	Add a new attribute to archive in HDB.
AttributeRemove	DEV_STRING	DEV_VOID	OPERATOR	Remove attribute from configuration.
AttributeStatus	DEV_STRING	DEV_STRING	OPERATOR	Read a attribute status.
Start	DEV_VOID	DEV_VOID	OPERATOR	Start archiving
Stop	DEV_VOID	DEV_VOID	OPERATOR	Stop archiving
AttributeStart	DEV_STRING	DEV_VOID	OPERATOR	Start archiving single attribute
AttributeStop	DEV_STRING	DEV_VOID	OPERATOR	Stop archiving single attribute
ResetStatistics	DEV_VOID	DEV_VOID	OPERATOR	Reset statistic counters

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	..

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	..

Command AttributeAdd :

Add a new attribute to archive in HDB.

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

Command AttributeRemove :

Remove attribute from configuration.

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

Command AttributeStatus :

Read a attribute status.

AttributeStatus Definition		
Input Argument	Tango::DEV_STRING	The attribute name
Output Argument	Tango::DEV_STRING	The attribute status.
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Start :

Start archiving

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 :

Stop archiving

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 AttributeStart :

Start archiving single attribute

AttributeStart Definition		
Input Argument	Tango::DEV_STRING	Attribute name
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..

Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command AttributeStop :

Stop archiving single attribute

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

Command ResetStatistics :

Reset statistic counters

ResetStatistics 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	..

HdbEventSubscriber Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
AttributeOkNumber	false	false	Scalar	READ	Tango::DEV_LONG	OPERATOR	Number of archived attributes not in error
AttributeNokNumber	false	false	Scalar	READ	Tango::DEV_LONG	OPERATOR	Number of archived attributes in error
AttributePendingNumber	false	false	Scalar	READ	Tango::DEV_LONG	OPERATOR	Number of attributes waiting to be archived
AttributeNumber	false	false	Scalar	READ	Tango::DEV_LONG	OPERATOR	Number of configured attributes
AttributeMaxStoreTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Maximum storing time
AttributeMinStoreTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Minimum storing time
AttributeAVGStoreTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Average storing time
AttributeMaxProcessingTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Maximum processing (from event reception to storage) time
AttributeMinProcessingTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Minimum processing (from event reception to storage) time
AttributeAVGProcessingTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Average processing (from event reception to storage) time

							time
AttributeList	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	Returns the configured attribute list
AttributeOkList	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	Returns the attributes not on error list
AttributeNokList	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	Returns the attributes on error list
AttributePendingList	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	Returns the attributes waiting to be archived

There is no dynamic attribute defined.

Attribute AttributeOkNumber :

Number of archived attributes not in error

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
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	

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

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 AttributeNokNumber :

Number of archived attributes in error

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
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	false

Attribute AttributePendingNumber :

Number of attributes waiting to be archived

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
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	false

Attribute AttributeNumber :

Number of configured attributes

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
Inherited	false
Abstract	false

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	

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

Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Archive Periodic	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 AttributeMaxStoreTime :

Maximum storing time

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
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	false

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Attribute AttributeMinStoreTime :

Minimum storing time

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
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	false

Attribute AttributeAVGStoreTime :

Average storing time

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
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	false

Attribute AttributeMaxProcessingTime :

Maximum processing (from event reception to storage) time

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
Inherited	false
Abstract	false

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	

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

Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

	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 AttributeMinProcessingTime :

Minimum processing (from event reception to storage) time

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
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	false
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Attribute AttributeAVGProcessingTime :

Average processing (from event reception to storage) time

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_DOUBLE
Display Level	OPERATOR
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	false

Attribute AttributeList :

Returns the configured attribute list

Attribute Definition	
Attribute Type	Spectrum (10000)
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
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	false

Attribute AttributeOkList :

Returns the attributes not on error list

Attribute Definition	
Attribute Type	Spectrum (10000)
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	

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

Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

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 AttributeNokList :

Returns the attributes on error list

Attribute Definition	
Attribute Type	Spectrum (10000)
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
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	false
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Attribute AttributePendingList :

Returns the attributes waiting to be archived

Attribute Definition		Attribute Properties		Attribute Event Criteria	
Attribute Type	Spectrum (10000)	label		Periodic	Not set
R/W Type	READ	unit		Relative Change	Not set
Data Type	Tango::DEV_STRING	standard unit		Absolute Change	Not set
Display Level	OPERATOR	display unit			
Inherited	false	format			
Abstract	false	max_value		Archive Periodic	Not set
Polling Period	Not polled	min_value		Archive Relative Change	Not set
Memorized	Not set	max_alarm		Archive Absolute Change	Not set
		min_alarm			
Read allowed for	All states	max_warning		Push Change event by user code	false
		min_warning			
		delta_time		Push Archive event by user code	false
		delta_val			
				Push DataReady event by user code	false

HdbEventSubscriber Class States

Name	Description
ON	Archiving running and everything is OK.
ALARM	One or more attributes faulty or FIFO size above threshold
OFF	Archiving stopped
FAULT	All attributes faulty