

HdbConfigurationManager Tango Cpp Class

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HdbConfigurationManager Class Identification :

Contact : at elettra.eu - graziano.scalamera
Class Family : Miscellaneous
Platform : Unix Like

HdbConfigurationManager Class Inheritance :

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

Bus : Not Applicable
Manufacturer : none
Manufacturer ref. :

HdbConfigurationManager Class Description :

HdbConfigurationManager Properties :

Class Properties			
Name	Description	Type	Default Value
DbHost		String	none
DbUser		String	none
DbPassword		String	none
DbName		String	none
DbPort		short	none
MaxSearchSize		int	none

Device Properties			
Name	Description	Type	Default Value
ArchiverList		String[]	none
MaxSearchSize	Max size of search result	int	1000
DbHost		String	none
DbUser		String	none
DbPassword		String	none
DbName		String	none
DbPort		short	none

HdbConfigurationManager 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.
AttributeAdd	DEV_VOID	DEV_VOID	OPERATOR	Add a new attribute to archive in HDB.
AttributeRemove	DEV_STRING	DEV_VOID	OPERATOR	Remove attribute from configuration.
AttributeStart	DEV_STRING	DEV_VOID	OPERATOR	Start archiving single attribute
AttributeStop	DEV_STRING	DEV_VOID	OPERATOR	Stop archiving single attribute
ArchiverAdd	DEV_STRING	DEV_VOID	OPERATOR	Add a new archiver to archive in HDB.
AttributeAssign	DEVVAR_STRINGARRAY	DEV_VOID	OPERATOR	Assigne attribute to archiver
AttributeStatus	DEV_STRING	DEV_STRING	OPERATOR	Read an attribute status
AttributeGetArchiver	DEV_STRING	DEV_STRING	OPERATOR	Return archiver associated to attribute.
AttributeSearch	DEV_STRING	DEVVAR_STRINGARRAY	OPERATOR	Return list of attributes containing input argument
ArchiverRemove	DEV_STRING	DEV_VOID	OPERATOR	Remove archiver instance.
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	Device state
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	Device status
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_VOID	
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 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	..
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Command ArchiverAdd :

Add a new archiver to archive in HDB.

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

Command AttributeAssign :

Assigne attribute to archiver

AttributeAssign Definition		
Input Argument	Tango::DEVVAR_STRINGARRAY	[0]: Attribute name [1]: Archiver name
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command AttributeStatus :

Read an attribute status

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

Command AttributeGetArchiver :

Return archiver associated to attribute.

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

Command AttributeSearch :

Return list of attributes containing input argument

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AttributeSearch Definition		
Input Argument	Tango::DEV_STRING	Attribute name or part of it
Output Argument	Tango::DEVVAR_STRINGARRAY	Attribute list
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command ArchiverRemove :

Remove archiver instance.

ArchiverRemove Definition		
Input Argument	Tango::DEV_STRING	Archiver 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	..

HdbConfigurationManager 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
SetAttributeName	false	false	Scalar	READ_WRITE	Tango::DEV_STRING	OPERATOR	
SetPollingPeriod	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	
SetAbsoluteEvent	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	
SetRelativeEvent	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	
SetPeriodEvent	false	false	Scalar	READ_WRITE	Tango::DEV_LONG	OPERATOR	
SetCodePushedEvent	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	
SetArchiver	false	false	Scalar	READ_WRITE	Tango::DEV_STRING	OPERATOR	
AttributeMaxStoreTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Maximum storing time
AttributeMinStoreTime	false	false	Scalar	READ	Tango::DEV_DOUBLE	OPERATOR	Minimum 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

ArchiverList	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	
ArchiverStatus	false	false	Spectrum	READ	Tango::DEV_STRING	OPERATOR	

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	
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 AttributeNokNumber :

Number of archived attributes in error

Attribute Definition	
Attribute Type	Scalar

Attribute Properties	
label	

Attribute Event Criteria	
Periodic	Not set

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

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 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
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 SetAttribute **Attribute** **Name** :

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

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

delta_val	
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Attribute SetPollingPeriod :

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	Not set
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

Attribute SetAbsoluteEvent :

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

Attribute Properties	
label	
unit	
standard unit	
display unit	
format	
max_value	
min_value	

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

Polling Period	Not polled	max_alarm			
Memorized	Not set	min_alarm		Push Change event by user code	false
		max_warning		Push Archive event by user code	false
Read allowed for	All states	min_warning		Push DataReady event by user code	false
Write allowed for	All states	delta_time			
		delta_val			

Attribute SetRelativeEvent :

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

Attribute SetPeriodEvent :

Attribute Definition		Attribute Properties		Attribute Event Criteria	
Attribute Type	Scalar	label		Periodic	Not set
		unit		Relative Change	Not set

R/W Type	READ_WRITE
Data Type	Tango::DEV_LONG
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states
Write 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	

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 SetCodePushedEvent :

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

Attribute SetArchiver :

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

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	

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

min_warning	
delta_time	
delta_val	

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 AttributeMaxProcessingTime :

Maximum processing (from event reception to storage) time

Attribute Definition	
Attribute Type	Scalar

Attribute Properties	
label	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set

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

Attribute AttributeMinProcessingTime :

Minimum processing (from event reception to storage) time

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

Attribute ArchiverList :

Attribute Definition	
Attribute Type	Spectrum (1000)
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 ArchiverStatus :

Attribute Definition	
Attribute Type	Spectrum (1000)
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	

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

delta_val

HdbConfigurationManager Class States	
Name	Description
ON	
ALARM	At least one archiver is in ALARM