

VarianDualIP Tango Cpp Class

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VarianDualIP Class Identification :

Contact : at esrf - peru
 Class Family : Vacuum
 Platform : Unix Like
 Bus : Serial Line
 Manufacturer : Varian
 Manufacturer ref. : Dual IP

VarianDualIP Class Inheritance :

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

VarianDualIP Class Description :

This device server is intended to drive and monitor a ion pump controlled by a Varian Dual ion pump controller. You need VarianDualCtrl device classes OR Agilent4uhv device classes

VarianDualIP Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
ChannelNumber	The channel number of the ion pump (1 or 2)	short	none
ControllerDeviceName	The device name of the associated ion pump controller	String	none

VarianDualIP 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.
Off	DEV_VOID	DEV_VOID	OPERATOR	Set the pump to OFF.
On	DEV_VOID	DEV_VOID	OPERATOR	Set the pump to ON.
SetFixedMode	DEV_VOID	DEV_VOID	OPERATOR	Set the pump channel to the "fixed" mode.
SetStartMode	DEV_VOID	DEV_VOID	OPERATOR	Set the pump channel to the "start" mode.
SetStepMode	DEV_VOID	DEV_VOID	OPERATOR	Set the pump channel to the "step" mode.
SetProtectMode	DEV_VOID	DEV_VOID	OPERATOR	Set the pump channel to the "protect" mode.

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	false	..
Polling Period	3000	..
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	false	..
Polling Period	Not polled	..
Command allowed for	All states	..

Command Off :

Set the pump to OFF.

Off Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
Command NOT allowed for	• OFF	..

Command On :

Set the pump to ON.

On Definition		
Input Argument	Tango::DEV_VOID	
Output Argument	Tango::DEV_VOID	
DisplayLevel	OPERATOR	..
Inherited	false	..
Abstract	false	..
Polling Period	Not polled	..
		..
Command NOT allowed for	• ON	..

Command SetFixedMode :

Set the pump channel to the "fixed" mode.

SetFixedMode 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 SetStartMode :

Set the pump channel to the "start" mode.

SetStartMode 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 SetStepMode :

Set the pump channel to the "step" mode.

SetStepMode 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 SetProtectMode :

Set the pump channel to the "protect" mode.

SetProtectMode 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	..

VariDualIP Class Attributes							
Name	Inherited	Abstract	Attr. type	R/W type	Data type	Level	Description
Pressure	false	false	Scalar	READ	Tango::DEV_FLOAT	OPERATOR	
Voltage	false	false	Scalar	READ	Tango::DEV_FLOAT	OPERATOR	
Current	false	false	Scalar	READ	Tango::DEV_FLOAT	OPERATOR	
Size	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	
ControlType	false	false	Scalar	READ	Tango::DEV_STRING	OPERATOR	
FirstStepCurrent	false	false	Scalar	READ_WRITE	Tango::DEV_FLOAT	OPERATOR	
SecondStepCurrent	false	false	Scalar	READ_WRITE	Tango::DEV_FLOAT	OPERATOR	
FixMode	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	
StartMode	false	false	Scalar	READ_WRITE	Tango::DEV_BOOLEAN	OPERATOR	
Controller	false	false	Scalar	READ	Tango::DEV_STRING	EXPERT	

There is no dynamic attribute defined.

Attribute Pressure :

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

Attribute Properties	
label	Pressure
unit	mBar
standard unit	mBar
display unit	mBar
format	%1.1e
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 Voltage :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_FLOAT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read allowed for	All states

Attribute Properties	
label	
unit	V
standard unit	
display unit	
format	%4.0f
max_value	
min_value	
max_alarm	
min_alarm	1500
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 Current :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_FLOAT
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> OFF

Attribute Properties	
label	Current
unit	A
standard unit	A
display unit	A
format	%1.1e
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	Not set
Push Archive event by user code	Not set
Push DataReady event by user code	Not set

Attribute Size :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_STRING
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

Polling Period Memorized	Not polled Not set
Read NOT allowed for	<ul style="list-style-type: none"> UNKNOWN

max_alarm
min_alarm
max_warning
min_warning
delta_time
delta_val

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

Attribute ControlType :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	OPERATOR
Inherited	false
Abstract	false
Polling Period	Not polled
Memorized	Not set
Read NOT allowed for	<ul style="list-style-type: none"> UNKNOWN

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	Not set
Push Archive event by user code	Not set
Push DataReady event by user code	Not set

Attribute FirstStepCurrent :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_FLOAT
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	First step current
unit	A
standard unit	A
display unit	A
format	%3.2e
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 SecondStepCurrent :

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

Attribute Properties	
label	Second step current
unit	A
standard unit	A
display unit	A
format	%3.2e
max_value	
min_value	

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

Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

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 FixMode :

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 NOT allowed for	<ul style="list-style-type: none"> UNKNOWN
Write NOT allowed for	<ul style="list-style-type: none"> UNKNOWN

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	Not set
Push Archive event by user code	Not set
Push DataReady event by user code	Not set

Attribute StartMode :

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 NOT allowed for	<ul style="list-style-type: none"> UNKNOWN
Write NOT allowed for	<ul style="list-style-type: none"> UNKNOWN

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	Not set
Push Archive event by user code	Not set
Push DataReady event by user code	Not set

Attribute Controller :

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ
Data Type	Tango::DEV_STRING
Display Level	EXPERT
Inherited	false
Abstract	false
Polling Period	Not polled

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

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

Memorized	Not set
Read allowed for	All states

min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Archive Relative Change	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

VarianDualIP Class States	
Name	Description
ON	When the pump is ON.
OFF	When the pump is OFF.
UNKNOWN	When the state of the pump is unknown.
MOVING	When the pump is not in "step" mode or not in "protect" mode.