

NewFocusPico8742 Tango Python Class

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NewFocusPico8742 Class Identification :

Contact : at desy.de - thorsten.kracht
Class Family : Motion
Platform : Unix Like
Bus : TCP/UDP
Manufacturer : none
Manufacturer ref. :

NewFocusPico8742 Class Inheritance :

- [Tango::DeviceImpl](#)
 - NewFocusPico8742

NewFocusPico8742 Class Description :

NewFocusPico8742 Properties :

There is no class properties

Device Properties			
Name	Description	Type	Default Value
CtrlDevice	The name of the controller device	String	none
MotorChannel	the channel no., 1 - 4	int	1

NewFocusPico8742 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.
StopMove	DEV_VOID	DEV_LONG	OPERATOR	stops the motion of an axis, uses acceleration to slow down
Calibrate	DEV_DOUBLE	DEV_LONG	OPERATOR	sets unitCalibration = pos - steps/conversion
Reset	DEV_VOID	DEV_LONG	OPERATOR	This command performs a "soft" reset or reboot of the controller CPU. Upon restart the controller reloads parameters (e.g., velocity and acceleration) last saved in non-volatile memory and sets Home (DH) position to 0

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 StopMove :

stops the motion of an axis, uses acceleration to slow down

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

Command Calibrate :

sets unitCalibration = pos - steps/conversion

Calibrate Definition		

UnitLimitMin	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	
UnitLimitMax	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	
SlewRate	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	steps/sec, 1 - 20000, saved to non-volatile memory, with SM
Acceleration	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	steps/sec**2, 1 - 200000, saved to non-volatile memory, with SM
Conversion	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	pos = steps/conversion + unitCalibration
UnitCalibration	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	pos = steps/conversion + unitCalibration
StepRegisterInternal	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	an internal step register which keeps track of the HW steps, used after power-up
StepRegisterController	false	false	Scalar	READ_WRITE	Tango::DEV_DOUBLE	OPERATOR	displays the controller register

There is no dynamic attribute defined.

Attribute Position :

move by PA, -2147483648 to +2147483647,
relative to the position defined by the DH (Home) command,
home is reset after power-up or system reset
read-pos: TP?

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	

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
Write 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 UnitLimitMin :

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
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

Attribute UnitLimitMax :

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
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

Attribute SlewRate :

steps/sec, 1 - 20000, saved to non-volatile memory, with SM

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
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
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Attribute Acceleration :

steps/sec**2, 1 - 200000, saved to non-volatile memory, with SM

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
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

Attribute Conversion :

pos = steps/conversion + unitCalibration

Attribute Definition	
Attribute Type	Scalar
R/W Type	READ_WRITE
Data Type	Tango::DEV_DOUBLE

Attribute Properties	
label	
unit	
standard unit	

Attribute Event Criteria	
Periodic	Not set
Relative Change	Not set
	Not

Display Level Inherited	OPERATOR false
Abstract	false
Polling Period	Not polled
Memorized	true
Write hardware at init.	true
Read allowed for	All states
Write allowed for	All states

display unit	
format	
max_value	
min_value	
max_alarm	
min_alarm	
max_warning	
min_warning	
delta_time	
delta_val	

Absolute Change	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 UnitCalibration :

pos = steps/conversion + unitCalibration

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
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

Attribute StepRegisterInternal :

an internal step register which keeps track of the HW steps,
used after power-up

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
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

Attribute StepRegisterController :

displays the controller register

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
Write hardware at	

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

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

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

max_warning	
min_warning	
delta_time	
delta_val	

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

There is no state defined