

# Logic.PIDControl

An Xlogic implementation of a PID controller.

## Description

Triggers the PID control loop of the provided control item. The XCommand has to be invoked every  $t_a$  seconds (i.e. the controller interval).

## Inputs

Name	Type	Mandatory/Optional	Description
actual	ItemID	M	The item that provides the current value
setpoint	ItemID	M	The item that provides the set point
control	ItemID	M	The item that is used to write the control value

## Outputs

None

## Parameters

Name	Type	Mandatory/Optional	Description
Kp	number	M	The proportional gain of the controller
Ki	number	M	The integral gain of the controller ( $K_i = K_p/t_i$ )
Kd	number	M	The derivative gain of the controller ( $K_d = K_p*t_d$ )
esumMin	number	M	The minimum of the error sum
esumMax	number	M	The maximum of the error sum
minValue	number	M	The minimum value of the control value
maxValue	number	M	The maximum value of the control value

## Possible trigger types

- Timer

## Article applies to the following products:

- NETx BMS Platform, XLogic Library 1.0.11+
- NETx Multi Protocol Server, XLogic Library 1.0.11+
- NETx BMS Server 2.0