

Manual for the use of 'Actions' for xxter professionals



With xxter you can automatically perform an action under a certain condition. This manual explains the possibilities and how to use 'Actions'.





You can set up 'Actions' with *My xxter* via <https://my.xxter.com>
When configuring a project, you have the option to create and edit actions.

An 'Action' is configured with **conditions**, that are validated, and **actions**, that must be executed.

Conditions

Conditions can be used as a 'trigger', which means it will initiate the action if the condition occurs. Some conditions can also be used as a 'validation', which means the condition will be verified when another condition triggers the action.

Trigger: 	Validation: 
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By clicking on the icon of the condition, you can switch between both options.

Every 'Action' has to have at least one condition as a 'trigger' to make sure the action can be initiated.

The following types of conditions are available:

Component	<p>This refers to a specific component in the electrical installation, e.g. KNX. Apart from the component itself, you can choose how the telegrams should be validated:</p> <p>You have the following validation options:</p> <p>“every telegram” means that any telegram will be accepted as a 'trigger'.</p> <p>“=” means the value of the telegram has to be exactly the same as the set value.</p> <p>“<” and “>” means the value needs to be smaller or larger than the set value.</p> <p>“< (first time)” and “> (first time)” means a 'trigger' should only be given the first time a value falls below or rises above the set value, respectively. Further decreases or increases will not be a 'trigger' until after the component has reached the limit value again.</p> <p>The specific validation options can be used as either a 'trigger' or a 'validation'. For example, you can use a 'trigger' for closing the sunshade when the light intensity rises (for the first time) above a certain value and use a 'validation' that checks that the wind speed is below 5 m/s before allowing the sunshade to go down.</p>
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<p>HTTP trigger</p>	<p>Allows you to enter a number that can be supplied to the xxter controller to perform an action. Opening a web address to the xxter controller with this number will initiate the action.</p> <p>A trigger can be activated by opening “http(s)://[unitIP]:8001/trigger[trigger#]”. Opening the URL “http(s)://[unitIP]:8001/gettriggers” will show all triggers that have been created for the controller. On the xxter controller, under ‘Basic’ settings, you can set up to allow triggers, and whether to use HTTP or HTTPS.</p> <p>For instance, when the xxter controller has 192.168.0.150 as its IP-address, HTTP-triggers are enabled and you have created trigger 1, then you can use “http://192.168.0.150:8001/trigger1” to activate the trigger. You can use this from another device in the network, for instance an IP camera or an alarm system, to have xxter perform an action.</p>														
<p>SIP trigger</p>	<p>Allows you to enter a number that can be supplied by a VOIP intercom system to have the xxter controller perform an action. For more information about SIP, please refer to one of the intercom manuals.</p>														
<p>DoorBird trigger</p>	<p>Allows you to use the trigger from the DoorBird intercom system to have the xxter controller perform an action. For more information about DoorBird, please refer to the xxter DoorBird manual.</p>														
<p>Weather forecast</p>	<p>Allows forecasted weather to be a trigger or validation for an action. For any condition, you must choose a time period when the weather condition should occur and whether the condition should be below or above which threshold value.</p> <p>You have the following weather conditions to choose from:</p> <table border="0"> <tr> <td>Temperature (min/max)</td> <td>Feels like (min/max)</td> </tr> <tr> <td>Air pressure (min/max)</td> <td>Humidity (min/max)</td> </tr> <tr> <td>Dew point (min/max)</td> <td>UV Index (min/max)</td> </tr> <tr> <td>Clouds (% , min/max)</td> <td>Visibility (m, min/max)</td> </tr> <tr> <td>Wind speed (m/s, min/max)</td> <td>Wind gust (m/s, min/max)</td> </tr> <tr> <td>Precipitation (mm)</td> <td>Rain (mm)</td> </tr> <tr> <td>Snow (mm)</td> <td>Precipitation chance (min/max)</td> </tr> </table> <p>For instance, this allows you to create an action if the temperature (max) in the next 24 hours is forecasted to be above 25° Celsius and precipitation (mm) in the next 24 hours below 10 (mm) then set component ‘irrigation period’ to value 30 (minutes).</p>	Temperature (min/max)	Feels like (min/max)	Air pressure (min/max)	Humidity (min/max)	Dew point (min/max)	UV Index (min/max)	Clouds (% , min/max)	Visibility (m, min/max)	Wind speed (m/s, min/max)	Wind gust (m/s, min/max)	Precipitation (mm)	Rain (mm)	Snow (mm)	Precipitation chance (min/max)
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<p>Time condition</p>	<p>Allows a certain time to be a trigger or validation for an action. With this option, you can also create a scheduler which is not visible or accessible to the end user and combine the time condition with other conditions.</p> <p>You can either choose an exact time and (an offset of) the sunrise or sunset, which can be used as a trigger or validation, or choose “before” or “after” as a validation value.</p>														



Artnet trigger	Allows xxter to perform an action based on a changing DMX value. Supply the <i>universe</i> and <i>address</i> required to identify the DMX instruction and the value that should be used as a trigger.						
Protocol (dis) connect trigger	Allows you to initiate an action when the KNX protocol is (dis)connected on the xxter controller.						
Presence detection trigger	Allows you to trigger an action when a user is detected as present or absent. You can either use the presence of all users or select a specific user. You can add users in the project under the menu option 'Presence detection'.						
Page opened	Allows the xxter controller to perform an action, when any user opens a certain page in the visualisation. For instance, you can automatically turn on an external light whenever a user opens the camera page, so they can see what is happening.						
On location	Allows the detection of an xxter beacon or the scanning of an NFC-tag to be a trigger for an action. You can select whether any user can detect a certain beacon/NFC-tag (and therefore is on that location) or only for a specific (device of a) user. For more information, see the manual for iBeacons and NFC-tags.						
Energy Tariff changes	Allows tariff changes set up in the Energy Manager to be a trigger for an action. For more information, see the manual for the Energy Manager. You can select the following events as a trigger. The definition of "low" and "high" are configuration options in the Energy Manager, via the low/high tariff threshold. <table style="margin-left: 40px; border: none;"> <tr> <td>Low price start</td> <td>Low price end</td> </tr> <tr> <td>High price start</td> <td>High price end</td> </tr> <tr> <td>Pricing negative</td> <td>Pricing positive</td> </tr> </table>	Low price start	Low price end	High price start	High price end	Pricing negative	Pricing positive
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You can add up to 5 conditions. The different conditions can be combined with either 'AND' or 'OR'. By clicking on the 'AND' and 'OR' symbols, you can switch between the two. You can also place brackets by clicking in front or behind the condition. Clicking with the left mouse button adds a bracket, clicking with the right mouse buttons removes one. An equation must always have an equal amount of opening and closing brackets.



Condition – example 1

Conditions

	(((	Component	Light intensity	>	(first time)	30000	)))	AND	X
	(((	Component	Wind speed	<		5	)))	AND	X
	(((	Component	Barring - Sunshade	=		0	)))	+	X

In this first example, the action is initiated when the light intensity rises above the set value, but only when the wind speed is below 5 (m/s) and the barring option is not active.

Condition – example 2

Conditions

	(	Component	Light intensity	>	(first time)	30000	)))	OR	X
	(((	Component	Inside temperature	>	(first time)	22	))	AND	X
	(((	Component	Wind speed	<		5	)))	AND	X
	(((	Component	Barring - Sunshade	=		0	)))	+	X

In this second example, the action is initiated when either the light intensity or the inside temperature rises above the set values, but only when the wind speed is below 5 (m/s) and the barring option is not active.

Please note: in case you would not use brackets in this second example, the 'validation' components would not be applied correctly. The 'trigger' on light intensity would then always initiate the action, regardless of the wind speed and the barring option.

Actions

You can select up to 5 actions to be performed. You can choose between:

- Setting a component to a fixed value or to a value of another component in the electrical installation
- Calling a scenario
- Starting, restarting or stopping a script
- Executing a command (e.g. Sonos, uPnP or infrared)
- Making a snapshot by a camera
- Starting or stopping the recording or playback of the presence simulation
- Waiting a set amount of seconds

De selected actions will always be performed in the order they are listed. The wait option can be used to postpone the subsequent action. It is advised to use the wait only for short periods (max 2 minutes / 120 seconds). If you want to delay longer, please use scripts or logic, see the corresponding manuals for more information.



Please note that an action can be triggered multiple times, and the execution of the actions will run in parallel. This is fundamentally different to a script or logic block, which will always have one running instance at a time.

Saving, testing and enabling/disabling

By default, when an *'Action'* is saved it will be enabled. By clicking on the check mark in front of the name, you can disable the action. An action that has been disabled will never be initiated automatically by a *'trigger'*.

An *'Action'* can be used after the configuration has been loaded onto the xxter controller. To do this, log in on the controller and press the *'Load configuration'* button.

You can find the overview of all existing actions under the menu option *'Actions'* of the xxter controller. On this page you also have the option to disable or enable an action by clicking on the symbol, but beware that when the configuration is (re)loaded on the xxter controller, the disable or enable state of every action is overwritten how they are set on *My xxter*. Apart from the actions, the alert service items that have been created by the user are also shown on this page.

To verify if an action is performed correctly, you can click on the *'Simulate condition'* button. This executes the action regardless of the actual conditions of the action.

On the xxter controller there is also an extensive user log available to troubleshoot the *'Actions'*. In the *'Settings – basic'* menu, under *'User log'* you can select the option to include *'Actions'* in the log. You can open the user log by clicking on the link under *'User log'* on the *'Status'* page. In the log you can see when a *'trigger'* of an action is verified, how the *'validation'* is performed and which actions are executed.