

Lifedomus

Universal listen module

31/01/2018

Version 1.1

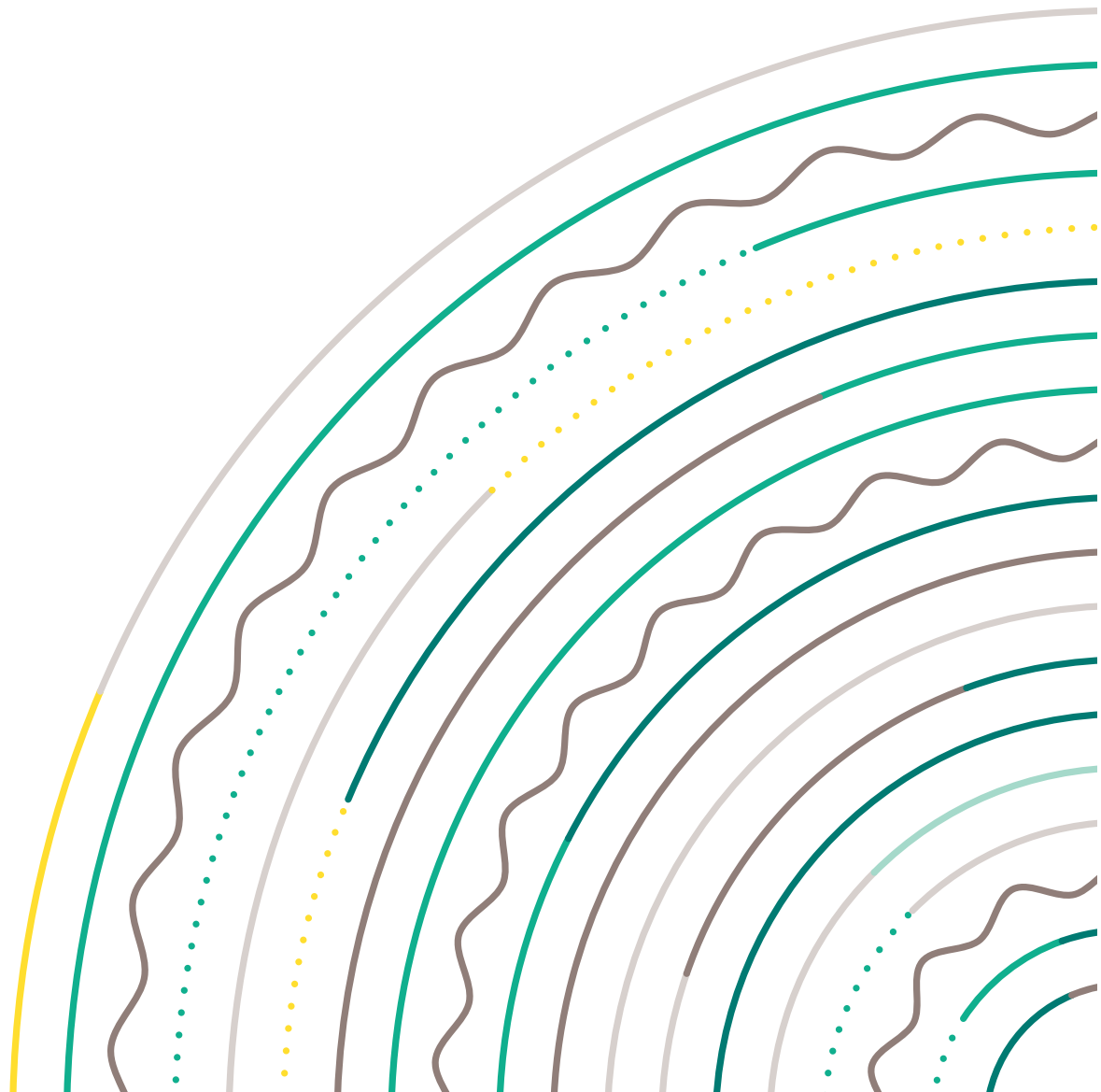


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Universal listen module

1 Presentation

The universal module has 2 operating modes, either the Lifemodus that connects to a module to communicate, or an external module connects to the Lifemodus server to communicate. The 1st mode is covered in the 'IP/RS Universal Connector' guide.

In the 2nd mode, modules can send WEB queries and UDP frames to the Lifemodus server, which can trigger scenarios or upgrade the interface.

2 HTTP connector

The HTTP principle involves using the following URL to send messages to the Lifemodus server:

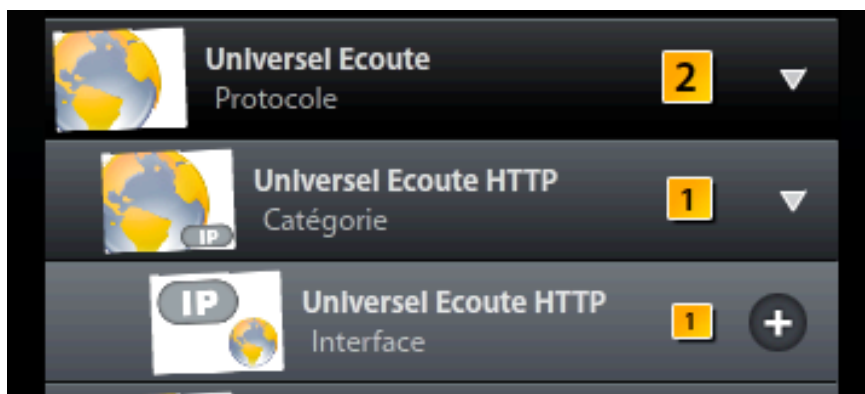
https://Lifemodus_Server_IP_address:8443/UniversalListen?frame=DATA

Where:

Lifemodus_server_IP_address is the Lifemodus server's IP address on the local network,
frame is the default parameter name (other parameter names can also be used),
 and *DATA* is the outbound message.

Before using this URL to communicate with the Lifemodus server, create the connector for the queries to be successfully sent.

You can create it from the connector module; there are no specific parameters for this connector.



3 'Universal Listen' device

As with each protocol in Lifemodus, a device must be used to be able to operate a connector. For this module only the 'Universal Listen' device must be used.

Once the connector is associated with the device, a property to receive the state by default - called 'frame' - already exists. This state operates like all Lifemodus device states; it can be used in the 'What I See', triggers and in the logic module for use.



You can delete the default state, rename it or create your own states using the 'var' button.

In addition, states can have different types. By default, incoming messages are in text form (String). You can cast the message as a number by selecting the type Double.

To change several states to HTTP, add the parameters to the base URL:

https://Lifemodus_Server_IP_address:8443/UniversalListen?message=Coucou&scenario=2

In this example, the 'message' and 'scenario' states will respectively receive the values 'Coucou' and '2'.

4 UDP connector

The UDP principle involves sending a frame to the Lifemodus server from a port specified in the connector.

If the outbound message is a text, it will automatically be assigned to 'frame' states. If you want to distinguish and use a different 'state', send a UDP in a message as JSON in the following format:

```
{  
  
  "trame": "datatrame",  
  
  "testVar": "27"  
  
}
```

Here the 'datatrame' message will be the 'frame' state feedback and 27 is the 'testVar' state feedback.

You can create it in the connector module; there is only one parameter for this connector, i.e. the port number to which the data is sent to the Lifemodus server.

5 Example: Running a motion detection scenario on the camera

This example shows how to run a camera recording when motion is detected between 9am and 6pm, on this camera, and simply switch on a light for 30 seconds outside this period.

We will use an Axis camera (model M5014) to send an HTTP notification when motion is detected.

The server will catch this event with the listening module and if the detection time is between 9am and 6pm we will record the camera stream in Lifemodus, otherwise, outside this period, we will switch on a light for 30 seconds.

NOTE: recording of the camera stream shown in this document is an optional module that is not delivered by default in Lifemodus servers. Please contact us for further details.

5.1 Axis camera configuration

Configuration takes place from your camera's administration WEB interface. Open the 'Events' tab and proceed as follows:

- Motion detection configuration
- 'Event Server' configuration (Lifemodus server)
- Event configuration (outgoing notification).

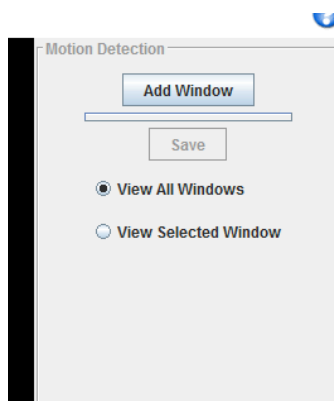


- ▶ **Basic Setup**
- ▶ **Video & Audio**
- ▶ **Live View Config**
- ▶ **PTZ**
- ▶ **Applications**
- ▼ **Events**
 - Instructions
 - Event Servers
 - Event Types
 - Motion Detection**
 - Audio Detection
- ▶ **Recordings**
- ▶ **System Options**
- About**

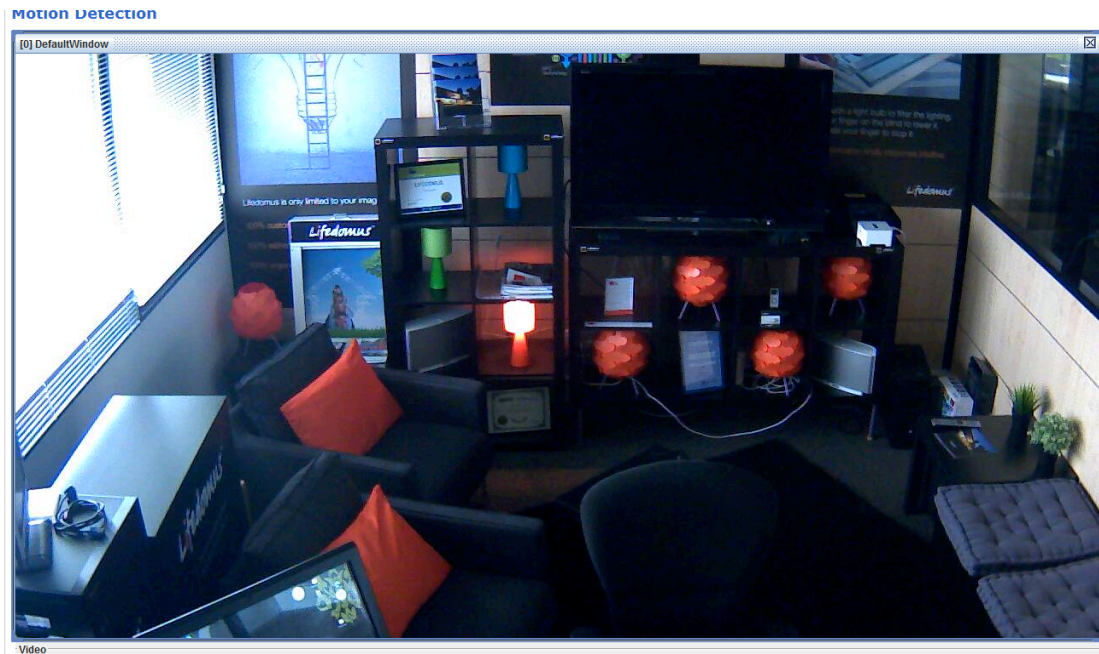
5.1.1 Motion detection

Click on the 'Motion Detection' tab.

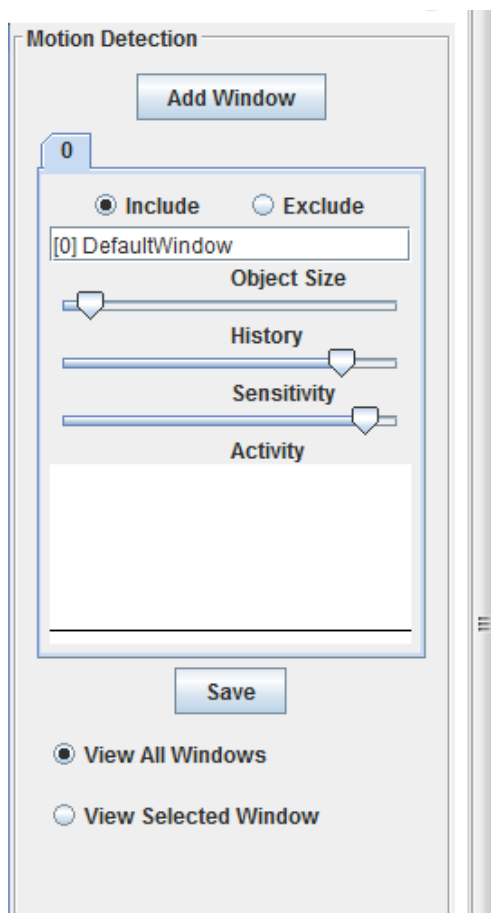
Motion detection by the Axis camera is actually a difference calculation between the current image and an image that will be configured. To define it, click on the 'Add Window' button in the top right hand corner of the window.



A window appears, it is the zone in which you want to detect motion. In this case, we will apply it to the entire camera.



Then we will configure the detection level for this image:



You can set to detect human motion only and not a light or shutter state change, or animal motion.

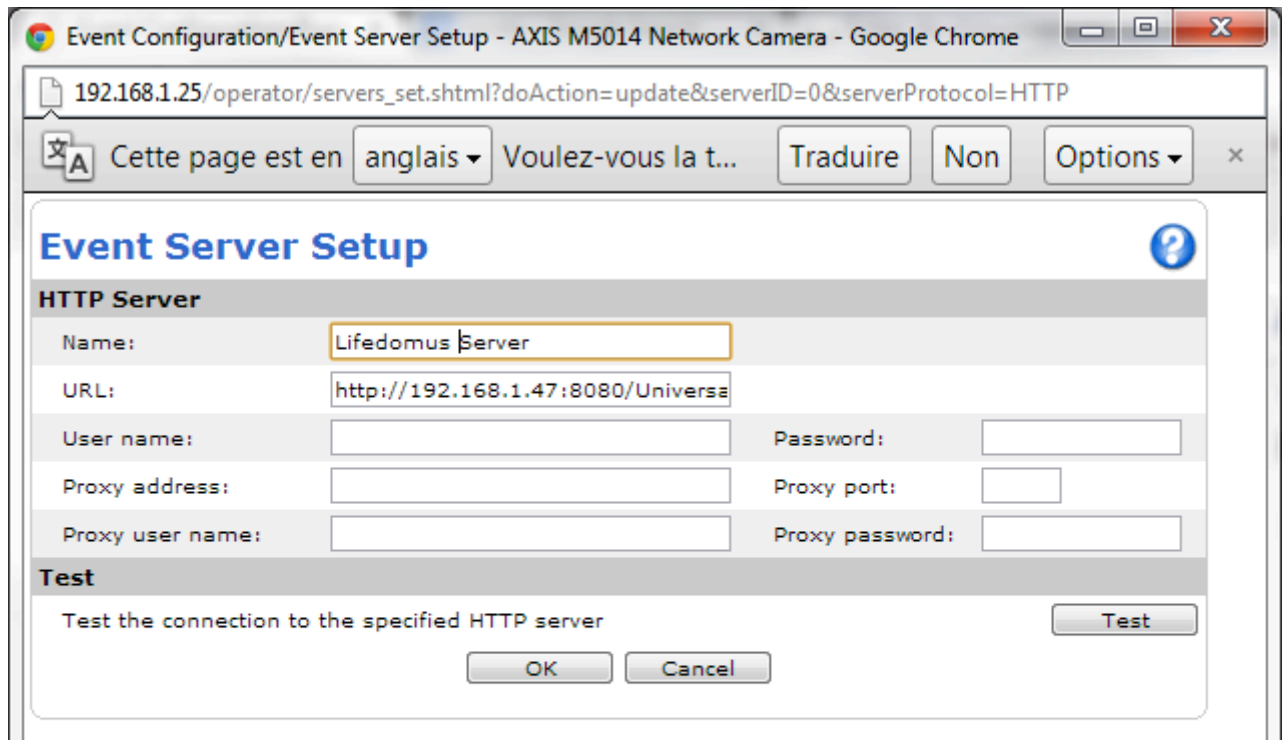
Then press Save

5.1.2 Event Server setup

We will now declare the Lifemodus server so that the AXIS camera can send a notification.

Go to the Event Server tab and click on 'Add http... '.

A pop-up window appears and we will enter the URL:



Enter the following URL: http://Lifemodus_server_IP_address:8080/UniversalListen

Note: Axis does not accept HTTP for the server, thus the non secured port of the Lifemodus server is used, i.e. 8080.

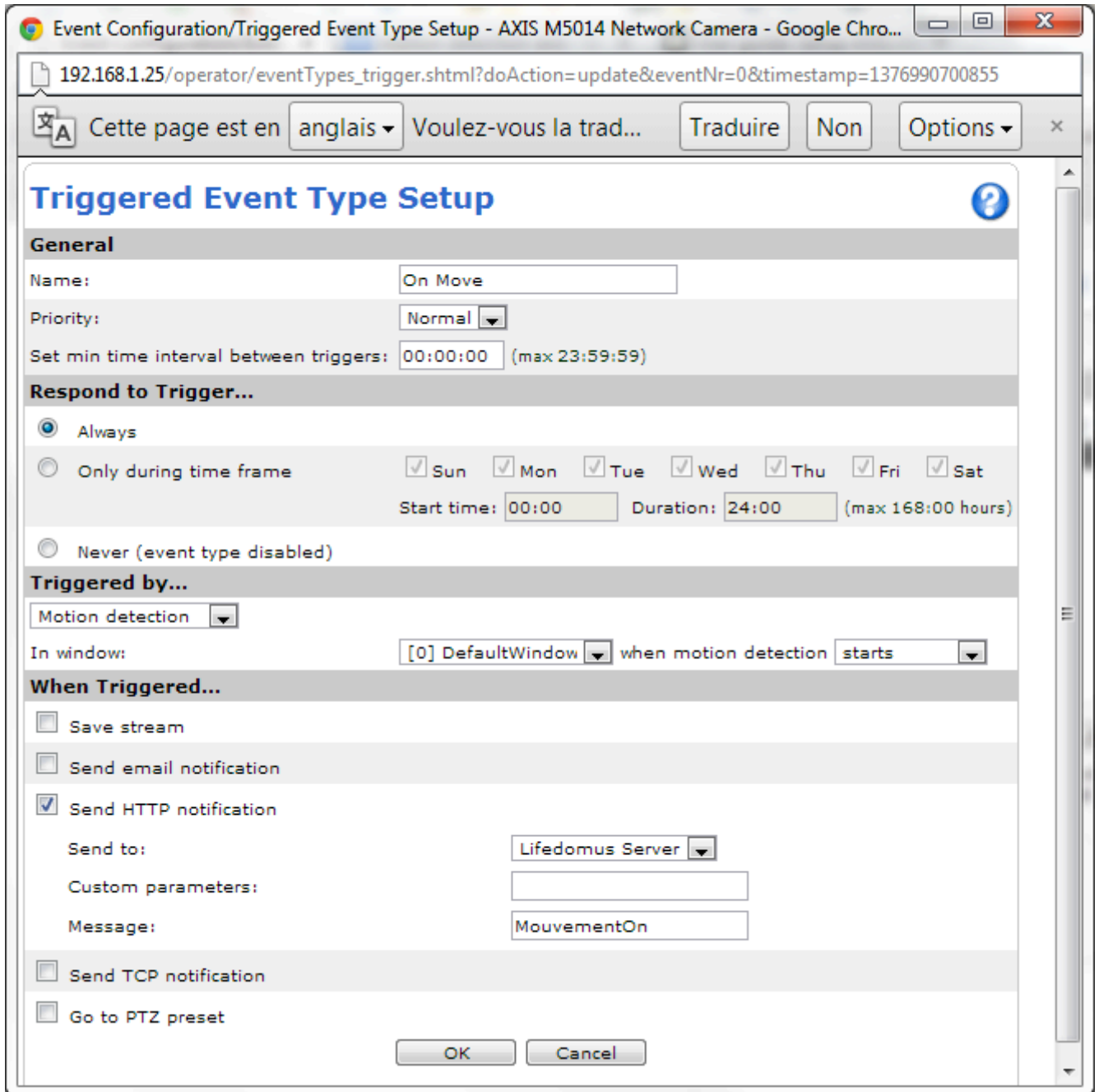
Note: the 'Test' button does not work because it tries to upload a stream, which is not the purpose of the Lifemodus server when in listen mode.

5.1.3 Event setup

We will now configure the event to send when the camera detects motion.

Click on the 'Event Type' tab and click on the 'Add Triggered' button.

A pop-up window appears to configure the event.



Event Configuration/Triggered Event Type Setup - AXIS M5014 Network Camera - Google Chro...

192.168.1.25/operator/eventTypes_trigger.shtml?doAction=update&eventNr=0×tamp=1376990700855

Cette page est en **anglais** ▾ Voulez-vous la trad... Traduire Non Options ▾

Triggered Event Type Setup

General

Name:

Priority:

Set min time interval between triggers: (max 23:59:59)

Respond to Trigger...

☒ Always

☐ Only during time frame ☒ Sun ☒ Mon ☒ Tue ☒ Wed ☒ Thu ☒ Fri ☒ Sat

Start time: Duration: (max 168:00 hours)

☐ Never (event type disabled)

Triggered by...

In window: when motion detection

When Triggered...

☐ Save stream

☐ Send email notification

☒ Send HTTP notification

Send to:

Custom parameters:

Message:

☐ Send TCP notification

☐ Go to PTZ preset

Select 'Motion detection' in the 'Triggered By...' section and the window you have created '[0] Default Windows'.

Leave 'starts' to only send the notification on detection.

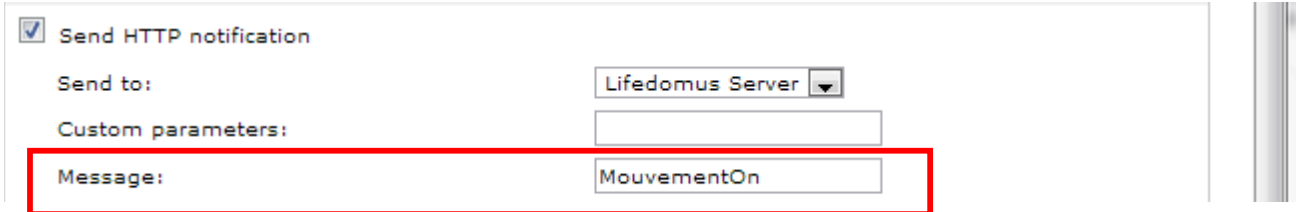
Tick 'Send HTTP notification' in the 'When Triggered...' section.

Select 'Lifedomus Server' and enter your message (in this example we will use 'MouvementOn'). This is the message you must interpret in Lifedomus subsequently.

5.2 Lifedomus setup

As shown in the documentation, create a 'Universal Listen HTTP' connector an a 'Universal Listen' device.

In this device you can change the 'frame' state name for 'Message', namely the parameter sent by the Axis camera:

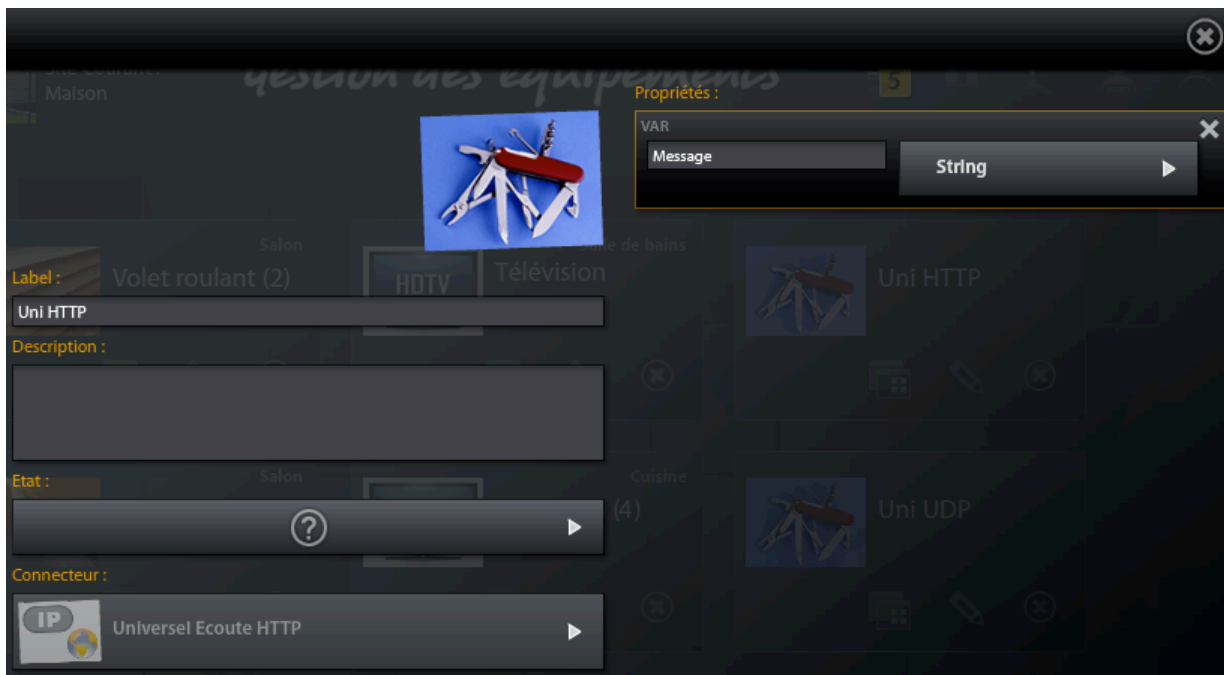


☒ Send HTTP notification

Send to: Lifedomus Server

Custom parameters:

Message: MouvementOn

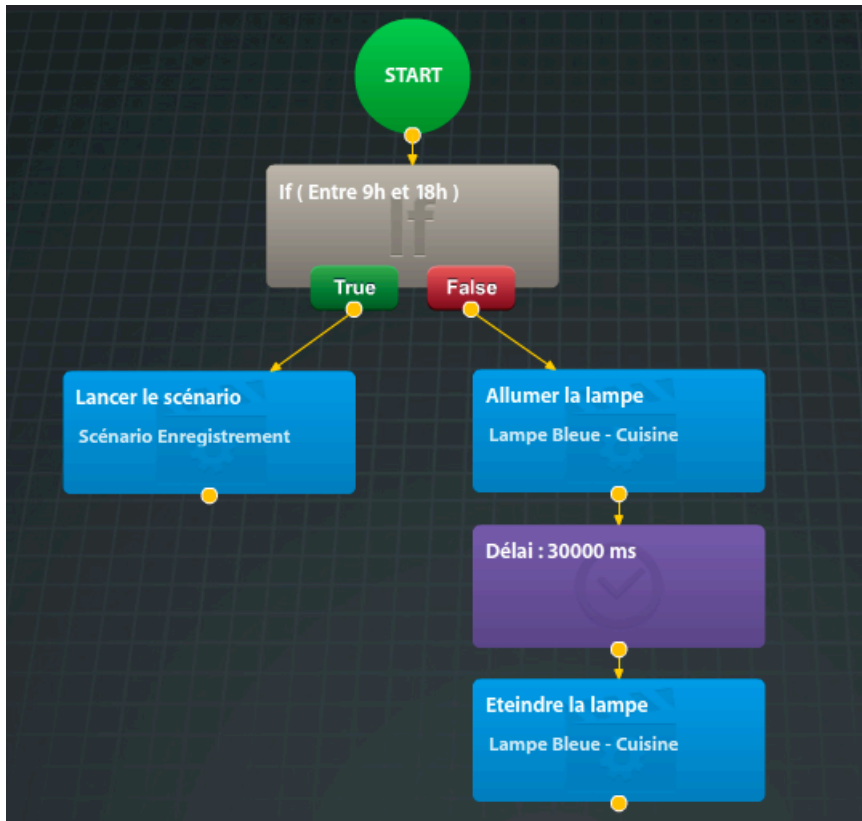


Save.

You can now create a widget in Design Studio and select the 'Message' state in 'What I See'.

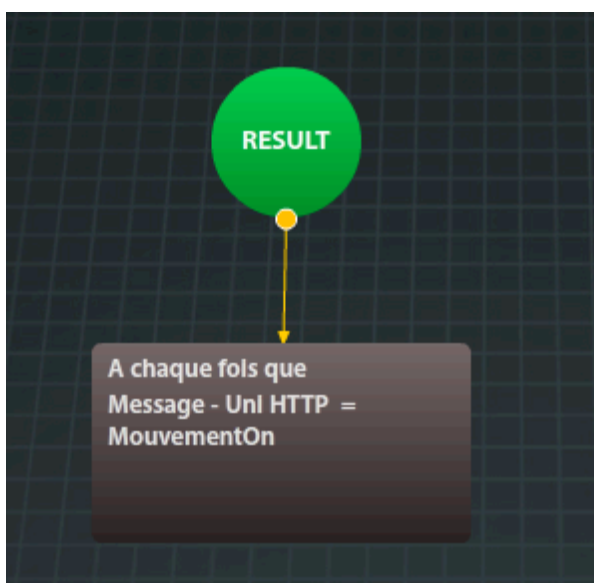
The text 'MouvementOn' will appear if you walk in front of the camera.

We will now configure a controller to switch on the light or save the camera stream depending on the time when the event was triggered.



If the time is between 9am and 6pm, the 'Record Scenario' is run (camera recording as covered below in the 'Scenario definition' section), otherwise the light is switched on and switched off 30 seconds later.

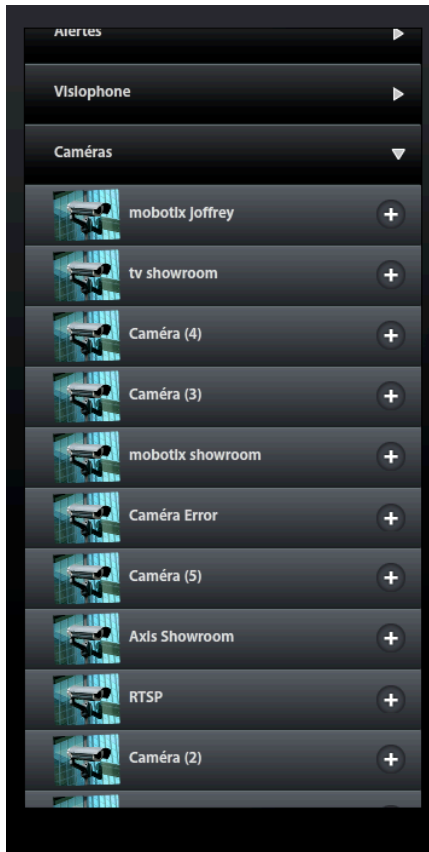
Controller trigger: Every time the Message state = MouvementOn.



Note: the controller is in 'Restart' mode for the light to stay on if there are several triggers. Then, when a new trigger occurs, the 30 seconds time out is cancelled, the light is switched on and a new 30 seconds time out starts before the light is switched off.

Scenario definition:

The camera stream is saved in the scenarios by clicking on '+' next to the camera you want to save.



There is only one available action. You will find the definition of parameters in the camera recording module documentation. In this example, we will enter the video length.

The recording time is set to 30 seconds.

As the 'Restart' mode is active in the controller, and to avoid recording every time motion is detected, we will set the scenario to 'Normal' mode so that it is not run if it is already in progress. To make sure that the scenario runs for the recording time, we will add an action 30 seconds after running it to block it.

