



# Weinzierl KNX IP BAOS Interface and Object Server App-note

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# 1. Introduction

This document will detail the integration for Building Management of the KNX IP BAOS 774 bus powered Interface and Object Server between a LAN and KNX-Bus, with the CathesisVision software. Functionally this integration will entail the triggering of standard CathesisVision Events, based on the triggers received from the KNX BAOS (Bus Access and Object Server) device from up to 1000 group objects.

## 1.1 Requirements

### 1.1.1 CathesisVision Requirements

- CathesisVision 2020 Service Pack 2, or later.

### 1.1.2 License requirements

The Cathesis KNX BAOS integration license requirements are as follows:

License	Name	Description
CKXB-2000	KNX BAOS Device	This license is the “base” license to integrate with the building management system devices. It is applied to the server to which the building management protocol is connected. It will allow for the connection of a single KNX BAOS device.

**Note:** In this integration, individual unlinked devices will require a license for each device.

## 1.2 KNX IP BAOS (Bus Access and Object Server) Specifications

- Model number: KNX IP BAOS 774
- Please note that the integration does not work on a 32-bit unit.

**Note:**

1. For information regarding the configuration and regular operation of a KNX device, please consult the relevant KNX documentation.
2. There is a General Integration section in the main *CathesisVision Setup Manual*. It has vital information on Third Party Integration, as well as a general introduction to the Integration Panel. Read over this section.

## 1.3 Integration Components and Features

All CathexisVision integrations have two component levels: **Device** and **Object**.

**Device** The device is CathexisVision software's interface, which handles all the interaction between CathexisVision and the integrated hardware. When an integration is added to the CathexisVision system, a device is added. The messages received from the device are called Device Events.

**Objects** Objects are the individual pieces of hardware that comprise the integration. There may be multiple "object types" under the objects group. For example, the main controller and door nodes of an access control system are both objects. They are different types of objects.

### A NOTE ON CAMERA CHANNELS

The CathexisVision software packages have **limits on camera channels**. A multi-sensor camera is physically a single device (camera) but it **requires a camera channel for each one of the internal cameras**. The same applies to an encoder: a 16-channel encoder will account for 16 camera channels on the CathexisVision software, even though it is a single device. Even when a camera or device only uses a single IP license, the camera channel limit will still apply.

### USEFUL LINKS

To view **tutorial videos** on CathexisVision setup, visit <https://cathexisvideo.com/resources/videos>

Find answers to Cathexis **Frequently Asked Questions**: <https://cathexis.crisp.help/en/?1557129162258>

## 2. Device Addition and Configuration

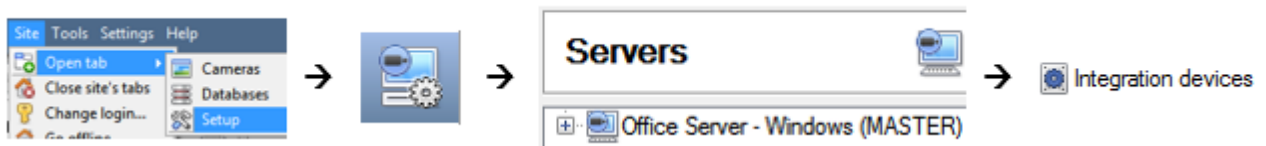
### 2.1 Device Connection with CathesisVision

Cathesis connects to the device automatically as long as it is on the same network domain as the CathesisVision server.

### 2.2 Add a New Device in CathesisVision

Integrations are added on a server-by-server basis. They are managed in the Integration Devices panel, under the Setup Tab of the servers to which they are added. To get to the Integration Panel follow this path:

#### 2.2.1 The Integrations Panel



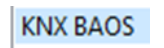
There are two sections in the Integration Panel:

1. The **Devices** list will list the integration devices that are attached to the server.
2. The **Configuration** section enables editing/reviewing the device selected in the **Devices** section.

#### 2.2.2 Device Addition



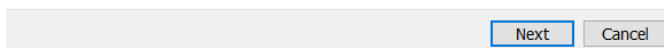
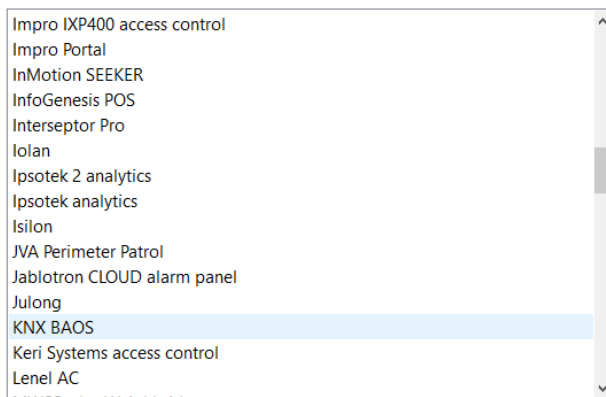
1. Once in the Integration Panel, click on the **New device** button, in the Devices section. This will open the addition dialogue.



2. Select the KNX BAOS driver from the list.

← New integration device

Select a driver



? ×

3. Give the device a descriptive **name**.

← New integration device

Configure the device

Name

Finish

Cancel

## 3. Configuration Section (Tabs)

The configuration section is divided up into a number of tabs. These tabs are: **Object configuration**, **Object properties**, **Device events**, **Object Groups**, and **General**.

**Note:** In the case of the KNX BAOS device, the Device Events Tab and General Tab cannot be used. There is also no integration database for the KNX BAOS device. This is because KNX supports a wide range of devices. It would not be feasible to display an event each time the temperature changes by 0.01, as this would generate a metadatabase with a quantity of useless data. The user is able to configure events based on the object properties.

### 3.1 Object Configuration Tab

Configuration of 'KNX BAOS'

Object configuration | Object properties | Device events | Object groups | General

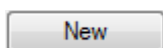
Object type: All objects

Type	ID	Name	Cameras	Object groups
BAOS	00c501029770	00c501029770		
Communication channel	_default_	Default		
DPT01 Binary - 1 bit	00c501029770_0007	Left button		
DPT01 Binary - 1 bit	00c501029770_0008	Right button		

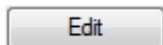
The object configuration tab shows all individual objects that comprise the integration.

**Note:** Device objects will populate once device events are received to CathesisVision.

#### 3.1.1 Object Configuration Buttons



Click **New** to add a new object.

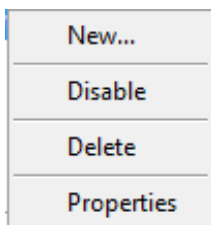


Click **Edit** to change an existing object.



Click **Delete** to remove an existing object from the CathesisVision configuration.

#### 3.1.2 Object Configuration Right-click Options



**New** will open up the dialogue to add a new object.

**Disable/Enable** allows objects to be enabled/disabled manually.

**Delete** will permanently remove this object from the list.

**Properties** will open up the object properties. The object may be edited from here. Specifically, assign cameras to this object, as well as define user access levels for it.

### 3.2 Object Properties Tab

The Object properties tab allows objects to be viewed by type.

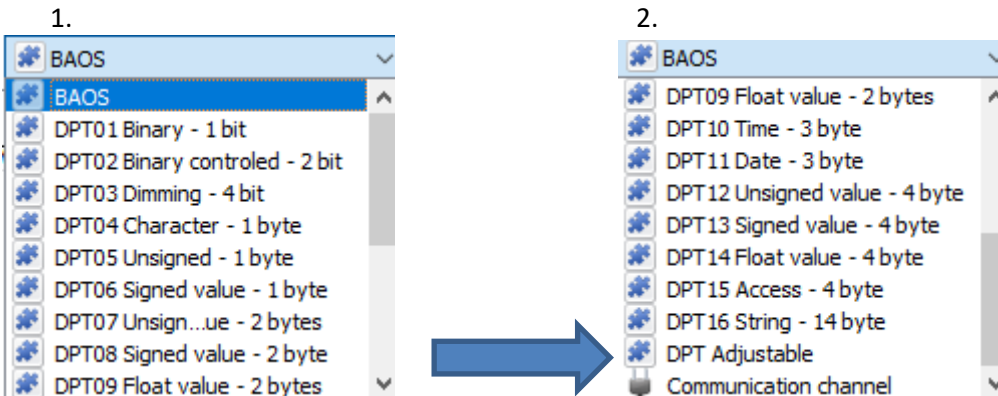
**Configuration of 'KNX BAOS'**

Object configuration | Object properties | Device events | Object groups | General

Object type: BAOS

Name	State	IP Address	Serial number	Hardware version	Firmware version
00c501029770	Bus connected	192.168.33.194	00c501029770	1.0	4.3

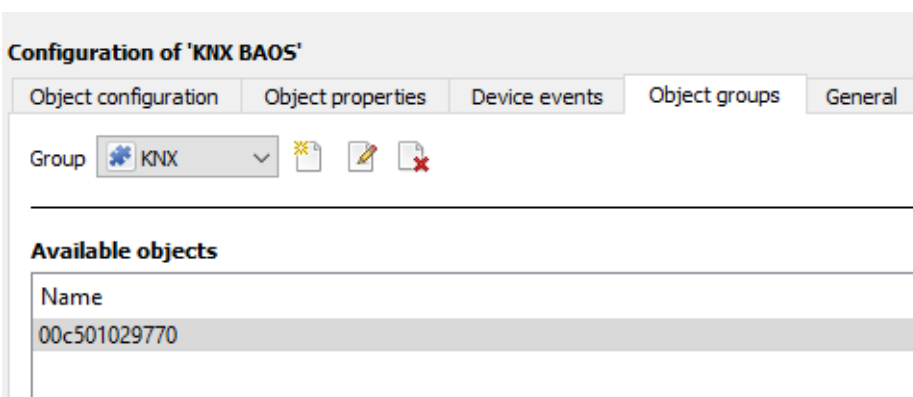
In the case of the KNX BAOS device, objects can be viewed by the following types:



DPT Adjustable cannot be controlled and Datapoint 6 cannot be set/controlled. The other object types can be commanded to **set**.

### 3.3 Object Groups Tab

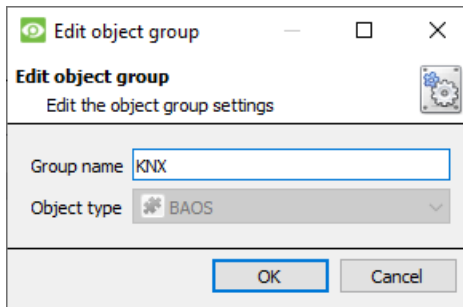
Groups of the same type of object can be created.



#### 3.3.1 Create a Group

- To **create** a group, click on this icon.
- To **edit** a group, click on this icon.
- To **delete** a group, click on this icon.





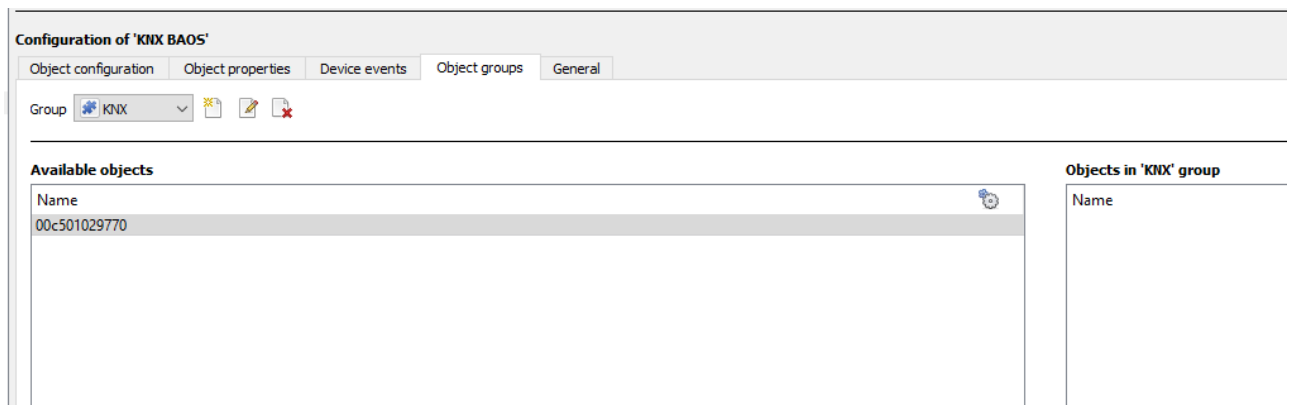
Give the group a descriptive **Group name**.


Click on the drop-down menu to select the **Object type** for grouping.


**Note:** Once a group has been created, the object type of the group cannot be edited.

### 3.3.2 Add or Remove Objects

A list of available objects will be displayed in the Available objects panel.



 To **add** these objects to the group, select them and click on the right arrow.

 To **remove** these objects from the group, select them and click on the left arrow.

**Note:** Multiple objects may be selected at a time.

## 4. Conclusion

This App-note was designed to deal specifically with this integration. For further information about the CathesisVision software please consult the main manual (<http://cathesisvideo.com/>).

For support, please contact [support@cat.co.za](mailto:support@cat.co.za)