



Zeag Parking System Integration App-note

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1. Introduction

This document will detail the integration of the Zeag Parking Station integration device, with the CathesisVision software. The Zeag parking station sends HTTP post messages to the Zeag integration driver in CathesisVision, which generates Gate and Paystation transactions and state change events, and stores them in the integration database.

Note:

1. For information regarding the regular operation of a Zeag device, please consult the relevant manufacturer’s documentation.
2. There is a General Integration section in the main *CathesisVision Setup Manual*. It contains information on creating an integration database, as well as a general introduction to the Integration Panel. **Read over this section.**

1.1 Requirements

1.1.1 General Requirements

- CathesisVision 2017.2 and later.
- ZMS (Zeag Management System) version 4.5.201.42.

Note: This version was used to configure this integration. Please consult the manufacturer for more information.

1.1.2 License Requirements

License No	License Name	Description
CZPK-2000	Zeag Parking System license.	This licenses a single Zeag parking system.

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

A NOTE ON CAMERA CHANNELS

The CathesisVision 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 CathesisVision 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.

1.2 Integration Components

All CathesisVision integrations have two component levels: Device and Object.

Device	The device is CathesisVision software’s interface, which handles all the interaction between CathesisVision and the integrated hardware. When an integration is added to the CathesisVision 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.

1.3 Features and Abilities

This section indicates the features/abilities of the Zeag Parking System when integrated with CathesisVision.

1.3.1 Connection

- Zeag system sends HTTP post messages to CathesisVision.
- System parameters need to be configured in ZMS (Zeag Management System) software to match parameters required in CathesisVision.

1.3.2 Integration Objects

- Integration provides gate and pay station transaction and state change events.
- Some device objects can be used to trigger events, and some can be controlled as event actions.
- Device can be embedded in a site map which offers multiple action options when messages are received from the device, and/or the device triggers an event.
- Overlays not supported.

1.3.3 Device Objects

Device objects populate automatically once communication is established.

Object Type	Abilities
General	<ul style="list-style-type: none"> • This integration has Gate, Station, and Communication channel objects. • Objects are automatically created as soon as communication between the CathesisVision unit and device is established. • Device objects cannot be commanded as an action. • Device objects do not support overlays. • Objects may be linked to cameras to associate device events with video footage.

Gate	Object Properties	<ul style="list-style-type: none"> • Name of gate. • State of gate. • Region code. • Direction.
Station	Object Properties	<ul style="list-style-type: none"> • Name of station. • State of station. • Region code.

1.3.4 Device Events

The ZMS software sends HTTP post messages to the CathesisVision Zeag integration driver which then generates integration device events. These integration device events (such as state changes) may then be used to trigger CathesisVision system events.

Event Element	Features/Abilities
General	<ul style="list-style-type: none"> • HTTP messages are sent from ZMS to CathesisVision. • Device event types are Gate and Paystation Transactions and State Changes. • Event messages generated by the device will generate device event messages in CathesisVision. • These device event messages can be used to trigger system events.
Device Event Types	<p>The following device event messages are received from the Paystation device and displayed in the CathesisVision device events tab and integration metadatabase:</p> <ul style="list-style-type: none"> • Gate Transaction. • Gate State Change. • Station Transaction. • Station State Change.
CathesisVision Event Actions	<ul style="list-style-type: none"> • Zeag device events are reflected in CathesisVision and can be used to create CathesisVision system events. • The device and device objects cannot be controlled as part of the system events.

1.3.5 Metadatabase

A unique metadatabase is created on the CathesisVision server for this integration. It is fully searchable, with configurable filters based on device event information (as above), and time stamping. The filtered event/s, and the associated video, will then be available for review in a new window from which an archive can be created and exported.

Database Element	Features/Abilities
<p style="text-align: center;">General</p>	<ul style="list-style-type: none"> • Database entries include the footage from cameras linked to device objects. • Multiple cameras may be linked to multiple objects. • Device event meta-data is displayed where applicable. • Databased device events may be viewed in the embedded video player, which includes the usual CathesisVision video review tools.
<p style="text-align: center;">View Options</p>	<ul style="list-style-type: none"> • Gate Transactions. • Station Transactions. • Gate State Change. • Station State Change. • All.
<p style="text-align: center;">Sort Options</p>	<ul style="list-style-type: none"> • Device event time.
<p style="text-align: center;">Easy Search</p>	<ul style="list-style-type: none"> • Name. • Transaction Type. • Park House Number. • State.
<p style="text-align: center;">Filter</p>	<ul style="list-style-type: none"> • Timestamp. • Name. • Entry Time. • Transaction type. • Ticket number. • Media type. • Rejection code. • Park House Number. • L300number. • Status. • State.
<p style="text-align: center;">Export</p>	<p>Database entries may be exported in CSV and PDF format.</p>

1.3.6 Maps

The CathesisVision GUI provides for configurable site maps that feature multi-layered, hierarchical, interactive interfaces providing representation and control of a site and its resources.

Map Element	Features/Abilities
General	<ul style="list-style-type: none"> • Device objects can be embedded in a site map which offers multiple action options when messages are received from the device, the device triggers an event, and/or the user manually initiates a map action.
Map Action Triggers	<ul style="list-style-type: none"> • All device objects may be set to trigger a map action if the user left-clicks on map. • Some device objects may be set to trigger a map action if a state change message is received from the device. • All device objects may be set to perform a map action if any event occurs on the device. • Device objects which can be configured to trigger CathesisVision events, may also be set to perform a map action when specific CathesisVision events are triggered.
Map Actions Options	<ul style="list-style-type: none"> • When triggered (see above), objects may perform the following map actions (where applicable): <ul style="list-style-type: none"> ○ Connect to a site. ○ Perform an animation. ○ Go to a camera preset. ○ Load a map. ○ Set a PTZ relay output. ○ Show a popup menu. ○ Set a relay output. ○ Show an HTML block. ○ Show a block of text. ○ Show a device popup menu. ○ Show a device event notification.

USEFUL LINKS

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

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

2. Device Addition and Configuration

2.1 Zeag Software Setup (Set up the Device)

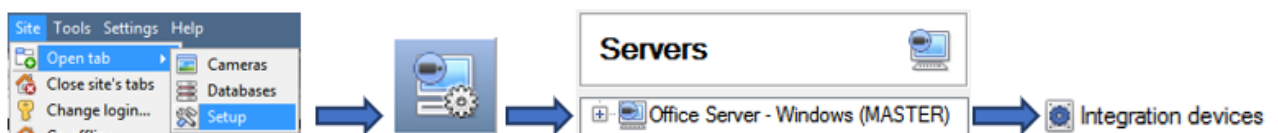
The following fields need to be configured on the ZMS (Zeag Management System) software to match the parameters required in the CathesisVision integration configuration. For more guidance on these configurations, please contact the manufacturer. These are site-specific configurations.

1. DP Port
2. Database user
3. Password
4. Database file
5. Database unit IP
6. TCP Port
7. Site ID
8. Site Name

2.2 Devices Section (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 attached to the integration database.
2. The **Configuration** section enables editing/reviewing the device selected in the **Devices** section.

This is illustrated in the image on the following page.

Devices

Name	Driver	
Zeag	Zeag Ps	<input type="button" value="New device"/> <input type="button" value="Edit device"/> <input type="button" value="Delete device"/>
optasense	OptaSense	

2 items

Configuration of 'Zeag'

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

Object type: All objects

	Type	ID	Name	Cameras	Object groups
	Communication channel	__default__	Default		
	Gate	34_E1	Gate 1		
	Gate	34_E3	Gate 3		
	Gate	35_A1	Gate 1		
	Gate	35_A3	Gate 3		
	Gate	35_E1	Gate 1		
	Station	34_K3	Station 3		
	Station	35_K1	Station 1		
	Station	35_K3	Station 3		

2.2.1.1 Device Addition



1. Once in the Integration Panel, in the Devices section, click on **New Device**. This will open the addition window.
2. Select the **Zeag ps** driver from the list.



New integration device

Give the device a descriptive **Name**.

Configure the device

Set the **Port number**. This number needs to match the one on the Zeag parking station software.

Name

Click **Finish**.

Settings _____

Port

2.3 Configuration Section (Tabs)

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

Note: Once the device is connected, and messages are received, the device objects will populate automatically.

2.3.1 Object Configuration Tab

Type	ID	Name	Cameras	Object groups
Communication channel	__default__	Default		
Gate	34_E1	Gate 1		
Gate	34_E3	Gate 3		
Gate	35_A1	Gate 1		

The object configuration tab is the tab where all the individual objects that comprise the integration may be viewed.

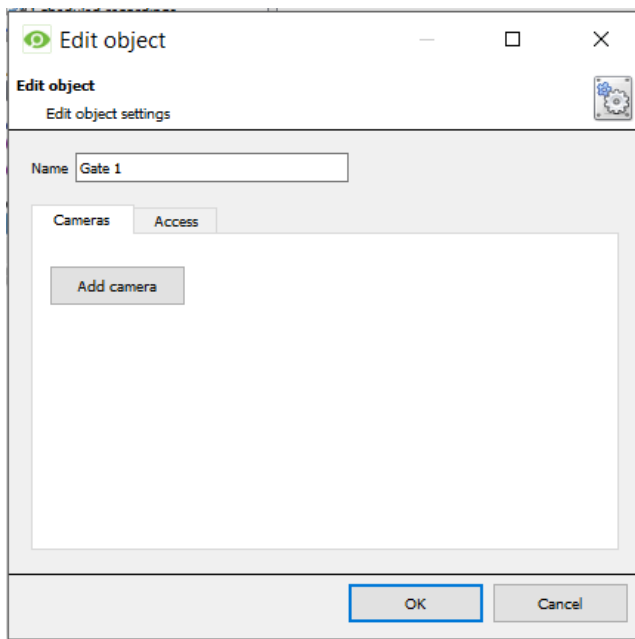
2.3.1.1 Object Configuration Buttons

	Add a new object by clicking on New.
	Click Edit to change an existing object.
	Click Delete to remove an existing object from the CathexisVision configuration.

2.3.1.2 Object Configuration Right-click Options

	New will open up the dialogue to add a new object.
	Disable/Enable allows the user to enable/disable individual objects manually.
	Delete will permanently remove this object from the list.
	Properties will open up the object properties. Edit the object from here (I.e. Assign cameras to this object, as well as define user access levels for it.)


Properties: Cameras



Adding a camera to an object will mean that, whenever there is an event on that object, the recording from that camera will be related to the time and date of the object event, in the Integration database.

To add a camera, click on **Add Camera**, and select the relevant camera from the drop-down menu.

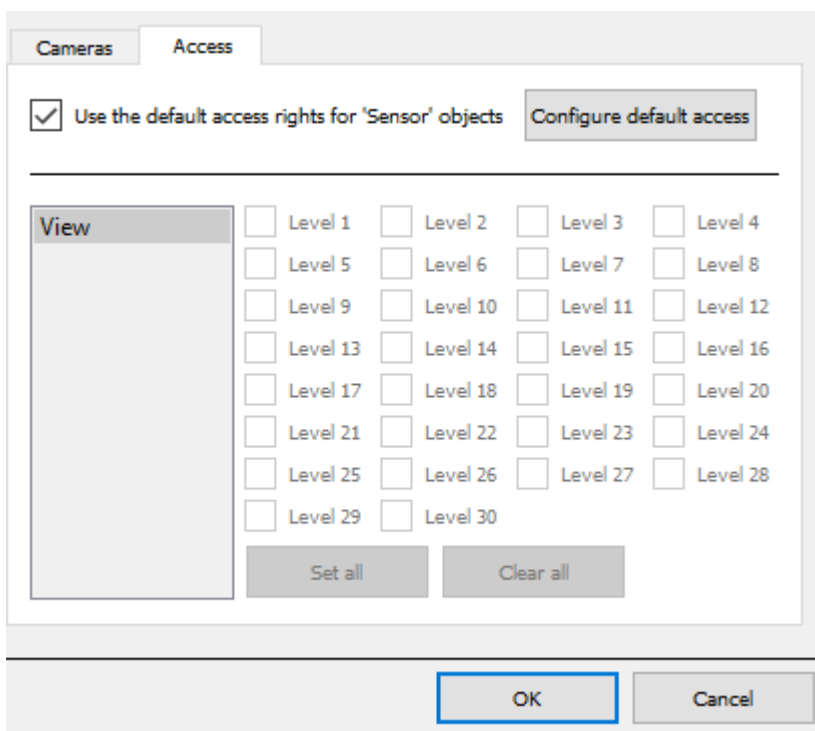
When a camera is added, a bin icon will appear which lets the user delete it.

 To delete a camera, click the trash icon.

Note: Multiple cameras may be associated with individual objects.

Note: If **continuous recording** is not set up on associated cameras, device objects run the risk of triggering while the cameras are not recording. To record cameras only when an object triggers, set up **Events to trigger a recording when one of these objects is activated**.

Properties: Access



Access allows protecting sensitive objects, by only allowing certain user levels access to them.

Under **View**, set the access levels.

Note: If *Use default access rights* is checked, make sure that those default rights have been correctly defined. Click on **Configure default access** to do this.

2.3.2 Objects Properties Tab

Configuration of 'Zeag'

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

Object type: Station

Name	State	Region Code
Station 3		34
Station 1	Operating	35
Station 3		35

The Object properties tab allows the user to view the object properties, sorted by object type. In the case of the Zeag device the viewing options are by **Gate**, **Station** or **Communication Channel**.

2.3.3 Device Events Tab

Configuration of 'Zeag'

Object configuration | Object properties | **Device events** | Object groups

All events | Filter

Event type			
Gate Transaction	2017-01-24 12:00:00.088	2016-03-07 15:28:56	Gate 1
Gate Transaction	2017-01-24 12:00:57.245	2016-04-02 12:30:05	Gate 3
Gate Transaction	2017-01-24 12:01:53.963	2016-03-07 15:30:55	Gate 3
Gate Transaction	2017-01-24 12:02:28.698	2016-04-02 12:50:10	Gate 1
Gate State Change	Gate 1	2017-01-24 12:03:36.088	Operating
Gate State Change	Gate 1	2017-01-24 12:04:05.323	Operating
Station Transaction	2017-01-24 12:04:24.010	2016-03-07 15:29:36	Station 3
Station Transaction	2017-01-24 12:05:15.713	2016-04-02 12:40:55	Station 3
Station State Change	Station 1	2017-01-24 12:05:34.010	Operating

This will list all events sent from this device. It can be used to monitor the functioning of the integration and the events on site.

2.3.4 Object Groups Tab

Configuration of 'Zeag'

Object configuration | Object properties | Device events | **Object groups**

Group

Available objects

Name

Objects in group

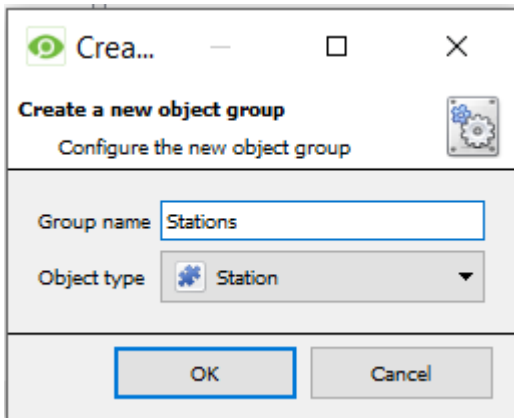
Name

← →

In this tab, objects of the same type may be grouped together.

Tip: This is useful when setting up Events, because events can be triggered by an object group. (E.G. a group will trigger, if any of the devices in that group is triggered.)

2.3.4.1 Create a Group

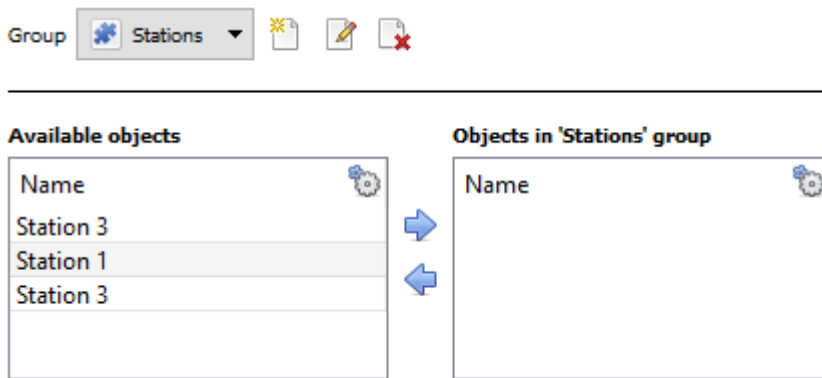


To create/edit a group click on / .

Note: Once a group has been created, the group's object type may not be edited.

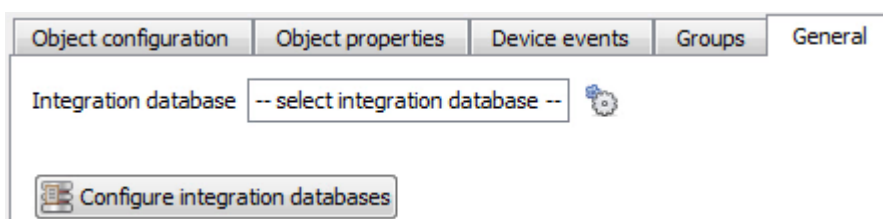
Give the group a descriptive **Group name**.

Click on the drop-down menu to select the **Object type**. Only objects of this type can be added to the group.



A list of Available Objects will then populate. To add/remove these objects, select them (multiple may be selected), and click on / .

2.3.5 General Tab

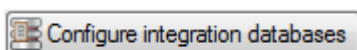


The General Tab deals with the **Integration database**.

Select an existing database or create a new one.

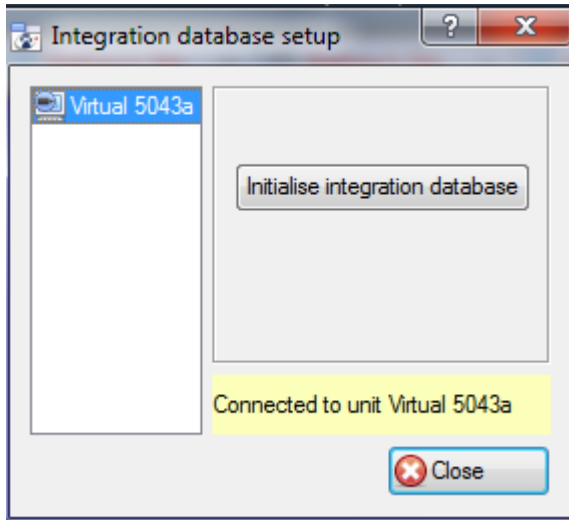
Important Note: Each integrated device needs to be attached to an Integration database. Without setting up/adding a database, the integration will not function properly within the CathexisVision system.

2.3.5.1 Configure a New Database



If there is no existing database for the current integration, clicking **Configure integration databases** will open the integration database setup.

2.3.5.2 Initialise the Integration Database

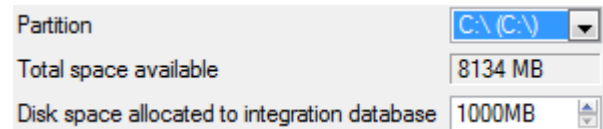


To create databases for specific integrations, the general integration database must be initialised.

Select the unit to which the database will be added from the list on the left.

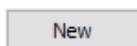
Then click **Initialise integration database**.

Choose a partition on which the database will be created, and select disk space.

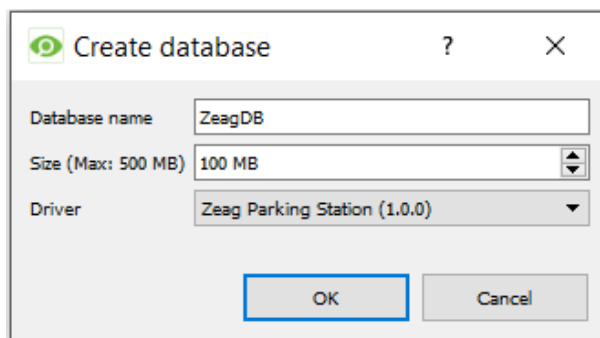


Add a New Devices Database

After initialisation, add the database for the Zeag integration.



Click on the New button, at the bottom of the Create database window.

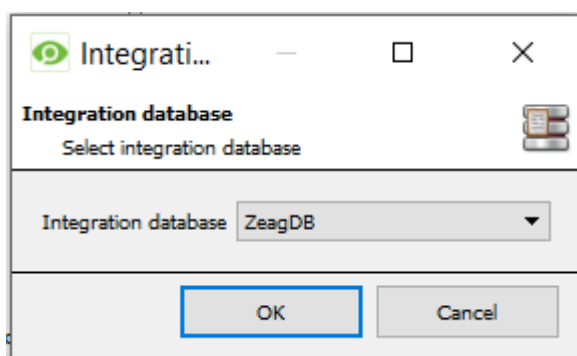


Give the Integration database a descriptive **Database Name**.

Allocate a **Size** to the new device database.

Select the **Zeag Parking Station Driver** from the drop-down menu and click on OK to create the database.

2.3.5.3 Select the Integration Database



Integration database -- select integration database --

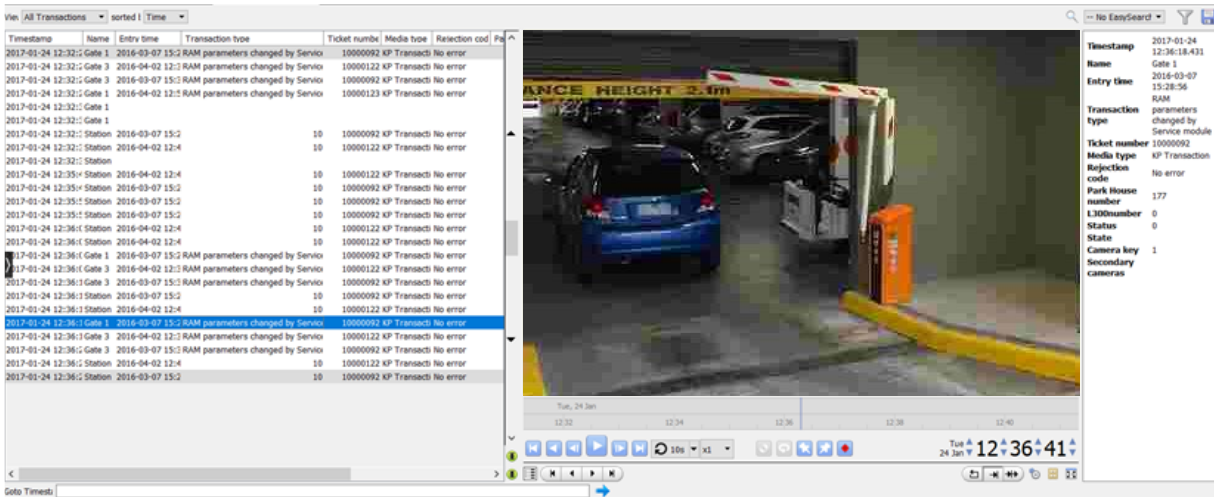
Once a database has been created the user may select it by clicking on the icon, and selecting it in the dialogue that appears.

Only databases which relate to the device being added should appear.

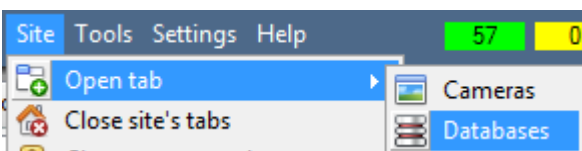
3. Database

The database tab will allow you to navigate the databased entries, for each individual database. In the database tab each database is presented as a table. It has built in filters, and the ability to navigate by timestamp. If a database entry has an associated recording you will also be able to launch this recording, from within the database tab.

Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathexisVision by the integrated device.

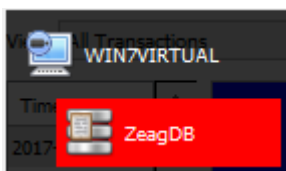


3.1 Navigate to the Database



To view the information stored in the Integration database, follow the path to the left.

This will open the Databases Tab.

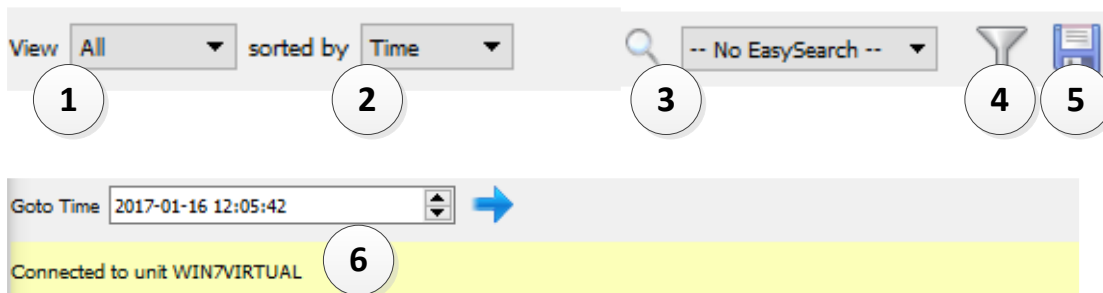


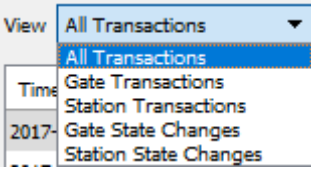
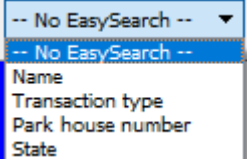



Once in the Databases Tab, select the relevant integration database. The databases are ordered under the NVRs that they are attached to.



Hover over the arrow on the left-side of the camera image to bring up the database panel on the left.

3.2 Database Interface



<p>① View</p>	<p>The user may change the way that the database is presented. Some integration databases have multiple view options. The Zeag device has:</p> 
<p>② Sorted By</p>	<p>Events can only be sorted by Time.</p>
<p>③ Easy Search</p>	<p>The easy search option lets the user quickly search the database. The Zeag device has:</p> 
<p>④ Filter </p>	<p>Filter offers a more advanced manner of sorting information in the Integration Database table.</p> <p>Once the filters dialogue is open, the following filter options are available:</p> <ol style="list-style-type: none"> To enable filters check this box: <input checked="" type="checkbox"/> Enable filters To add a new filter click on . To delete an added filter click on . <p>It is possible to filter the same parameters more than once.</p> <p>To change a filter click on the blue hyperlinked text. (For example, click on Timestamp to change the filter from Timestamp, to any of the other available options.)</p> <p>The filter options in this integration are:</p>

	<p>Transaction</p> <ul style="list-style-type: none"> Timestamp Name Entry time Transaction type Ticket number Media type Rejection code Park House number L300number Status State <p>Note:</p> <ol style="list-style-type: none"> 1. Multiple filters may be run simultaneously. 2. The filter icon will change to when filters are active.
<p>⑤ Export</p>	<p>Generate meta-database reports in PDF or CSV format. See below.</p>
<p>⑥ Go to Time</p>	<p>This navigates to a specific point in time, down to the second. To navigate to a timestamp set the time using the time and date boxes Then click on the arrow icon.</p>

3.2.1.1 Generate Meta-database Reports



Click the save icon to open the Export window.

Export
?
×

Select the period to export

Preset Quarter to date ▾

Specific
 From
1 ▾
January ▾
2017 ▾
00 ▾
00 ▾
00 ▾
to
1 ▾
April ▾
2017 ▾
00 ▾
00 ▾
00 ▾

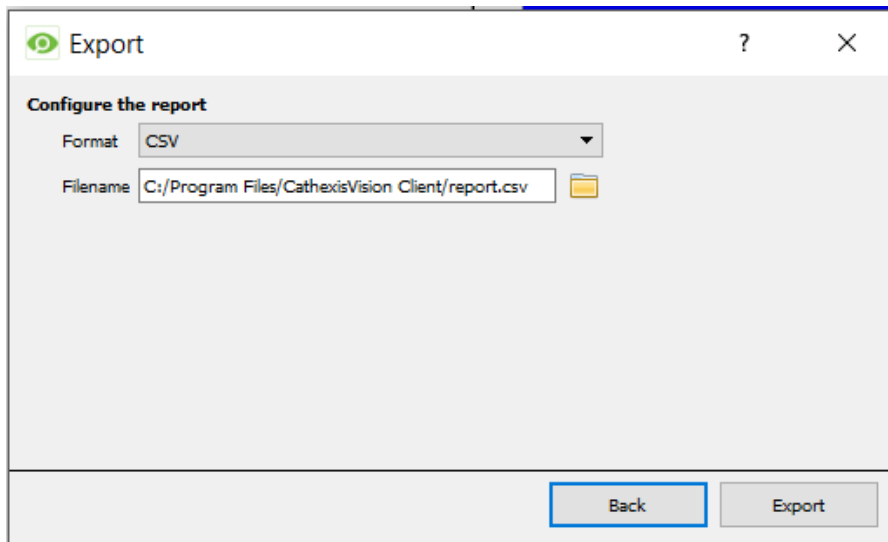
Previous 1 ▾ Hours ▾

Period of 1 ▾ Hours ▾
from
00h00 ▾
16 ▾
January ▾
2017 ▾

Back
Next

Select the **Period** to export, and enter the required details.

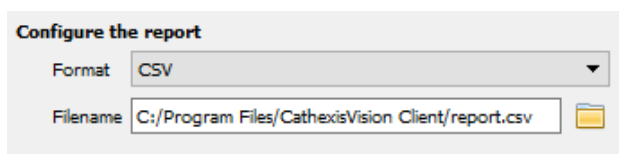
Click **Next**.



Select the **Format** to export the report in; either CSV or PDF.

See below for the two options.

Export CSV



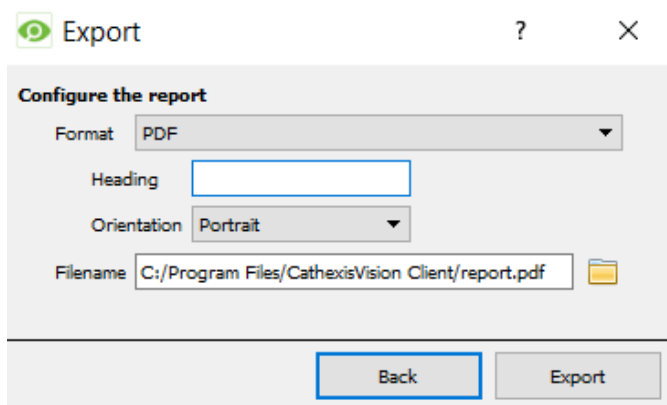
Select CSV **Format**.

Edit the **Filename** by either entering it straight into text field (replacing **report.csv**).



Or, click the folder icon to choose a new save folder and filename.

Export PDF



Select PDF **Format**.

Give the PDF a **Heading**.

Select either Landscape or Portrait **Orientation** of the PDF.

Edit the **Filename** by either entering it straight into text field (replacing **report.csv**).



Or, click the folder icon to choose a new save folder and filename.

3.2.1.2 Viewing an Entry's Associated Recording

This integration uses the new video option where the video player is embedded in the database view. This player uses the same timeline features as the CathesisVision cameras tab.

- To view an associated recording, left-click on a database entry which has the camera icon in the **Links** column.

Then click play in the video player.

Timestamp	Name	Entry time	Transaction type	Ticket number	Media type	Rejection code	Pe
2017-01-24 12:32:1	Gate 1	2016-03-07 15:2	RAM parameters changed by Servio	10000092	KP Transaction	No error	
2017-01-24 12:32:1	Gate 3	2016-04-02 12:4	RAM parameters changed by Servio	10000122	KP Transaction	No error	
2017-01-24 12:32:1	Gate 3	2016-03-07 15:2	RAM parameters changed by Servio	10000092	KP Transaction	No error	
2017-01-24 12:32:1	Gate 1	2016-04-02 12:4	RAM parameters changed by Servio	10000123	KP Transaction	No error	
2017-01-24 12:32:1	Gate 1						
2017-01-24 12:32:1	Station	2016-03-07 15:2		10	10000092	KP Transaction	No error
2017-01-24 12:32:1	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:32:1	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:35:4	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:35:4	Station	2016-03-07 15:2		10	10000092	KP Transaction	No error
2017-01-24 12:35:4	Station	2016-03-07 15:2		10	10000092	KP Transaction	No error
2017-01-24 12:35:4	Station	2016-03-07 15:2		10	10000092	KP Transaction	No error
2017-01-24 12:35:4	Station	2016-03-07 15:2		10	10000092	KP Transaction	No error
2017-01-24 12:36:1	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:36:1	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:36:1	Gate 1	2016-03-07 15:2	RAM parameters changed by Servio	10000092	KP Transaction	No error	
2017-01-24 12:36:1	Gate 3	2016-04-02 12:4	RAM parameters changed by Servio	10000122	KP Transaction	No error	
2017-01-24 12:36:1	Gate 3	2016-03-07 15:2	RAM parameters changed by Servio	10000092	KP Transaction	No error	
2017-01-24 12:36:1	Station	2016-03-07 15:2		10	10000092	KP Transaction	No error
2017-01-24 12:36:1	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:36:1	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:36:1	Gate 1	2016-03-07 15:2	RAM parameters changed by Servio	10000092	KP Transaction	No error	
2017-01-24 12:36:1	Gate 3	2016-04-02 12:4	RAM parameters changed by Servio	10000122	KP Transaction	No error	
2017-01-24 12:36:1	Gate 3	2016-03-07 15:2	RAM parameters changed by Servio	10000092	KP Transaction	No error	
2017-01-24 12:36:1	Station	2016-04-02 12:4		10	10000122	KP Transaction	No error
2017-01-24 12:36:1	Station	2016-03-07 15:2		10	10000092	KP Transaction	No error

Timestamp	2017-01-24 12:36:18-431
Name	Gate 1
Entry time	2016-03-07 15:28:56
QAM	
Transaction type	parameters changed by Service module
Ticket number	10000092
Media type	KP Transaction
Rejection code	No error
Park House number	177
L300number	0
Status	0
Camera key	1
Secondary cameras	

3.2.1.3 Reviewing Multiple Cameras

If multiple cameras were added to the recorded object during the integration setup, these are displayed on the left of the video player screen as thumbnails.

Select a camera thumbnail to review it.

3.2.1.4 Device Event Metadata

When an integration database entry is selected, its event information will be displayed on the right of the video player:

Timestamp	2017-01-24 12:36:14.900
Name	Station 3
Entry time	2016-03-07 15:29:36
Transaction type	10
Ticket number	10000092
Media type	KP Transaction
Rejection code	No error
Park House number	177
L300number	0
Status	0
State	
Camera key	1
Secondary cameras	

4. Events

A CathesisVision Event has a trigger, which causes an action. Integrated devices can be set to act at triggers, or as actions. This document will detail the Zeag specific aspects of Events. There is a comprehensive guide to CathesisVision Events in the main setup manual. For more information, please consult it.

Most of the data that CathesisVision receives from a device is presented in the Events interface. This is done in order to give the user a full range of options. As a result, some of the options presented in the interface may be *impractical* for being used as an event trigger, or action.

4.1 Event Window

Events in CathesisVision are setup via the Event Window. This has 4 tabs:

1. In the **General Tab**, an event is given a name, description, schedule and priority.
2. In the **Triggers Tab**, the trigger/s for the event is defined.
3. In the **Actions Tab**, the action/s which the event takes is/are defined.
4. In the **Resources Tab**, the various site resources which can be used as part of an event are defined.

New Event

New event



General

Triggers

Actions

Resources

Name

Description ?

Schedule Always ⚙️ 📄 ✎️

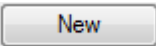
Priority ⚠️ Low

OK
Cancel

4.2 Creating an Event

To create an event using the Zeag device, enter the Events management area:



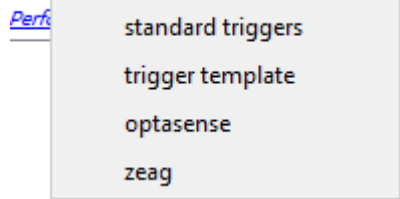
 Once in Events management click on New. This will open up the New Event window.

4.3 Triggers

A trigger is the user defined input that tells the event to start. The trigger causes the subsequent action (which the user will also define).

G4.3.1 Set the Device as the Trigger

Use [standard triggers](#) to trigger the event



If creating a new event, the trigger type will default to:

Use [standard triggers](#).

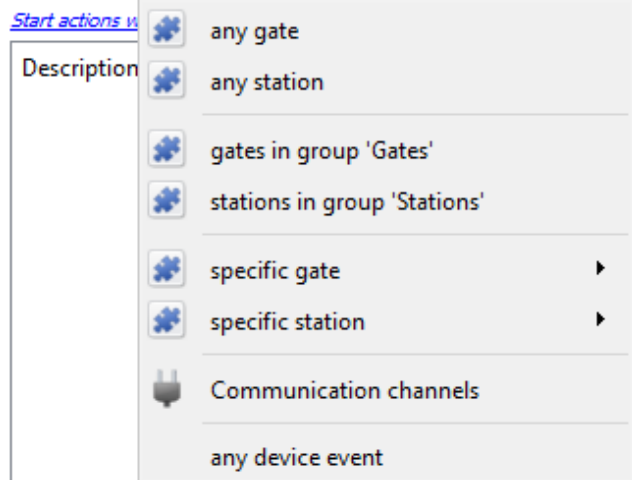
To **define** which device will trigger the event, **click on the hyperlink** after “use”.

To **set it** as the **Zeag device**, **click on the hyperlink**, and select the relevant device name from the drop-down menu.

4.3.2 Trigger Types (Trigger Using)

It is useful to think of this as a **master trigger type**.

Trigger using [any gate](#)



Any object ... will trigger when on an event from *any* of these objects.

Object in group... If an object group has been set up it will appear in this list. When any object in the group triggers, the event will be triggered.

Specific object... will only trigger on an event from a specific object.

Communication channels will trigger only on the Communication channels.

Any device event will trigger on any event that occurs on the device. Within the “any device event” setup the user may set “device event rules” which will constrain which device events will trigger the event.

Note for group triggers: For events to be databased under the name of a specific object, and not the name of the triggering group, the Description field in the **General Tab of the Event setup** needs to be modified.

Click on the question mark to see a list of available descriptions.

4.3.3 While/When and Any/All

When triggering on an object the user will have the option to trigger **while/when** a trigger is active. The user will also be able to select multiple triggers, and define whether **all/any** of the triggers need to be active to start an event.

Use [zeag](#) to trigger the event

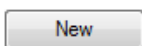
Trigger using [any gate](#)

Start actions when [any of the following device events occur](#)

As usual, to change these settings click on the related, blue, hyperlinks.

4.3.4 Define the Trigger

After selecting a master trigger type, add a trigger to the event.



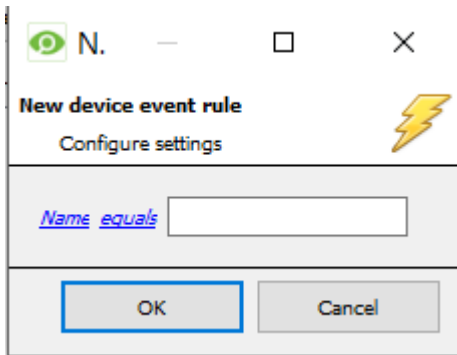
Click on New in the Triggers tab. This will bring up the dialogue box below, for the various trigger types:

For example, within the [any device event](#) option, choose what type of device Event will be the trigger. Choose an event type from the drop-down menu.

Note: Multiple constraints (**Device Event Triggers**) may be set. If a constraint is not defined, every single device event will trigger this event.

To add/edit/delete a **Trigger** (a constraint) use the **New**, **Edit**, and **Delete** buttons on the right-hand side.

Choose if [any](#), or [all](#) constraints need to be fulfilled to set off a trigger.



To change the constraint, click on the first hyperlink, this will bring up the full list of available rules.

To modify the way this rule will be treated click on the second hyperlink ([equals](#) in the example) to display the rules options.

Note: When all available options are known to CathesisVision a drop-down menu will be available. When these variables are not pre-defined they will need to be filled in manually. The information pulled through to the events is information sent to CathesisVision from the Zeag device, see the Zeag settings for the strings needed here.

4.4 Actions

Once the triggers that are going to initiate the event have been defined, the user will need to define some Actions in the **Actions tab** of the **New Event** window.



To set an action for an event trigger, click New and select an action from the available options.

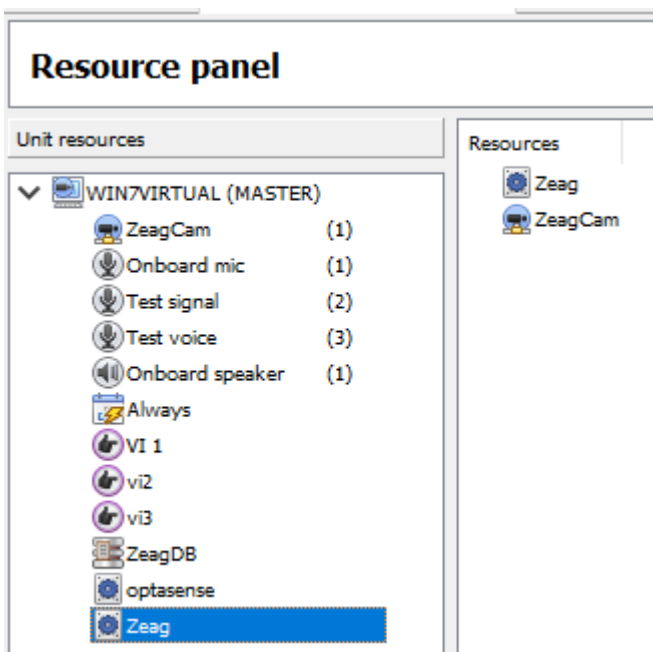
5. Maps

It is possible to add the Zeag device to a site map, which will allow for a number of action options when objects are triggered. These options include the animation of triggered zones and connecting to site cameras when zones are triggered, etc.

Note: This section will only deal with the specifics of the Zeag device. For more information on using the CathesisVision Map Editor and Map Tab, please consult the dedicated and detailed **Map Editor Operation Manual**.

5.1 Add the Device as a Resource

To configure the map, the device must be added as a resource to be added to the map.



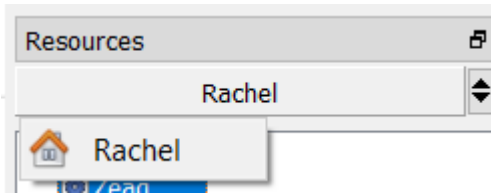
5.1.1 Add the Device in the Resource Panel

1. Navigate to the **Resource Panel** by following **Site / Open Tab / Setup / Resource Panel**.
2. Drag the device from the **Unit Resources** list into the **Resources** list, on the right.

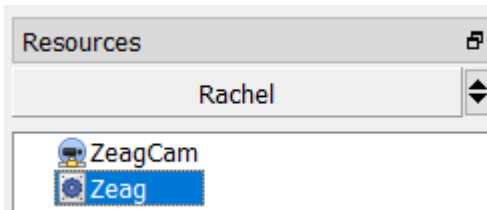
5.1.2 Add the Device in Map Editor

Once the device has been added as a **Resource**, it will be available to drag onto the map area from the **Site Resources** list.

5.1.2.1 Connect to Site



At the bottom, right-hand of the Map Editor screen, click the drop-down menu to select the site to connect to.



Once connected to site, all the resources available will populate the panel below.

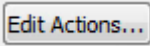
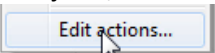
5.1.2.2 Adding Device Objects

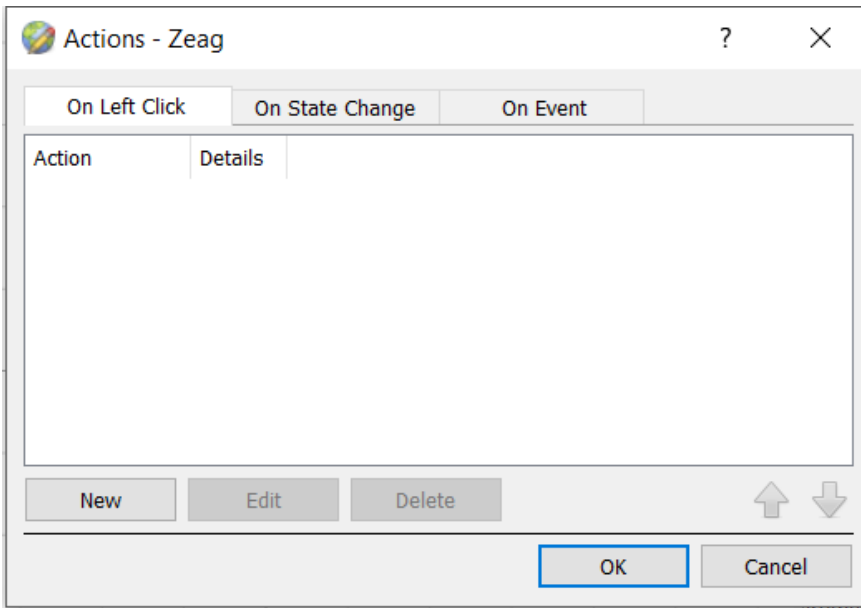


Drag the device from the Site Resources list onto the map area. All of the device objects will appear in a list. Select an object.

Note: To add multiple objects, repeatedly drag-and-drop the device onto the map area and select the desired objects individually.

5.2 Adding Device Actions

To add actions to the device objects, either select the object on the map and click  or right-click the map object and select .



Actions may be set for **Left/Right-Clicks** and **Events**.

To create a new action, select

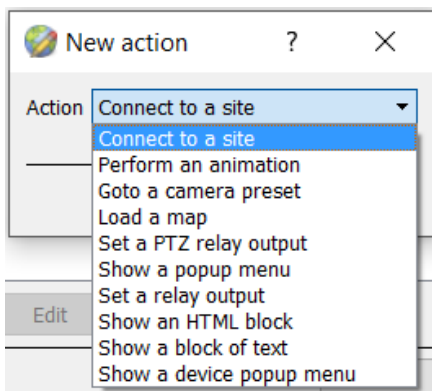


Note: State change map actions have not been configured for this integration.

5.2.1 Action Options

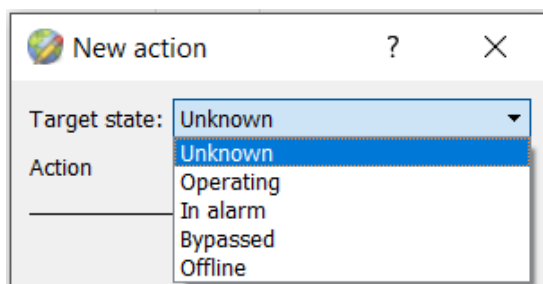
The action triggers will differ according to the object selected, as well whether the action is being set for a Click or Event. See below.

5.2.1.1 On Left-Click Tab

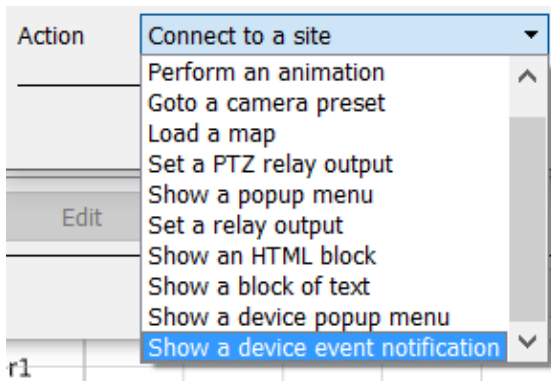


Select a map action to be triggered when this device object is left-clicked on the map.

5.2.1.2 On State Change Tab

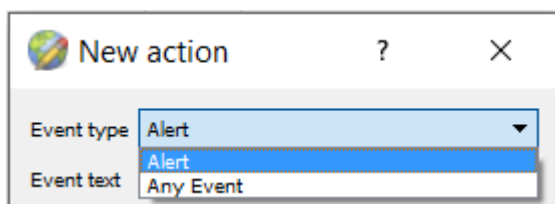


Select a Target state which, when the device switches to, will trigger a map action.



Select a map action which will be triggered by the device state change.

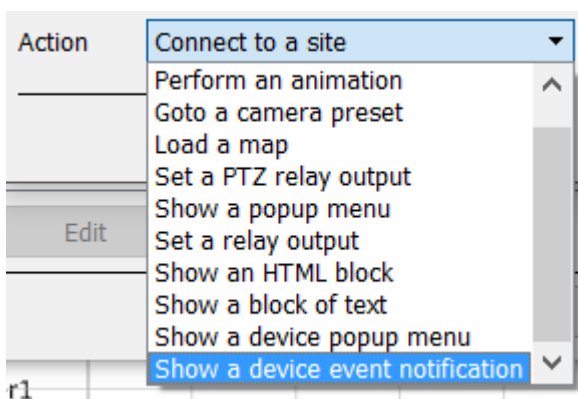
5.2.1.3 On Event Tab



Select the **Event type** of the device object which will trigger the map action.



Enter **Event text** which will appear on the map when the selected event triggers this map action.



Select the map **Action** which will be triggered by the device object event.

Note: Event actions include the extra option to **Show a device event notification**.

Note: Multiple actions may be added to the map objects.

5.2.1.4 Save Map

Once finished, save the map.

Important note: The map **must not be saved** in the **Work** folder of the CathexisVision installation directory.

5.3 Map Tab

The saved map needs to be uploaded to CathexisVision. Once the map is open, all objects added to the map area in the Map Editor will be visible on the map, and all actions set will be available.

6. 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.