



Detnov CAD-150

Fire Panel Integration App-note

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1. Introduction

This document details the integration of the Detnov CAD-150 Fire Alarm Panel with CathexisVision. This integration entails the triggering of standard CathexisVision Events, based on the triggers from the Detnov CAD-150 panel.

Note:

1. For information regarding the regular operation of a Detnov CAD-150 fire panel device, please consult the relevant Detnov CAD-150 documentation.
2. There is a General Integration section in the *CathexisVision Setup Manual*. It has information about creating an integration database and a general introduction to the Integration Panel. **Read this section.**
3. Events that occur when the communication channel, between the Detnov CAD-150 fire panel and CathexisVision is down will not be retrieved when the channel is up again.

1.1 Requirements

1.1.1 General Requirements

- CathexisVision 2023.2 or later
- Cathexis NVR 64-bit
- Windows 10 Pro
- Ubuntu 16.04 LTS and 20.04 LTS

1.1.2 License Requirements

The CathexisVision Detnov CAD-150 Fire Panel Integration license requirements are as follows:

License No.	Name	License Description
CDNV-2000	Detnov Fire Panel	This license is the “base” license to integrate with the alarm panel system. It is applied to the server to which the Detnov Fire Panel is connected. This licence will allow for the connection of a single integration device

Note: In this integration, a single license will cover multiple linked devices.

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>

1.1.3 Third-Party Device Information

This integration was tested on an entry level model of the Detnov CAD Fire Panel, which only supports 2 loops. It is not a panel specifically designed for CathesisVision.

Third-party hardware name	CAD-150
Firmware as tested	313 (Panel version)
Third-party software version	V2.32
Third-party software license required	No Detnov license required

Note: Cathesis makes a best attempt to ensure that the equipment and license requirements of third-party equipment are adequately specified. However, it is possible that the requirements of third-party equipment may change over time, including the interface hardware/firmware and licensing. The user is advised to clarify the latest requirements directly with the third-party equipment supplier.

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

CathesisVision receives event messages from the Detnov CAD-150 fire panel device which can be used to trigger a CathesisVision system event.

1.3.1 Device Objects

Object Type	Abilities
General	<ul style="list-style-type: none"> This integration has Device, Loop, Panel, Zone, and Communication Channel objects. Device, Panel, and Zone objects can be commanded as an action of a CathesisVision system event. Only Device and Zone objects support overlays. Objects may be linked to cameras to associate device events with video footage.

Device	Object Properties	<ul style="list-style-type: none"> Name Type Mode Fault Analogue value 1 Analogue value 2 State
	Commands	<ul style="list-style-type: none"> Enable/Disable
Loop	Object Properties	<ul style="list-style-type: none"> Name Open/Shorted Comms Fault Alarm count Fault count Active
	Commands	<ul style="list-style-type: none"> N/A
Panel	Object Properties	<ul style="list-style-type: none"> State Max Loops Version Alarm Version Alarm Fault Alarm count Fault count Muted Has a Zone in test Has a disabled Zone Outputs disabled Sounders disabled Sounders delayed Sounders on Sounders silenced
	Commands	<ul style="list-style-type: none"> Reset Sounders on Silence Sounders
Zone	Object Properties	<ul style="list-style-type: none"> Mode Alarm
	Commands	<ul style="list-style-type: none"> Enable/Disable
Communication Channel	Object Properties	<ul style="list-style-type: none"> ID Name Channel Status

- Details
- Creation Type
- Creation Time
- Idle time (min)

1.3.2 Device Events

The CathexisVision Detnov CAD-150 Fire Panel integration generates Device events (logs), which are triggered on the device and reflected in CathexisVision.

Event Element		Features/Abilities
General		<ul style="list-style-type: none"> • Changes on the device are detected by CathexisVision, which then generates an event. • Event types are: Device, Panel, Zone • Events generated from integration device changes can be configured to trigger system actions and notifications, and map events.
Device Event Types	Device	<ul style="list-style-type: none"> • Time (includes date) • Device • Description • Zone
	Panel	<ul style="list-style-type: none"> • Time (includes date) • Description
	Zone	<ul style="list-style-type: none"> • Time (includes date) • Zone • Description

1.3.3 Metadatabase

A unique metadatabase is created on the CathexisVision 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
General	<ul style="list-style-type: none"> • All device events are databased. • Database entries include the footage from cameras linked to device objects. • Multiple cameras may be linked to multiple objects. • Device event metadata is displayed where applicable. • Databased device events may be viewed in the embedded video player, which includes the usual CathexisVision video review tools.
View Options	<ul style="list-style-type: none"> • All • Device

	<ul style="list-style-type: none"> • Zone • Panel
Sort Options	<ul style="list-style-type: none"> • Time
Easy Search	<ul style="list-style-type: none"> • Device • Zone • Description
Filter	<ul style="list-style-type: none"> • Time • Event type • Device • Zone • Description
Export	Database entries may be exported in CSV and PDF format.

1.3.4 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	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"> • Device objects may be set to trigger a map action if the user left-clicks on map or if a state change message is received from the device. • All device objects may be set to perform a map action if <i>any</i> 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	<p>When triggered (see above), objects may perform the following map actions (where applicable):</p> <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.

2. Device Addition

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.

2.1 CathexisVision Specific Detnov CAD-150 Fire Panel Setup

The Detnov CAD-150 Fire Panel device needs to be set up correctly for it to integrate with CathexisVision correctly. The Detnov CAD-150 software is only used to configure the fire panel. The panel itself works independently of the software. Detnov has multiple fire panels, and this integration is only for the CAD-150 subset. These panels can have up to 8 loops, with each loop supporting 250 devices.

2.1.1 Connection Options

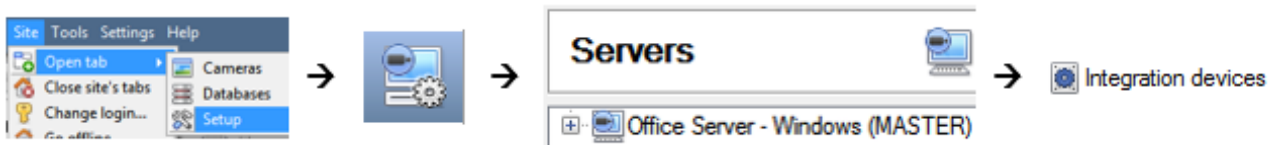
CathexisVision connects to the Detnov CAD-150 panel using TCP/IP over an ethernet cable.

2.1.2 Port Number

The port number must be the same in both the Detnov CAD-150, and CathexisVision setups. For this integration, connection is made on **TCP port 502**.

2.2 The Integration Devices Panel

To get to the Integration Panel, follow this path: **Site / Open tab / Setup / Configuration icon / Server / Integration devices**.



There are two sections in the Integration Panel:

- The **Devices** list shows the integration devices attached to the integration database.
- The **Configuration** section enables editing/reviewing the device selected in the **Devices** section.

Devices

Name	Driver	Enabled
Detnov Fire Panel	Detnov CAD-150 fire panel	✔

Configuration of 'Detnov Fire Panel'

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

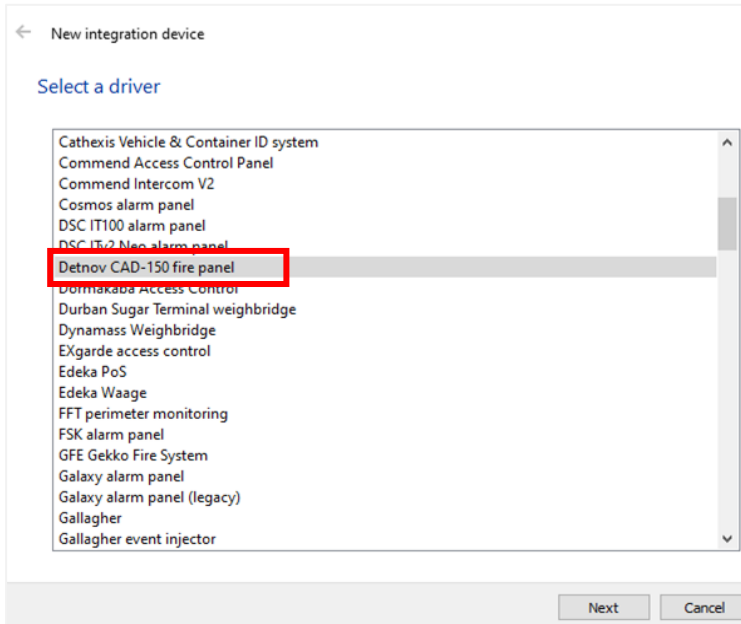
Object type: All objects

Type	ID	Name	Cameras	Object groups
Communication channel	CommsChannel._default_	Default		
Device	Device.L1_D001	L1_D001		
Device	Device.L2_D001	L2_D001		
Loop	Loop.L1	L1		

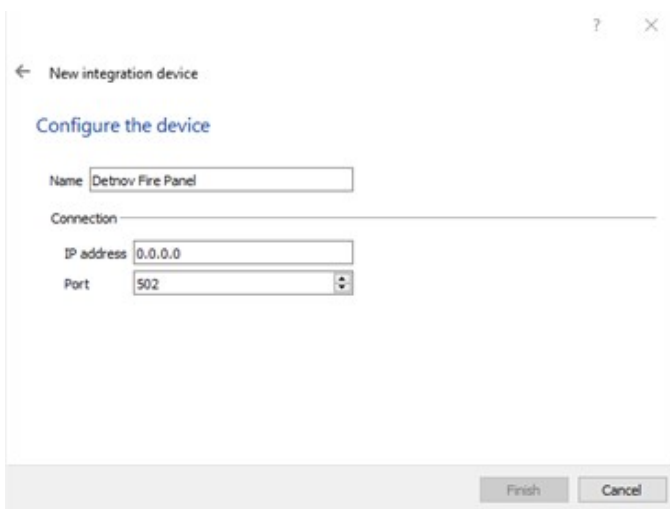
2.3 Add a New Device

New device

- In the Integration Panel, navigate to the **Devices section**.
- Click on the **New device** button on the right-hand side. This will open the addition dialogue.



- Select the **Detnov CAD-150 fire panel** driver from the list, and click Next.



- Give the device a descriptive **name**.
- Enter the **IP address** for the configured Detnov CAD-150 Device.
- Leave the **Port number** as **502**. This is the default number.
- Click **Finish**.

You will return to the **Configure the device** window.

2.3 Select Device

The newly added device will show in the Devices section.



- Click on the **device** name to select it.

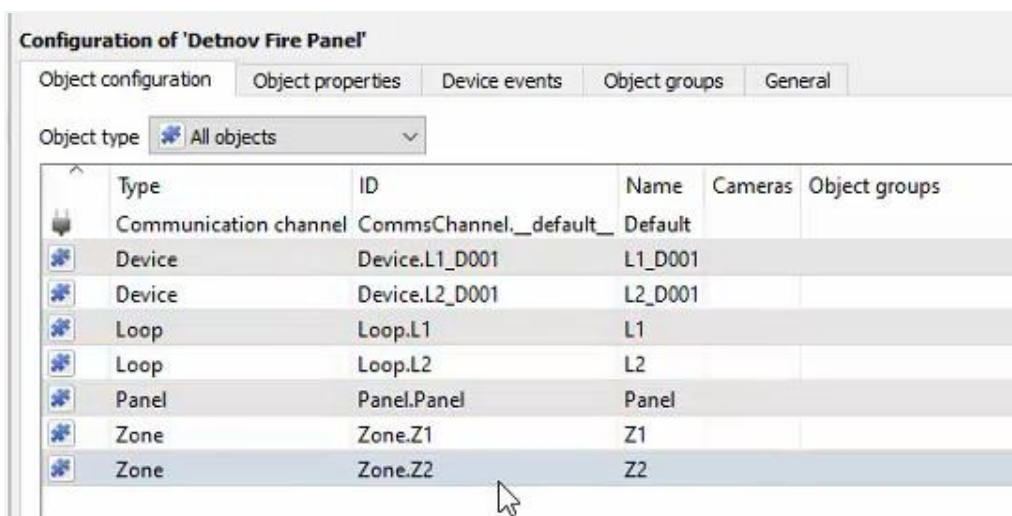
3. Configuration

The configuration section is divided into five main tabs. These tabs are: **Object configuration**, **Object properties**, **Device events**, **Groups**, and **General**.


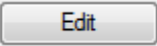

3.1 Object Configuration Tab

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

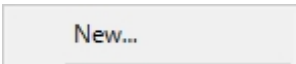
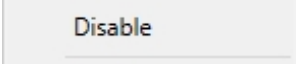
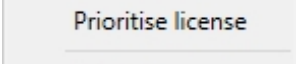
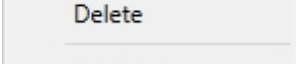
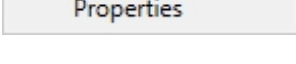
The Detnov CAD-150 fire panel integration has five object types: **Device**, **Loop**, **Panel**, **Zone**, and **Communication channel**.



3.1.1 Object Configuration Buttons

-  **New** will add a new object by clicking on New.
-  **Edit** will open up an existing object for editing.
-  **Delete** is used to delete an existing object from the CathesisVision configuration.

3.1.2 Object Configuration Right-Click Options

-  **New** will open the dialogue to add a new object.
-  **Disable/Enable** allows objects to be enabled/disabled manually.
-  **Prioritise license** allows the user to give specific objects priority when licenses are applied. This is useful if there are fewer licenses than objects.
-  **Delete** will permanently remove this object from the list.
-  **Properties** will open up the object editing window.

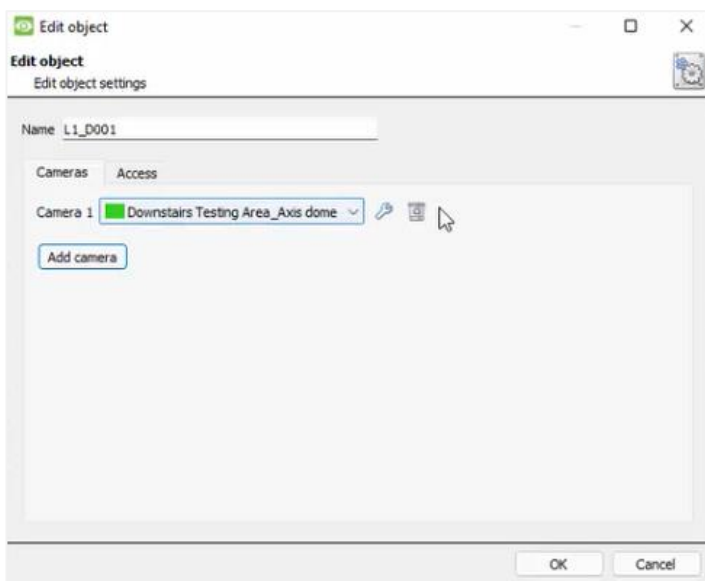
3.1.3 Edit Object

Open the object **editing window** by selecting object from the list, **double clicking** the object, **right-click Properties**, or clicking the **Edit button** at the bottom of the window.

This window is where cameras are added to objects, overlays are configured, and access rights to the integration are added. These are dealt with in two tabs: **Cameras** and **Access**.

3.1.3.1 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.



Add camera

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



To **delete** a camera, click the trash icon.

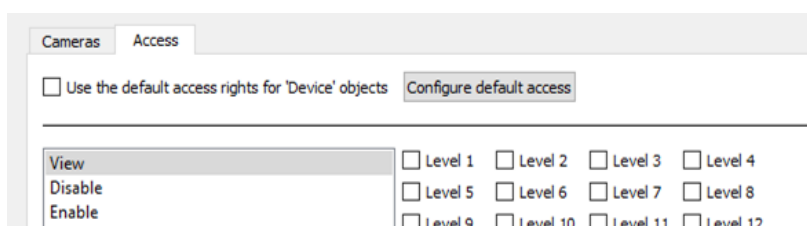


The spanner icon allows users to edit/configure overlays. This is addressed below in [3.1.4](#).

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

3.1.3.2 Properties: Access

Access can be used to protect sensitive objects by allowing only certain user levels to access them.



There will be a list of options, for which access levels may be set

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

3.1.4 Configure Overlays

Overlays may be configured globally for all objects, or individually for selected objects.

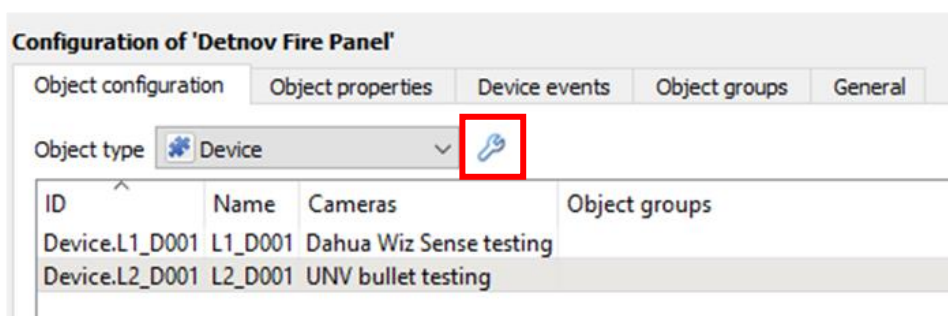
The path to follow for opening the configuration window for global or individual overlays is different, however the overlay configuration process is the same.

Overlays may be configured for **Device** and **Zone** objects only.

3.1.4.1 Configure Global Overlays

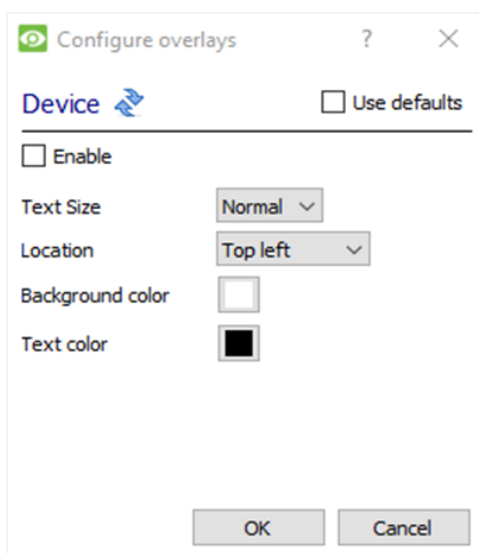
Global overlays may be configured for **Device** and **Zone** objects. If global overlays are configured for an object type, then configuration will then apply to *all* objects of that type. I.e., if they are configured for Device objects, they will apply to *all* Device objects, however they will not apply to Zone Object type.

Navigate to the global overlays setup by first opening the **Object configuration tab**. Choose an object type.



→ **Select the spanner icon** next to the drop-down menu to configure the global overlays for the chosen object.

A new window will open.



→ **Enable:** Check the box to enable overlay configuration.

→ Define the **Text size** by selecting from the drop-down menu.

→ Define the **Location** of the overlay by selecting from the drop-down menu.

→ Chose the **Text colour** and **Background colour** of the overlay stream.



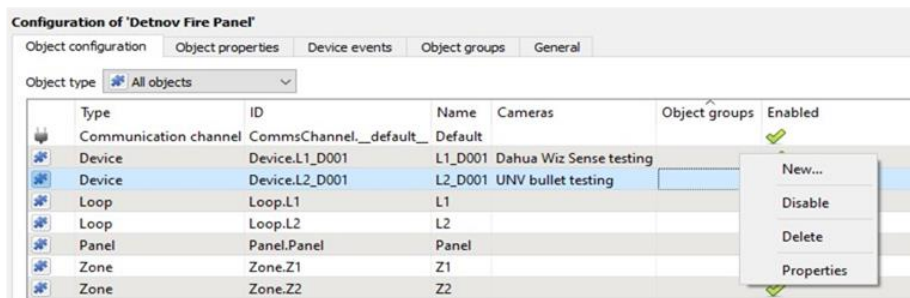
Click the colour boxes to bring up a colour chart.

Note: Click  to reset values.

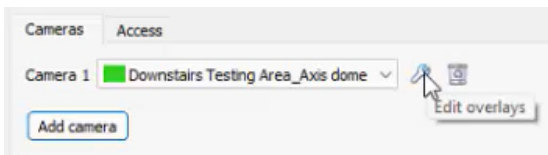
3.1.4.2 Configure Individual Overlays

For individual devices, there is a choice to use the global overlay settings (above), which apply to all objects, or to configure the settings for an individual device or zone.


For example, the overlays for the camera on one zone might be configured to show up with yellow text, while another zone displays in red.



→ Right-click an item in the list and select **Properties** to edit the object.



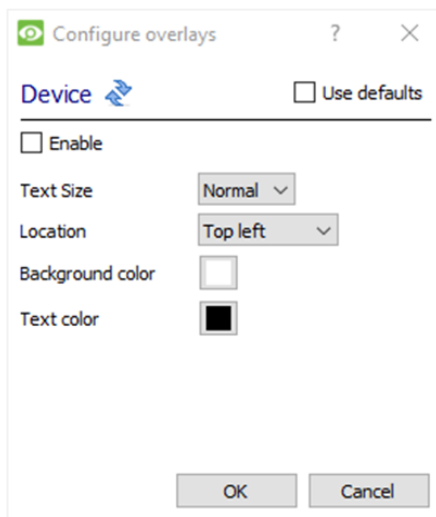
→ **Add a camera** to the object, or, select a camera from the drop-down menu.

 → Click the **settings** icon that appears next to the camera name.

→



→ **Uncheck the 'Use defaults'** box to configure the overlays.




→ **Enable:** Check the box to enable overlay configuration.

→ Define the **Text size** by selecting from the drop-down menu.

→ Define the **Location** of the overlay by selecting from the drop-down menu.

→ Define the **Text colour** and **Background colour** of the overlay stream.

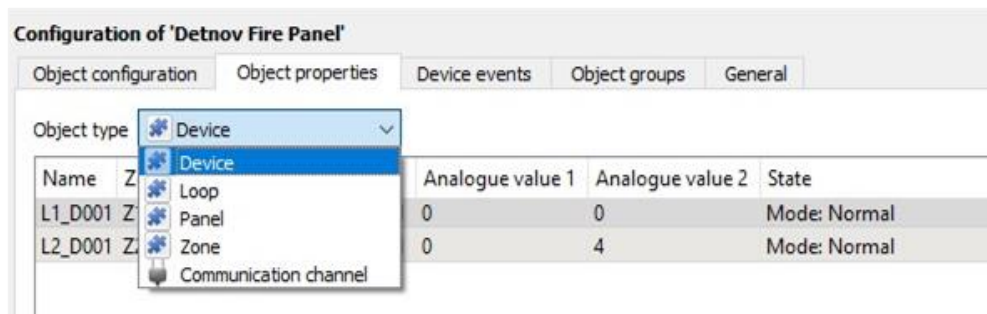
 Click the colour boxes to bring up a colour chart.

Note: Click  to reset values.

3.2 Object Properties Tab

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

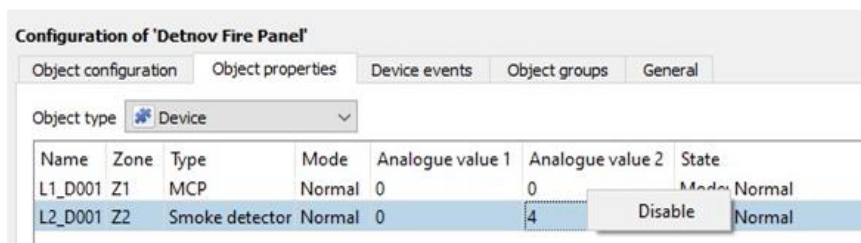
In the case of the Detnov CAD-150 integration, there is the option of viewing by **Device, Loop, Panel, Zone,** and **Communication channel.**



Commands can be configured from the Object properties tab.

3.2.1 Controlling Commands on Detnov CAD-150

Select the object from the drop-down menu in the **Object properties** tab. In this case, the object type is **Device.**



- **Right-click** an item on the list.
- Choose the **command** which appears.
- If a new window open, fill in the fields.

Commands will reflect in the Device events tab. Click the Device events tab to view.

The following commands are available in this integration:

Object	Command
Device	Enable Disable
Panel	Reset Silence sounders Sounders on

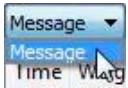
3.3 Device Events Tab

The Device events tab lists real-time events happening on this device. Installers can ensure that the integration is functioning and monitor the Events happening on site.

Return to CathexisVision and navigate to the Integration Panel. Open the Device events tab.



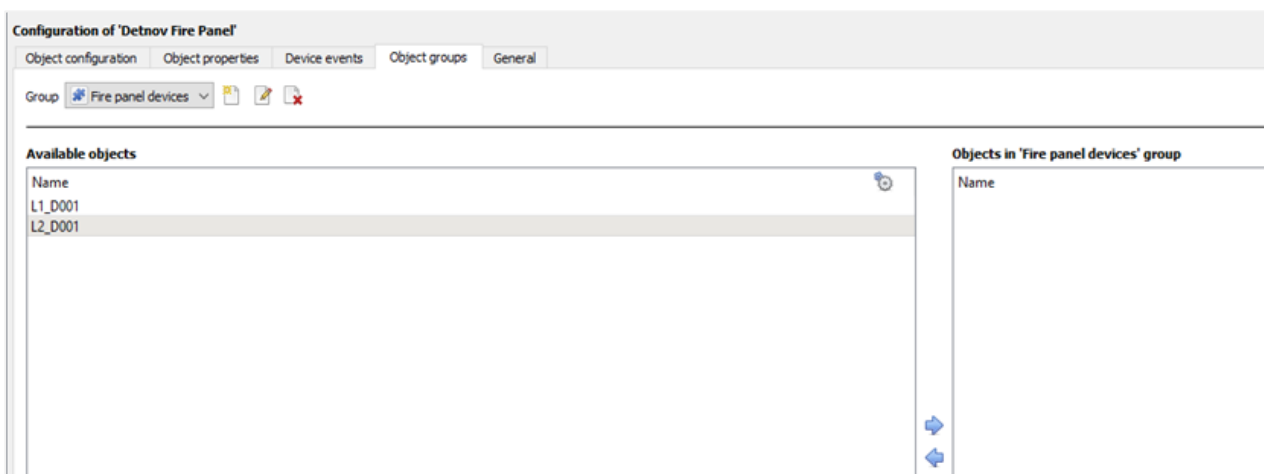
Use the drop-down menu to sort the events. This integration only has a **Message** event type.



Selecting an event type will populate the relevant event fields in the tab.


3.4 Object Groups Tab

Groups of *the same type of object* can be created.

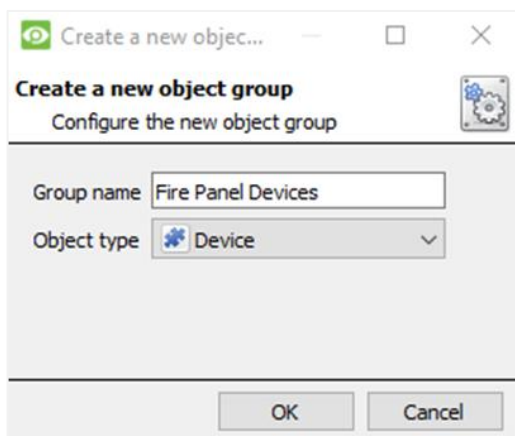


Tip: This is useful when setting up events, because events can be triggered by an object group. (E.g., a group will trigger an event if any of the doors in that group are triggered.)

3.4.1 Create a Group

 → To **create** a group, click on this icon.

A new dialogue box will open.




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

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

Note: Only objects of this type can be added to the group.

→ Click **OK**.

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

 To **edit** a group, click on this icon.


 To **delete** a group, click on this icon.


The next step is to add individual objects to the group.

3.4.2 Add or Remove Objects

After creating a group, a list of all the available objects for that group will be displayed in the Available objects panel, on the left-hand side. Objects can then be chosen from this list, and added to the group.

Objects in 'Fire panel devices' group	
Name	
L1_D001	
L2_D001	

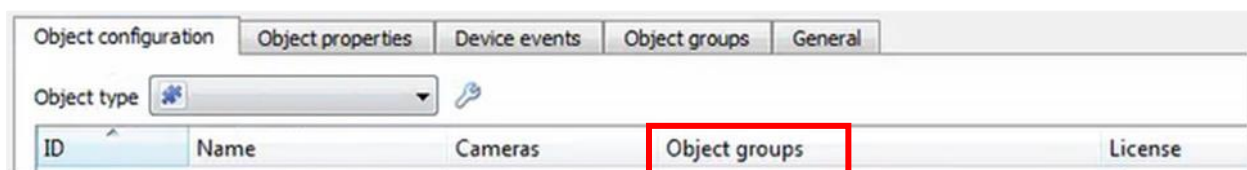
 To **add** these objects to the group, select them from the list, and **click on the right arrow**.

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

Note: Multiple objects may be selected at a time.

Once individual objects have been added to the group using the arrows (above), they will appear in the section on the right-hand side.

The object group information will also reflect in the Object configuration tab:



3.5 General Tab

The General tab of the Configuration section (Integration panel) deals with the integration database. Setup must be completed here, before the Databases tab can be used to search events and view associated footage.

From the General tab, the user must:

- *Select* an existing database, or
- Configure a *new* database.

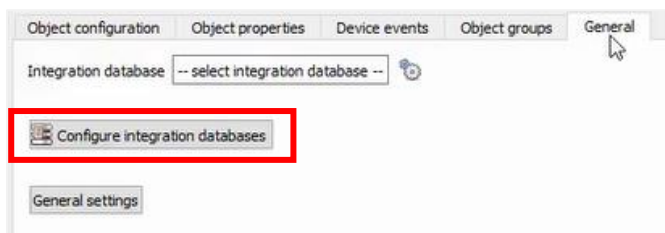
Note: Each integrated device needs to be attached to an integration database. Without setting up/adding a database here, the integration will not function properly within the CathexisVision system.

3.5.1 Configure a New Database

- The first time an integration database is added, the general integration database will need to be *initialised*.
- Once the general integration database has been initialised, then a database for a *specific integration* can be created.

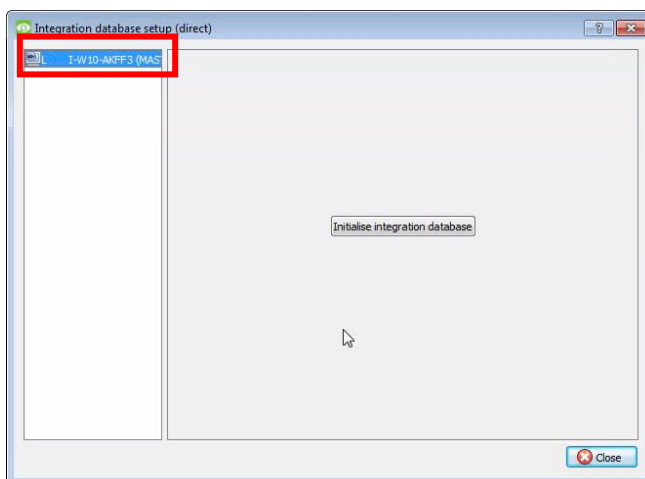
3.5.1.1 Initialise the Integration Database

If an integration database has not yet been created, follow the steps below.



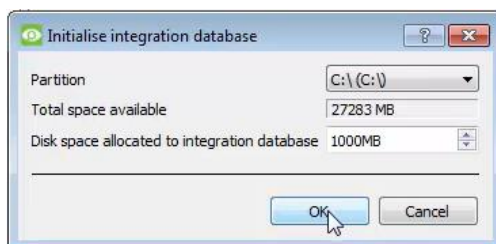
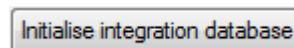
- Click the **Configure integration databases** button from the General tab.

This opens the Integration database setup window.



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

- Then, click **Initialise integration database**.



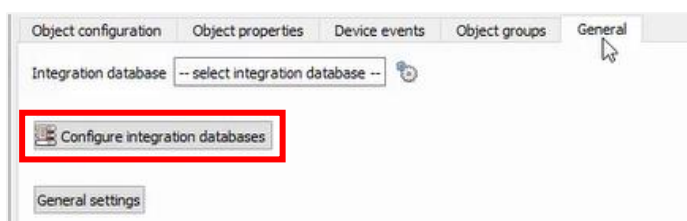
- Choose the **partition** on which the database will be created.

- Select **disk space** allocation.

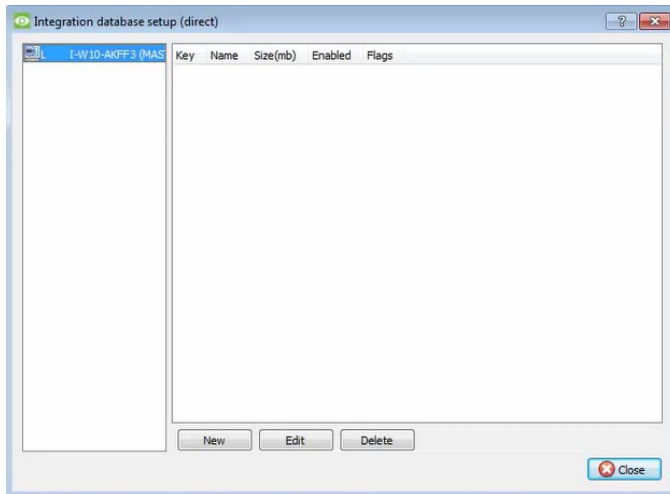
- Click **OK**.

3.5.1.2 Add a New Devices Database

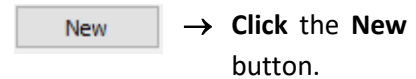
After initialisation, the database can be added to the integration.



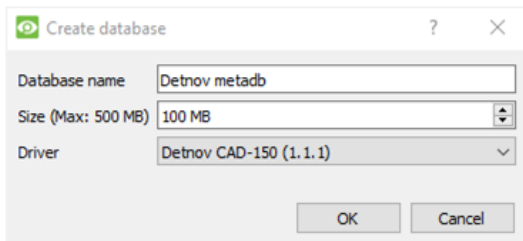
- To add a new database, click the **Configure integration databases** button from the General tab.



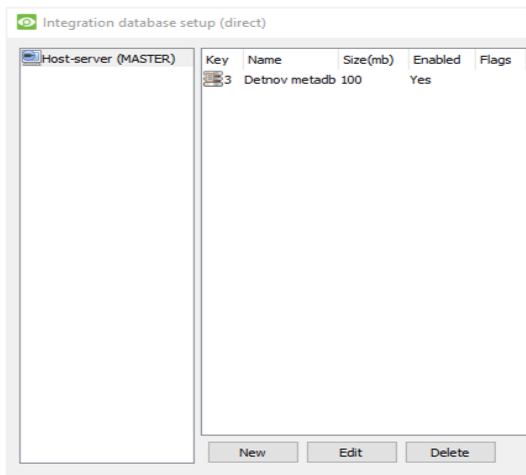
This opens the integration database setup window.



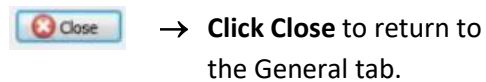
A dialogue will appear for creating the integration database.



- Give the database a descriptive **Database Name**.
- Allocate a **Size** to the new device database.
- Select the device **Driver (Detnov CAS150)**, from the drop-down list.
- Click **OK** to create the database.

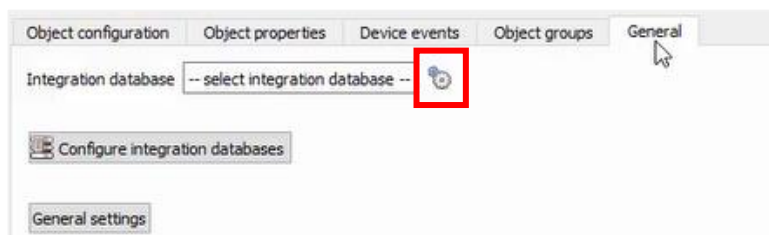


The newly created database will appear in the Integration database setup panel.

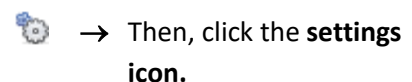


3.5.2 Select the Detnov CAD-150 Integration Database

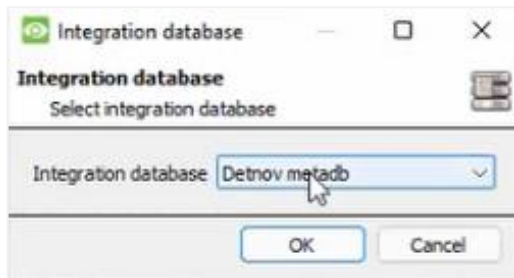
Once a **Detnov** database has been created, it must be actively selected.



→ Return to the General tab.



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

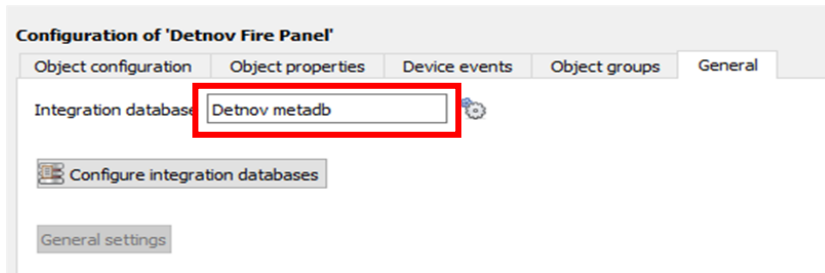


→ Select the **Detnov database** from the drop-down menu.

→ Click **OK**.

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

Once selected, the database will reflect in the General Tab as shown below.



Note: The information on setting up an integration database may be found in the **Integration Devices General Settings** section of the *CathexisVision Setup Manual*.

4. Events

A CathesisVision event has a trigger, which causes an action. Set integrated devices to act as triggers, or as actions. This document will detail the **Detnov CAD-150** specific aspects of Events. There is a comprehensive guide to CathesisVision Events in the ***CathesisVision Setup Manual***.

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

4.1 Event Window

Events in CathesisVision are set up via the Event Window. This has four tabs:

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

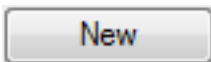
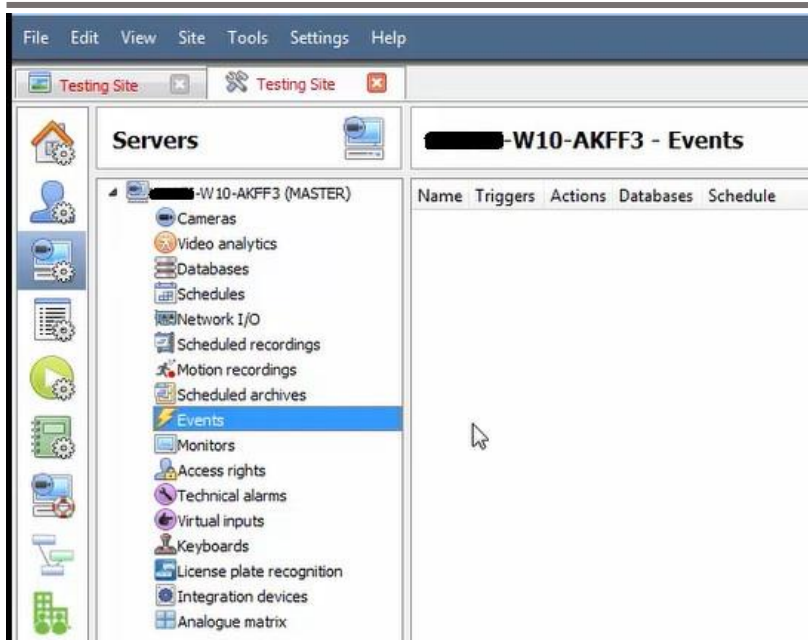


4.2 Creating an Event

To create an event using the Detnov CAD-150 device, navigate to Events by following the sequence: **Site Menu / Open Tab / Setup / Servers / Master Server / Events**. This is shown below.



This will allow the user to enter the Events management area:



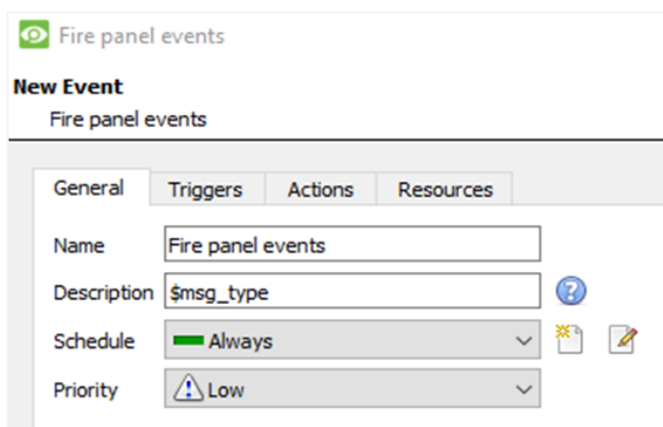
Once in Events management area, click the **New** icon at the bottom of the screen. Alternatively, right-click and select **New**.

This will open the **New Event window**.

The new event window has four tabs which can be used to set up the event: General, Triggers, Actions, and Resources.

4.3 General Tab

Create a new event under the General tab by filling in the fields.



- Give the event a descriptive **Name**.
- Set up a **Schedule** if desired by clicking the icon.
- Select a **Priority**.
- A description may be entered. Or, modify the **Description** if relevant according to the instructions below.

Note for group triggers: For an event to be databased under the name of a specific object, and not the name of the triggering group, modify the Description field in the **General tab** of the Event setup.

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

4.4 Triggers tab

A trigger is a user-defined input, for example, the user may choose to define the trigger as a door opening on an access control system.

Once the user defines the *trigger*, it can be used to cause a subsequent *action*.

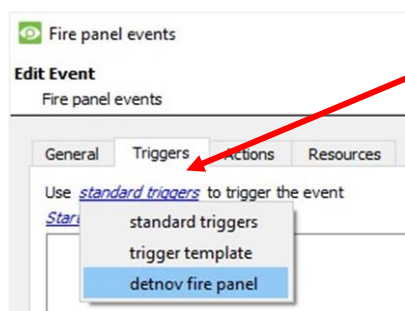


The user will need to click on the hyperlinks (depicted alongside) to set up the trigger.

The subsections below provide instructions.

4.4.1 Set the Device as the Trigger

For a new event, the trigger type will default to “standard triggers”. The user will need to change this to the Detnov CAD-150system.



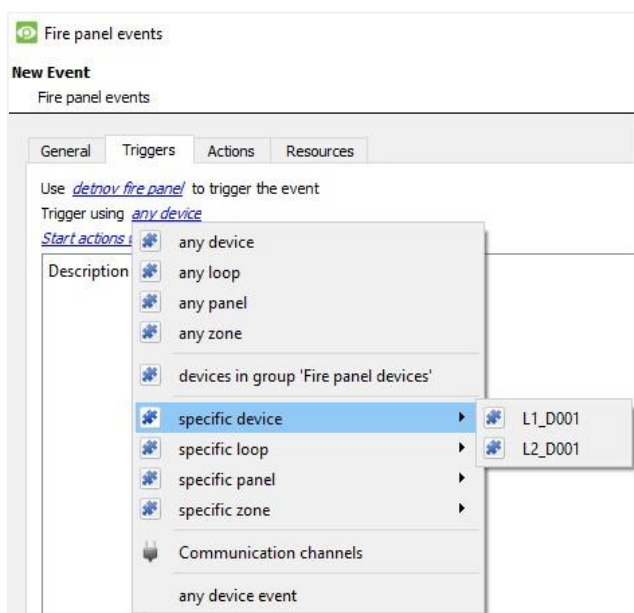
→ To change the event trigger, **click on “standard triggers”** (the hyperlink after the word “Use”).

This will open a drop-down menu with more options.

→ To set the **Detnov fire panel** as the trigger, **select the device name** from the drop-down menu.

4.4.2 Trigger Types (Trigger Using)

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



→ **Click on the hyperlink** after the words “Trigger using”.

This will open a drop-down menu.

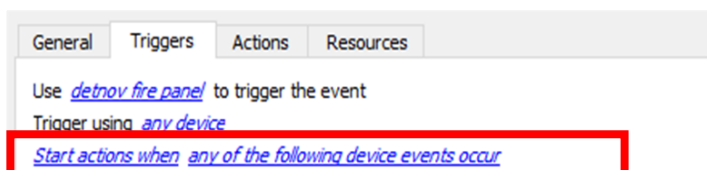
→ **Click an option** from the menu to select.

See the table below for descriptions of the options on the drop-down menu.

MENU OPTION	DESCRIPTION OF TRIGGER TYPE
Any [device]	This will trigger if anything happens on any device.
Any [loop]	This will trigger if anything happens on any loop.
Any [panel]	This will trigger if anything happens on the panel (there can only be one).
Any [zone]	This will trigger if anything happens on any zone.
Devices/loops in group	This will trigger if anything happens in a selected group.
Specific [device]	This will trigger on the specific object chosen, e.g., L1_D001.
Specific [loop]	This will trigger on the specific loop chosen.
Specific [panel]	This will trigger on the panel (there can only be one).
Specific [zone]	This will trigger on the specific zone chosen.
Communication Channel	This will trigger if anything happens on the Communication channel.
Any device event	This will trigger, initially, when any event occurs on the integration.

4.4.3 While/When and Any/All

The third row of hyperlinks further specifies when the event triggers. The user will choose to trigger either based on a *device event* occurring or based on an *object property*.



To change these settings, click on the blue hyperlinks in the *third* row as shown in the image on the left.

The user can choose the option to:

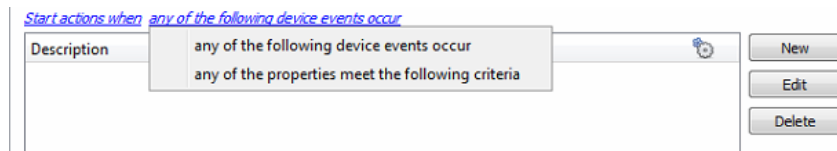
- **start actions when** any of the properties meet user-configured *criteria*, or any user-configured *device events* occur, or
- **perform actions while** any/all of the properties meet user-configured *criteria*.

<u>Start actions when</u>	any of the following device events occur any of the properties meet the following criteria
<u>Perform actions while</u>	any of the properties meet the following criteria all of the properties meet the following criteria

4.4.4 Define the Trigger (“Any Device Event” Option)

After using the hyperlinks to set up how the trigger will be defined, the user may proceed to creating a new *device* event.

One of these options is to select *any of the following device events occur*.



Pictured alongside is the **Triggers tab** where a user selects *any of the following device events occur*.

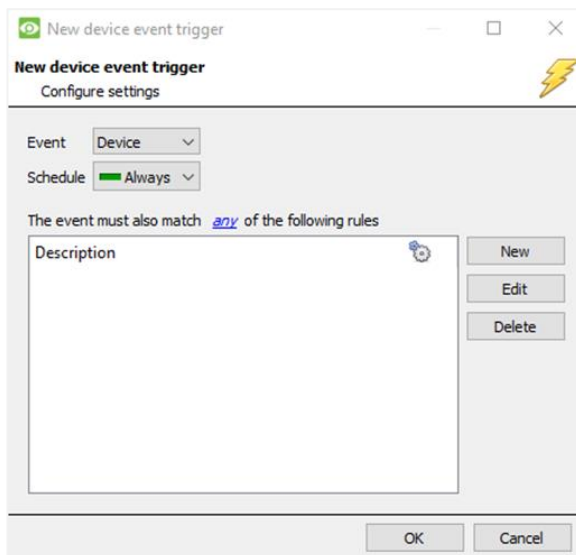


Click on **New** in the Triggers tab.

Clicking on New will bring up the **New device event trigger** dialogue box.

4.4.4.1 New Device Event Trigger

The user will then need to configure the new device event trigger.



→ Select the **type of Event** where applicable.

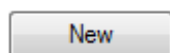
→ Choose a **schedule**.

→ Choose whether *any*, or *all* constraints need to be fulfilled to set off a trigger.

→ Use the **new/edit/delete** buttons on the right-hand side to add a device event rule (a constraint). Follow the instructions below.

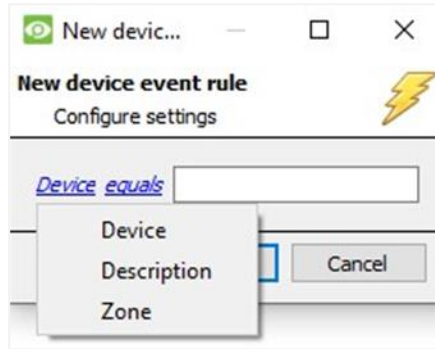
4.4.4.2 New Device Event Rule

Note: From within the **New device event trigger** window (above), it is necessary to set further constraints. Multiple constraints can be set. If constraints are not defined, every device event will trigger this event.



→ To configure a New device event rule, **click on New** in the New device event trigger window.

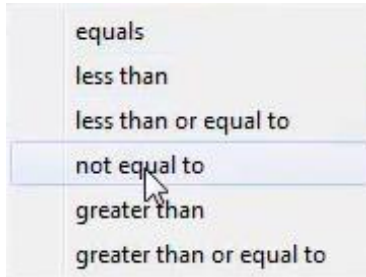
This will bring up a further window, called **New device event rule**.



→ To change the constraint, **click** on the **first hyperlink** ('Device' in this example).

This will bring up the full list of available constraints.

→ **Click an item** to select it.



→ To modify the way this constraint will be treated, **click** on the **second hyperlink** (which is "equals" in the example).

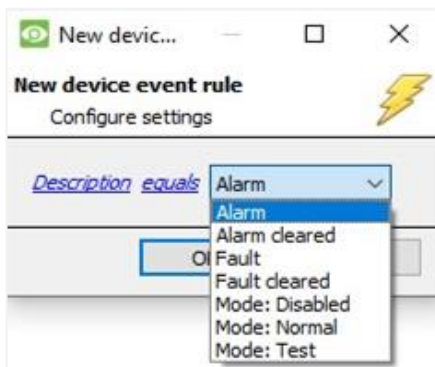
This will display a drop-down of further options.

→ Click an option to select.

Next, the constraint must be defined. Follow the instructions below to do this.

Defining a Constraint: Drop-Down Menu or Written Description

When all available options are known to CathexisVision, a drop-down menu will appear alongside the chosen constraint.



→ **Click an item** from the drop-down menu to select.

Or, if the variables for a constraint are *not* pre-defined, fill them in manually.

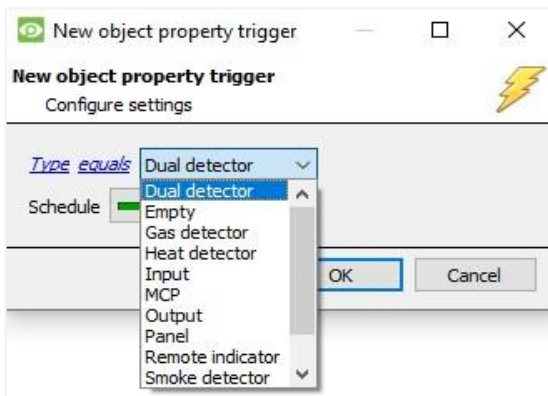
Note: Descriptions are case sensitive and must be identical to how they appear in the Object Properties tab. For example the ID of a device or zone.

4.4.5 Define the Trigger ("Properties Meeting Criteria" Option)

If the user has defined the trigger by choosing according to *properties meeting criteria*, the **New object property trigger** dialogue box will open.

- In these instances, further constraints do not need be set, since they are being added one at a time.
- This option is better if a few triggers have been selected.
- This is also true for groups, since a group may only be made up of one object type.

4.4.5.1 New Object Property Trigger: Configure Settings

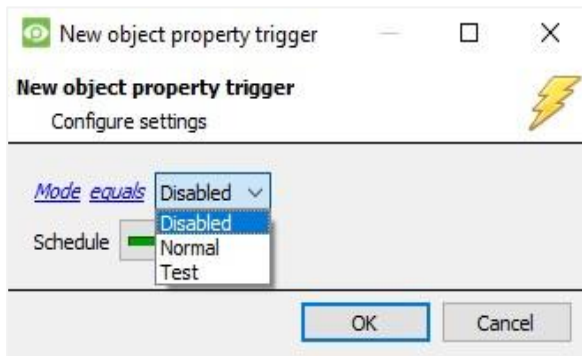


→ **Select the event type** by clicking the first hyperlink.

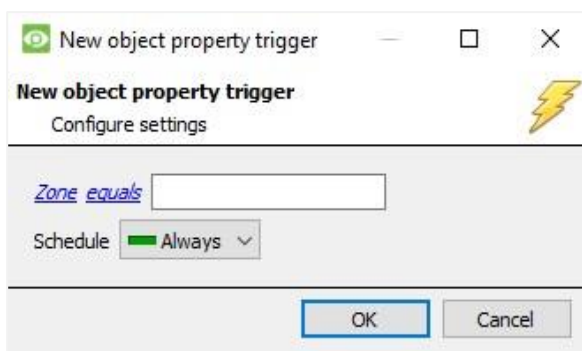
→ **Further define** the rule by clicking the second hyperlink.

Defining a Constraint: Drop-Down Menu or Written Description

When all available options are known to CathesisVision, a drop-down menu will appear alongside the chosen constraint.



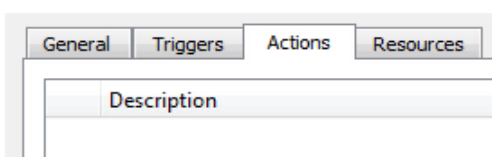
→ **Click an item** from the drop-down menu to select.



→ If the variables are not pre-defined, fill them in manually.

Note: Descriptions are case sensitive and must be identical to how they appear in the Object Properties tab.


4.5 Actions Tab

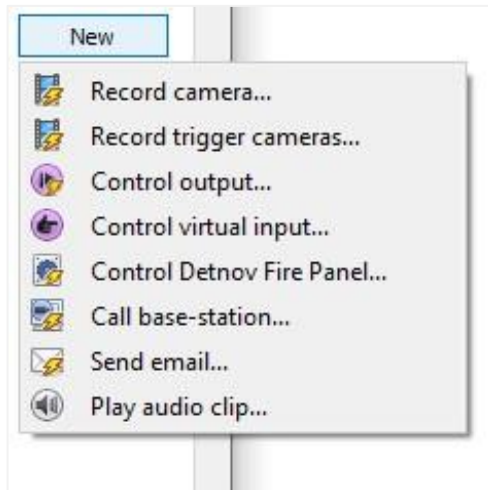


Having defined the triggers that will initiate an event, the user will need to define the Actions.

Select the **Actions tab** from the **New event** window.

4.5.1 Adding an Action

 → To add an action, click New in the Actions tab.

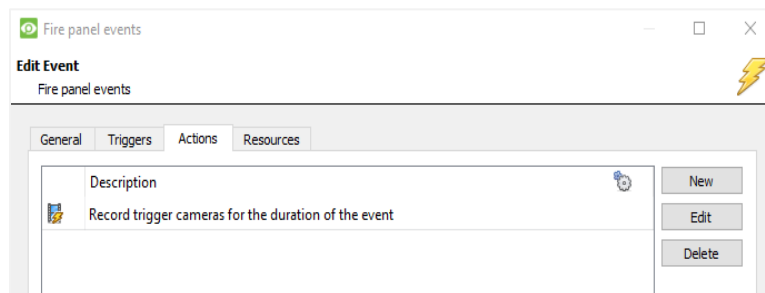


A list of **available actions** will appear. The drop-down contains all the available **action types**.

→ **Select an option**, for example, Record trigger Camera.

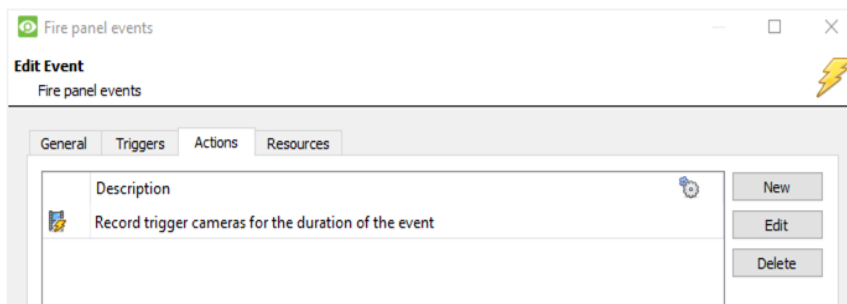
4.5.1.1 Actions: Record Trigger Camera

If the user has selected a new action to record trigger camera, the following setup steps are required:



Click the drop-down menus to see more options and click to select the appropriate option.

- Edit **Recording channel**, **frame rate**, and **recording duration** as necessary.
- Choose the **database** to which the video recordings will be saved.
- Set **Pre-events** to determine the length of time recording will begin before the event.
- Click OK.

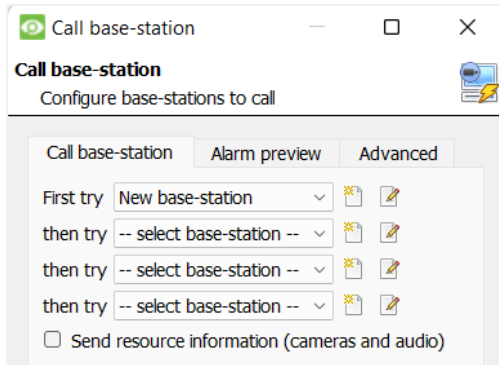


The configured action will appear in the tab.

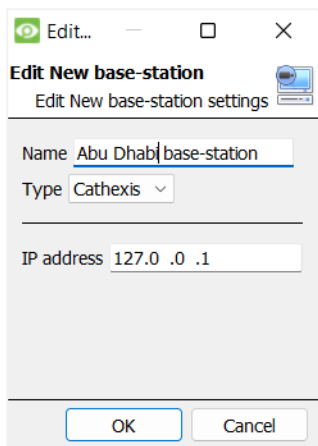
4.5.1.2 Actions: Call Base-Station

If the user has selected a new action to call base-station, the following setup steps are required. Use the tabs along the top of the window.

Call Base-Station Tab



→ Click the **edit icon** next to a base-station to configure.

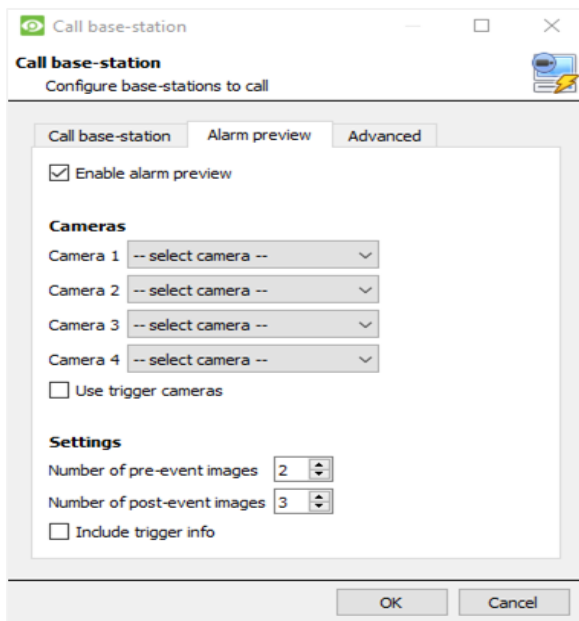


→ In the window that opens, edit or enter the **name** of the base-station and select the **type**.

→ Ensure that the **correct IP address** has been entered. This is the IP to receive the alarms on the specific unit.

→ Click **OK**.

Alarm Preview Tab

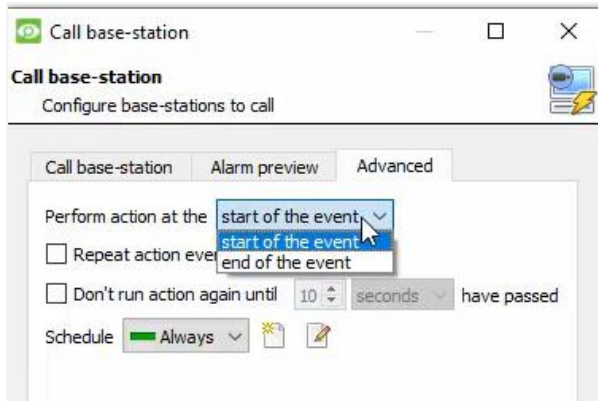


→ Click the **checkbox** to Enable alarm preview.

→ Select an appropriate camera/s or click the **Use trigger cameras** checkbox.

→ Click **OK**.

Advanced

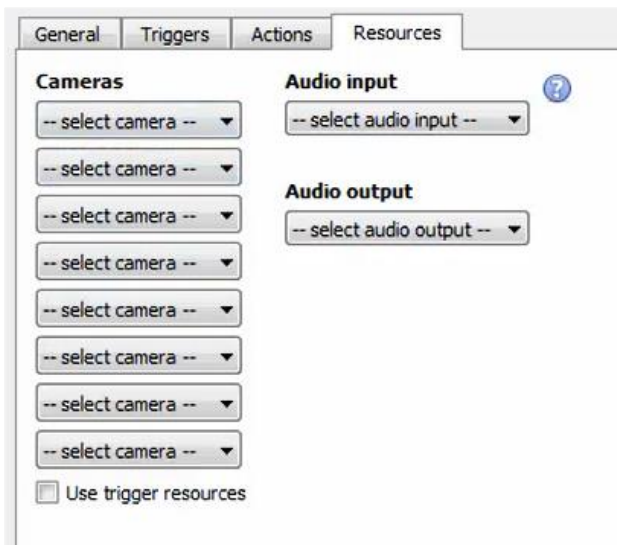


→ From the Advanced tab, **choose** to *perform the action* either at the start of the event, or once the event triggers have subsided.

The two checkboxes allow the user to set the action to repeat every few seconds, and/or not run for a period after it has triggered.

→ **Select the schedule.** This is a standard Cathexis schedule, which may be applied to the actions.

4.6 Resources Tab



In the Resources tab, users can select the cameras, audio input, and audio output to be used.

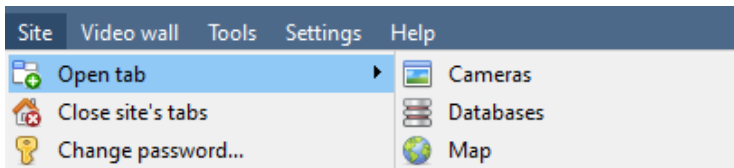
The default is to select “Use trigger resources.”

5. Camera Tab Overlay Setup

Once all the relevant settings have been configured, the fire alarm system *overlay* can be pulled through over the appropriate camera feed.

Note: Cameras must have already been added to device objects, and overlays need to have been configured.

5.1 Navigate to the Cameras Tab



To see the camera feeds, go to the Cameras tab by following this path.

Site / Open tab / Cameras

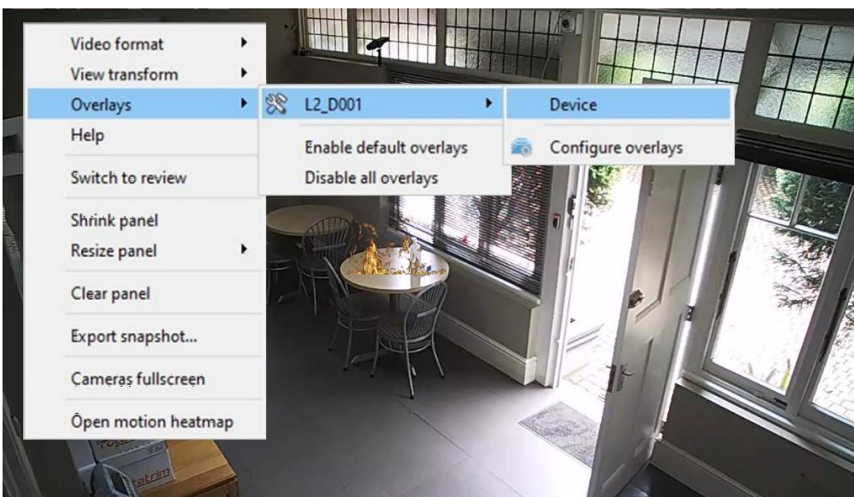
5.2 Video Feed Options Panel



To bring up the overlay, click the arrow to the left of the screen. This will pop out the Video feed options panel.

The Video feed options panel will present options specific to the settings that have been configured.

Right-clicking will also bring up the overlay option as shown below.



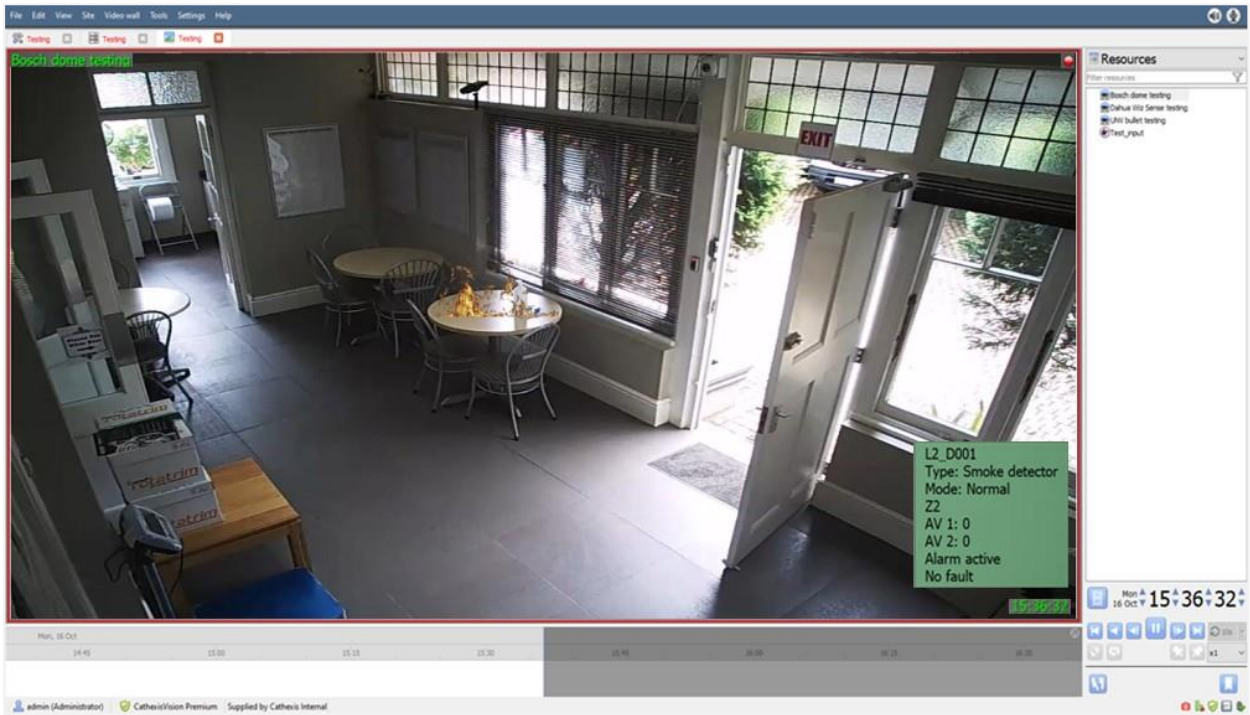
Through the right-click option, one can select the overlay and it will appear over the video feed, as above.

5.2.1 Select the Overlay



1. **Clicking** this icon will bring up the overlay options for this video feed.
2. **Select** the **device** and **enable** the overlay.

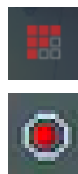
The overlay will appear over the video feed, as below.



5.3 Enable Overlays from the Database

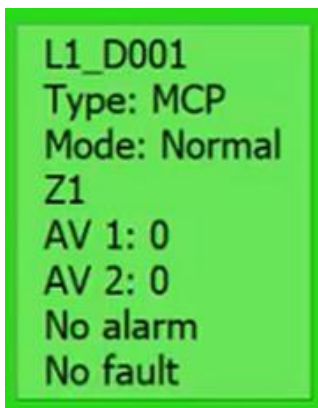


→ Click this arrow on the central panel of the database.



→ Select the overlay icon on the left side of the camera player screen.

→ A red dot indicates that the overlay is enabled.



The overlays will appear as configured by the user.

In this example the overlay is configured to show:

- Device name
- Device type
- Zone name
- Analogue value (AV) 1
- Analogue value (AV) 2
- Alarm status
- Fault status

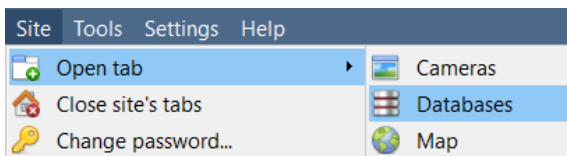
6. Database

The database tab allows one to navigate to 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, this recording can be launched from within the Databases tab.

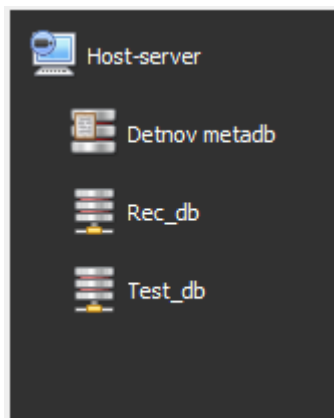
Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathesisVision by the integrated device.

6.1 Navigate to the Database

View the information stored in the Integration database, first navigate to the Databases Tab:



1. **Follow the path** on the left: **Site / Open tab / Databases.**



2. **Select the Detnov** integration database from the database panel that opens on the left-hand side.

The databases are ordered under the NVRs to which they are attached.



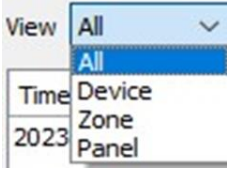
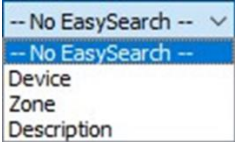
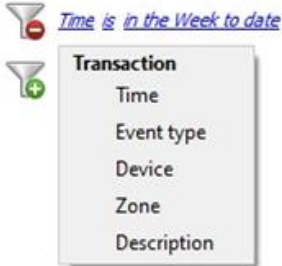
To open and close this list, click on the arrow in the centre of the list.

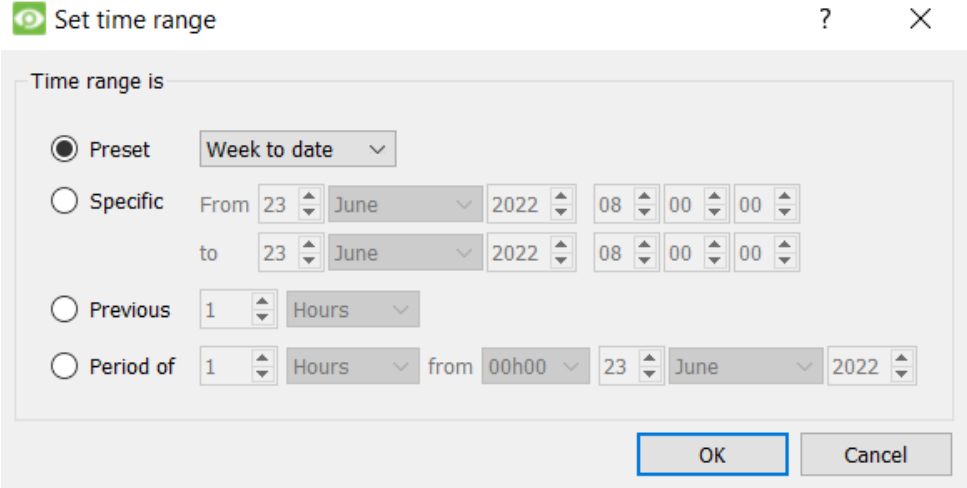
Below is an image of a **Detnov** database.

Time	Event type	Device	Zone	Description	Links
2023-10-16 15:19:29	Device	L2_D001	Z2	Alarm	
2023-10-16 15:21:15	Panel			MCP alarm cleared	
2023-10-16 15:21:43	Panel			Alarm cleared	
2023-10-16 15:21:43	Panel			PCB sounder 2 quiescent cleared	
2023-10-16 15:21:55	Panel			MCP alarm	

6.2 Database Interface



<p>1</p> <p>View</p>	<p>Change the way that the database is presented. Some integration databases have multiple view options.</p> <p>Click the field to see the available options in the drop-down menu. The database view presentations available for the Detnov integration are:</p> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;">  </div> <ul style="list-style-type: none"> • All • Device • Zone • Panel </div>
<p>2</p> <p>Sorted By</p>	<p>Sort the Events based on the following parameter: Time.</p> <div style="border: 1px solid #ccc; padding: 5px; width: fit-content;"> sorted by Time </div>
<p>3</p> <p>Easy Search</p>	<p>Easy Search options allow quick searching of the database.</p> <p>Click the field to see the available options in the drop-down menu.</p> <div style="border: 1px solid #ccc; padding: 5px; width: fit-content; margin-bottom: 10px;"> 🔍 -- No EasySearch -- 🔍 💾 🔄 </div> <p>The following options are available:</p> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;">  </div> <ul style="list-style-type: none"> • Device • Zone • Description </div>
<p>4</p> <p>Filter</p>	<p>Filter offers a more advanced manner of sorting information in the Integration Database table.</p> <p>For this integration the database can be filtered according to:</p> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;">  </div> <ul style="list-style-type: none"> • Time • Event type • Device • Zone • Description </div>

	<p>Once the filters dialogue is open, the following 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 . The filter icon will change to when filters are active. To delete an added filter, click . <p>A Time range, within which the search will be conducted, may also be set. To set a Time range, click on the blue hyperlinked text which specifies time (e.g. in the week to date). This will bring up the following dialogue box, where the time range can be defined:</p>  <p>Note:</p> <ol style="list-style-type: none"> Multiple filters may be run simultaneously. Filters with the same parameters may be run more than once. To change a filter, click on the blue hyperlinked text. Filter fields that require typed input instead of a dropdown menu (such as zone in this integration) are case sensitive.
<p>5 Export</p>	<p>Generate metadatabase reports in PDF or CSV format. See below.</p>
<p>6 Manage Reports</p>	<p>Generate scheduled metadatabase reports. See below.</p>
<p>7 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.</p> <p> Then, click on the arrow icon.</p>

6.2.1 Generate and Export Metadatabase Reports



→ Click the save icon to open the Export window.

→ 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.

6.2.1.1 Export CSV

→ Select CSV **Format**.

→ Give the CSV a **Heading**.

→ Select either Landscape or Portrait **Orientation** of the CSV.

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



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

6.2.1.2 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.pdf**).

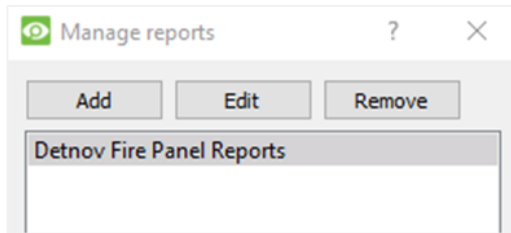


Or click the folder to choose a new save folder and filename.

6.2.2 Scheduled Metadatabase Reports



→ Click the report icon to open the scheduled report window.

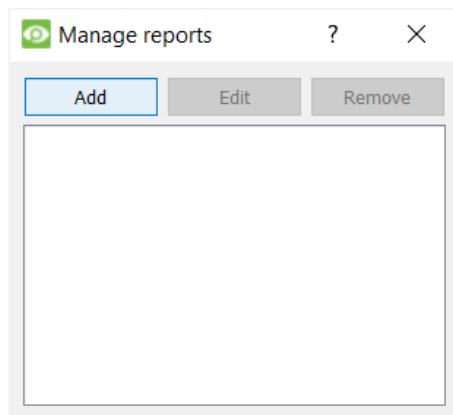


All created reports will be listed here.

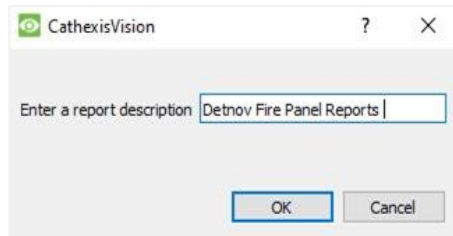
→ Click **Add** to create a report.

→ Then **edit** to define the reporting schedule. See below for more detail.

6.2.2.1 New Scheduled Report

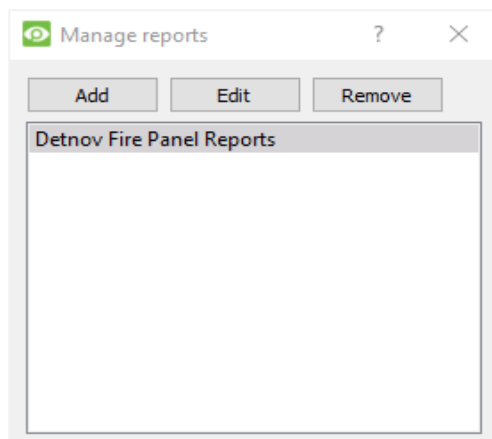


→ In the Manage reports window, click **Add**.



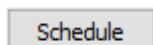
→ Give the report a description.

→ Click **OK** when done.



→ The item will appear in a list.

Once the new report is listed with the other reports, select it for editing to define the reporting schedule.



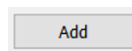
→ Either right-click the entry and select schedule or **select the entry** and **click the schedule button** at the bottom of the screen

- Edit the **Description** if needed.
- Edit the **View** options.
- Select a **Sorted by** option.
- Select the **Format**.
- Select the **orientation** of the Format.
- Select the **Period** to be reported on.
- Define the **Schedule** for the report.
- Select **Recipients** from the drop-down menu to whom reports will be sent.

Add/Remove Recipients

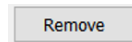
Use the icons to edit the drop-down menu.

Add recipient



Click **Add** and enter the email address of the recipient. Multiple recipients may be added. All will receive emails.

Remove recipient



Select the recipient from the dropdown menu and click **Remove**.

6.2.3 Metadata

Event type	Device
Device	L2_D001
Zone	Z2
Description	Alarm

The right side of the database displays metadata about the event entry.

6.2.4 Viewing an Entry's Associated Recording

The video player is embedded in the database view. The player uses the same timeline features as the cameras tab. If cameras are attached to device objects in the integration setup, and these cameras are set up to record continuously, each integration database entry will have a corresponding recording. See the image below.



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



Then click **play** in the video player.

7. Maps

It is possible to add the Detnov CAD-150 device to a site map, which will allow for a number of action options when zones/partitions are triggered. These options include the animation of triggered zones and connecting to site cameras when zones are triggered, etc.

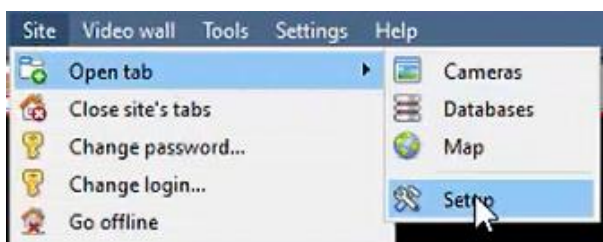
Note:

- This section will only deal with the specifics of the Detnov CAD-150 Integration. For more information on using the CathexisVision Map Editor and Map Tab, please consult the dedicated and detailed **Map Editor Operation Manual**.
- The CathexisVision Map Editor is only available on **Windows** operating systems.

7.1 Add the Detnov CAD-150 Device as a Resource

To configure the map, the Detnov CAD-150 Device must be added as a resource to be added to the map.

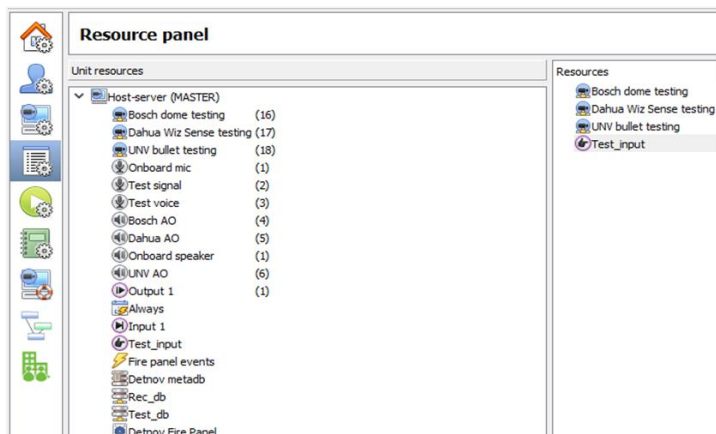
7.1.1 Add the Device in the Resource Panel



Navigate to the **Resource Panel** by following:
Site / Open Tab / Setup / Configure resource Panel



Click the **Configure Resources** icon.

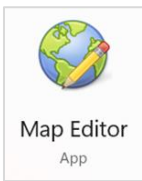


In the site's Resource panel, a list of resources will be displayed.

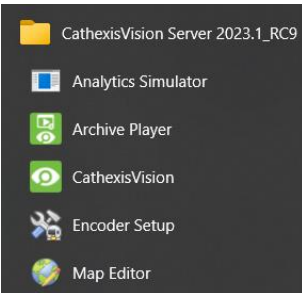
Select the **Detnov CAD-150 fire panel** integration device. Drag and drop it under **Resources** on the right.

7.2 Add the Device in Map Editor

Once the **Detnov CAD-150 fire panel** device has been added as a Resource in CathexisVision, it will be available to select in the **Resources** panel in the bottom-right corner of the Map Editor.



Open the **CathexisVision Map Editor** software.



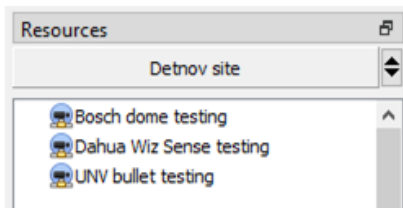
Follow this filepath:

Start / All Programs or Apps / CathexisVision / Map Editor

7.2.1 Connect to Site



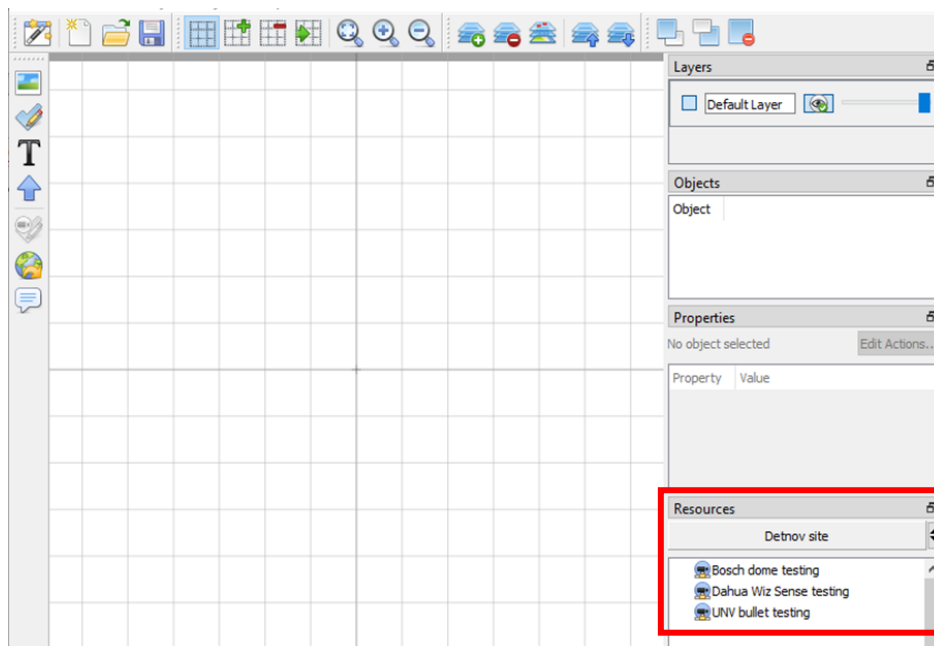
→ In the **Resources** panel on the bottom right of the Map Editor screen, click the drop-down menu to select the Detnov CAD-150 site to connect to.



→ Once connected to the site, the device as well as all available **Site Resources** will appear in the panel below.

7.2.2 Add Device Objects

The Map editor will appear as below, with the selected site and device appearing in the bottom right.



Drag the Detnov CAD-150 fire panel device from the site Resources list onto the map area.



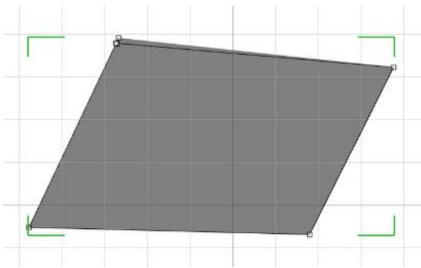
Right click and **select** one of the associated objects.

Note: To add multiple objects, repeatedly drag-and-drop the Detnov CAD-150 device onto the map area to bring up this option.

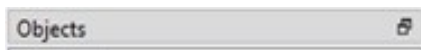
7.2.3 Add a Polygon



On the options bar on the left, click the **Add polygon** icon.



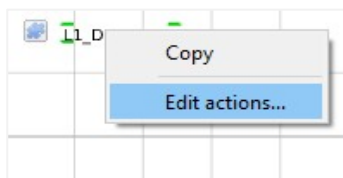
Use the mouse to draw the sides of the shape.



The polygon will now be listed under **Objects** on the right of the screen.

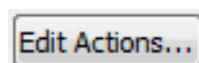
7.2.4 Adding and Editing Device Actions

→ To add or edit actions to the device objects, either:



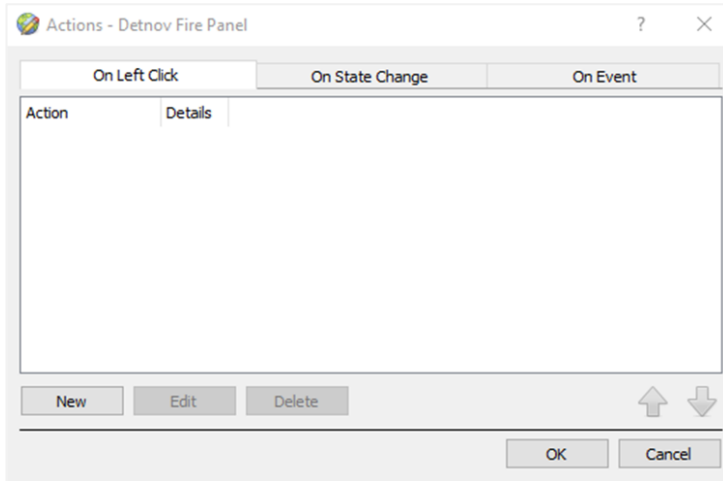
Right-click the map object and select **Edit Actions**.

Or



Select the object on the map and click **Edit Actions** (in the Properties panel on the right)

This will open the **Actions window**.



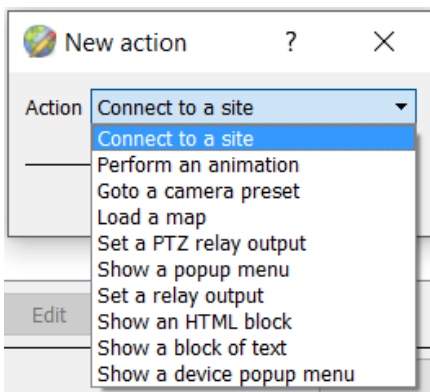
For CathexisVision integrations, Actions may be set for **Left/Right-Clicks, State Changes and Events**.

In this integration, Actions may be set for:

- **On Left Click**
- **On State Change**.

→ To create a new action, select **New**.

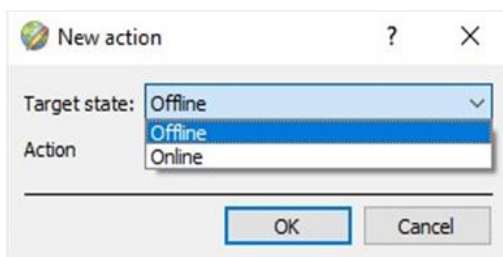
7.2.4.1 On Left Click



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

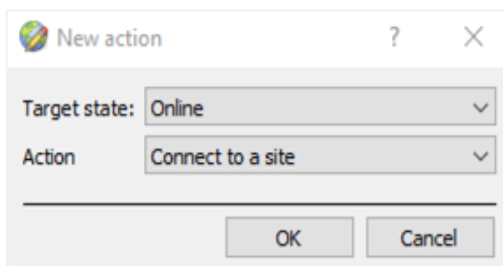
Note: The same Action options are available for all Action types.

7.2.4.2 On State Change



→ Select the target state which is to be represented on the map.

→ Then select an action with which to represent the target state.

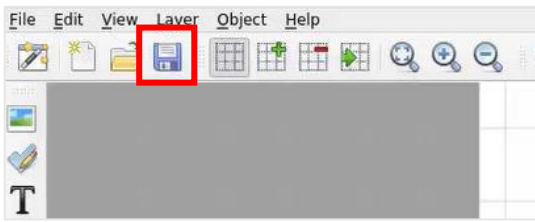


In this example the **Connect to a site** action has been selected.

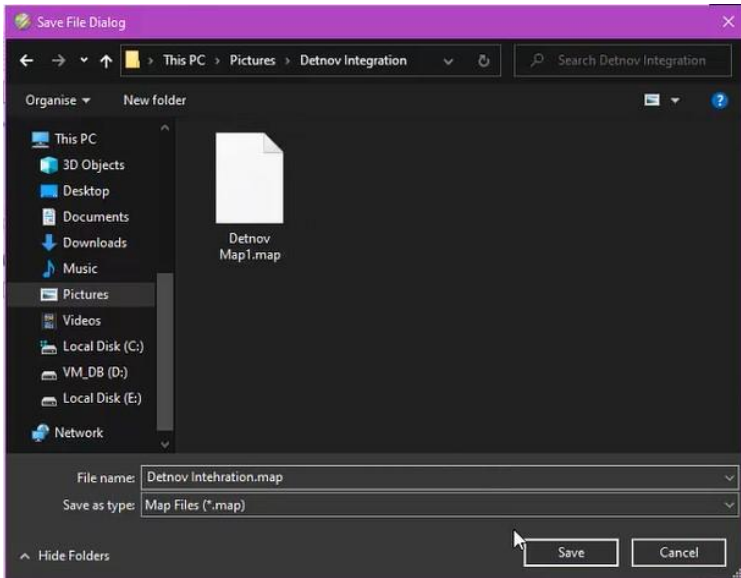
→ Follow the prompts to configure the selected Action.

→ Click **OK to finish**.

7.3 Save Map



→ In map editor click the **Save** icon.



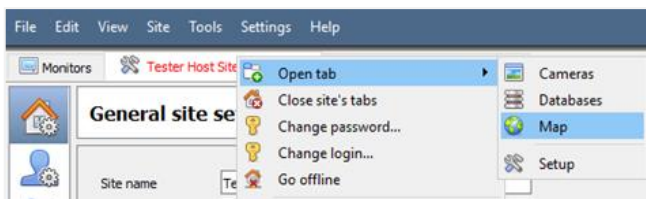
→ Give the map a name.

→ Click **Save**.

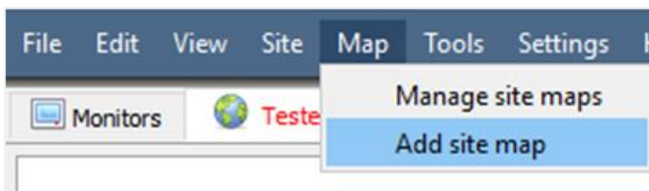
Note: The map must not be saved in the **Work** folder of the CathexisVision installation directory.

7.4 Load Map to CathexisVision

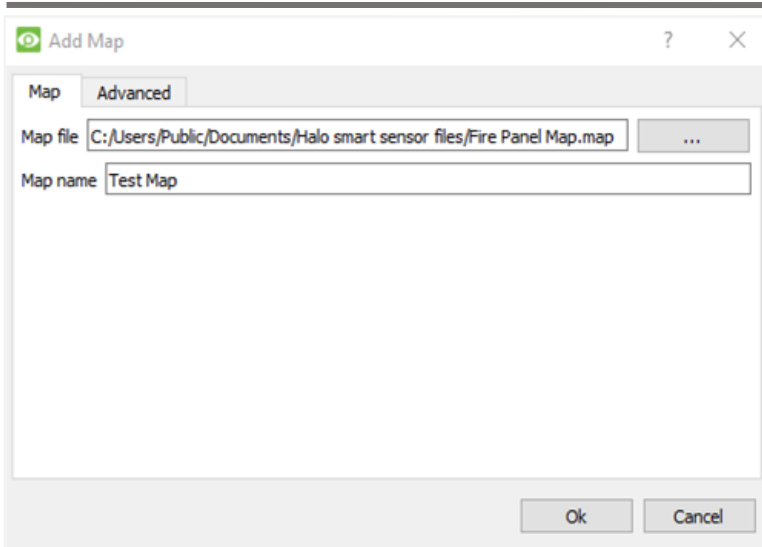
Now the completed and saved map can be uploaded to CathexisVision. Once the map is open, all objects added to the map area in the Map Editor will be visible on the map, and all actions set will be available.



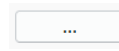
In CathexisVision, go to: **Site / Open tab / Map**



Then, in the Map tab, go to: **Map / Add site map**



The **Add Map** window will open.



Click the icon to retrieve the **Map file** from its location.

Give the map a **descriptive** name.

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.

8. Conclusion

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

For support, please contact support@cathesisvideo.com