Jablotron Alarm Panel

Integration App-note

Contents

1. Introduction

This document details the integration of the Jablotron Alarm Panel with CathexisVision. This integration entails the triggering of standard CathexisVision events, based on triggers from the Jablotron Alarm Panel.

Note: for information regarding the regular operation of the Jablotron Alarm Panel, please consult the relevant Jablotron documentation. The *CathexisVision Setup Manual* has general information on integration, creating an integration database, as well as a general introduction to the Integration Panel.

1.1 Cathexis Requirements

1.1.1 Software

- CathexisVision 2021.2 and later.

- Windows 10: 64-bit and later; Windows Server 2016 and later.

- This integration is available on the Ubuntu 20 and Windows 10 operating systems.

- Minimum of 4GB of RAM required.

1.1.2 Licensing

License No.	License Description
CJAB-2000	Jablotron cloud alarm panel device

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

1.2 Jablotron Requirements

Note: Cathexis 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.

This integration was tested on:

Hardware name	JA-101K Control Panel
Hardware model number	JA-101K-LAN3G
Additional hardware required (universal adapter to RS-485)	JA-121T RS 485

1.3 Integration Components

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

Device	The device is CathexisVision software's interface, which handles all the interaction between CathexisVision and the integrated hardware. When an integration is added to the CathexisVision system, a device is added. The messages received from the device are called Device Events.
Objects	Objects are the individual pieces of hardware that comprise the integration. There may be multiple "object types" under the objects group. For example, the main controller and door nodes of an access control system are both objects. They are different types of objects.

A NOTE ON CAMERA CHANNELS

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

USEFUL LINKS

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

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

2. Device Addition and Configuration

This section details the procedure for setting up CathexisVision and the Jablotron Alarm Panel to communicate with each other.

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:
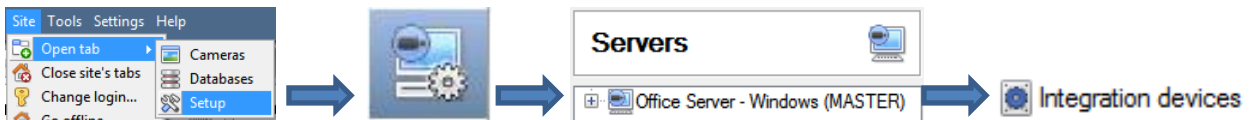
There are two sections in the Integration Panel:

1. The **devices** list will list the integration devices that are attached to the integration database.
2. The **Configuration** section enables the user to edit or review the device selected in the **devices** section.

2.1 Device Addition

1. In the Devices section of the Integration Panel, right-click. Select **New**. This will open the addition window.
2. Select the **Jablotron Alarm Panel** driver. Click **Next**.

Give the device a descriptive **name.**

Select the **Communication Port (COM)**.

(**Note**: this integration connects via a serial port, not on the network.)

Once the Jablotron Alarm Panel device has been added and configured, select it in the **Devices list**. All Jablotron Alarm Panel objects will then automatically populate the **Configuration Section**.

2.2 Configuration Section (Tabs)

The configuration section is divided into several tabs. These tabs are: **Object configuration, Object properties, Device Events, Object Groups,** and **General.**
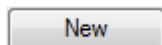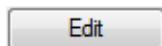
2.2.1 Object Configuration Tab
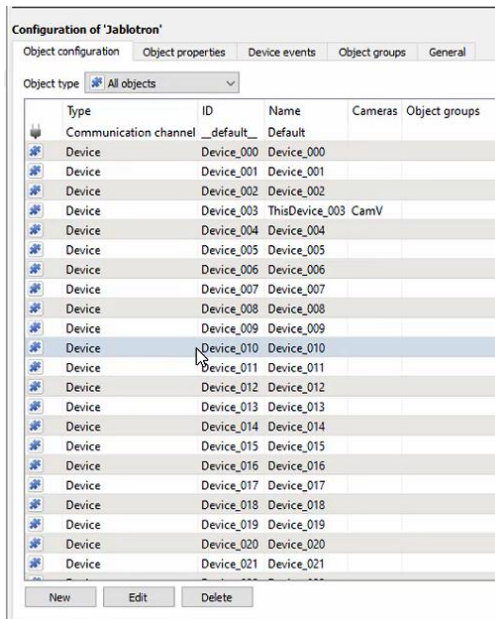
In the object configuration tab, all the individual objects that comprise the integration may be viewed. The Jablotron Alarm Panel device has four object types: **Device, PG, Panel, Section,** and **Communication channel.**

For each object type, cameras can be added and overlays enabled.

2.2.1.1 Object Configuration Buttons

Click to add a new object.

Click to open up an existing object for editing.

Click to delete an existing object from the CathexisVision configuration.

2.2.1.2 Object Configuration Right-click Options
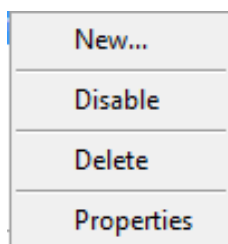
New allows a new object to be added.

Disable/Enable allows individual objects to be enabled or disabled.

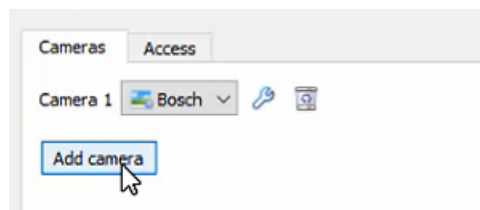**Delete** will permanently remove this object from the list.

Properties will open up the object properties. The object may be edited from here.

(Specifically, this is where cameras and user access levels are assigned.)

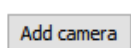Alternatively, to edit an object, double-click it. This will open the **Edit object** window:

2.2.1.3 Edit object
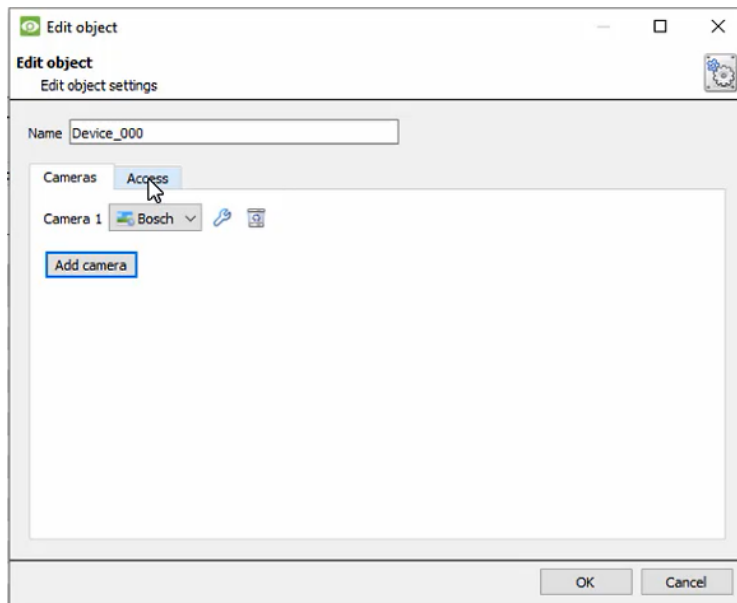
Cameras tab

Adding a camera to an object means 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**. Select the relevant camera from the drop-down menu.
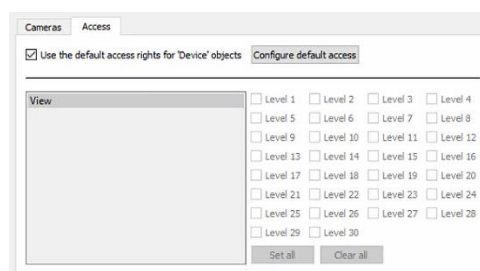
To delete a camera, click on the deletion icon.

Click on the spanner icon to configure a camera's overlays.

Access tab

Access allows sensitive objects to be protected by only allowing certain levels users access to them.

A list of objects for which access levels may be set, is visible.

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.

2.2.1.3 Configure overlays

To open the **Default overlays** window, click on the spanner icon to the right of the Object type list.
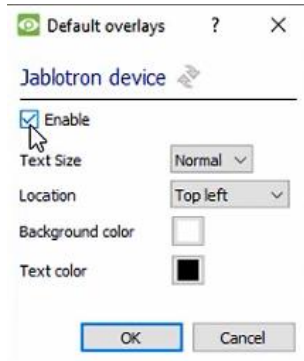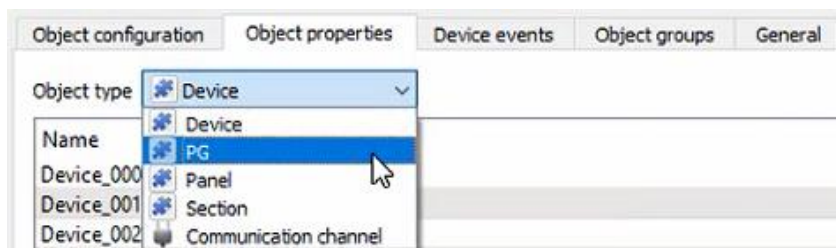
Configure the overlays as desired.

Alternatively, click on an object from the list. Select **Edit**.
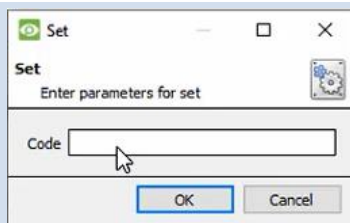
2.2.2 Objects Properties Tab

The Object Properties tab is where all object properties may be viewed. Objects are sorted by type. The types of objects for this integration are **Device, PG, Panel, Section** and **Communication channel**.

Below are the explanations for the properties shown for each of the object types.

Device	Shows whether the device is active or inactive.

PG	Right-click the State column, to either **Set** or **Clear** the object from CathexisVision. Enter the code, depending on user access levels.

|	
Panel	States whether the panel is online or offline.

Section	Shows alarms for sections that have been enabled.

2.2.3 Device Events Tab

This will list real-time events happening on this device. This helps installers to see that the integration is functioning, and to monitor the live events happening on site. The Device Events for this integration are **Communication, Device, PG** and **Section**.
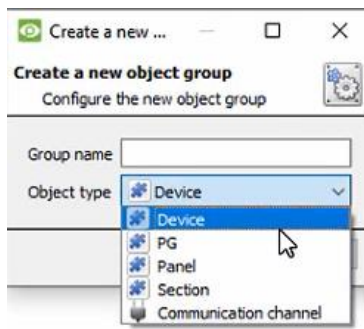

2.2.4 Object Groups Tab
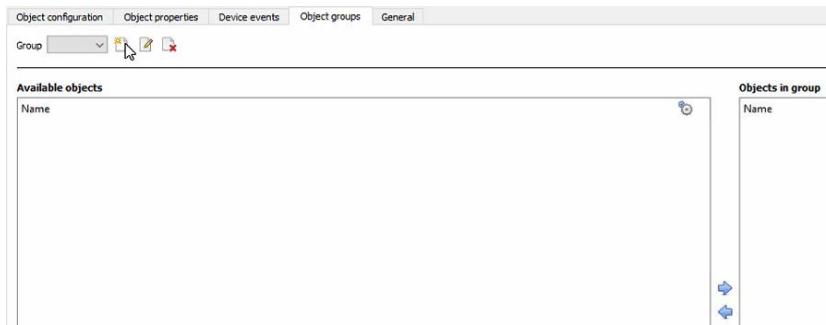
Groups of the same type of object may be created. This is useful when setting up events, because events can be triggered by an object group.

2.2.4.1 Create a Group

To create a group, click on this icon.

To edit a group, click on this icon.

To delete a group, click on this icon.

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

When creating a group, select what object type to include in the group. Once the group is created the available objects panel will fill up with all available objects of that type.

From this list, choose which objects to use in the Group.

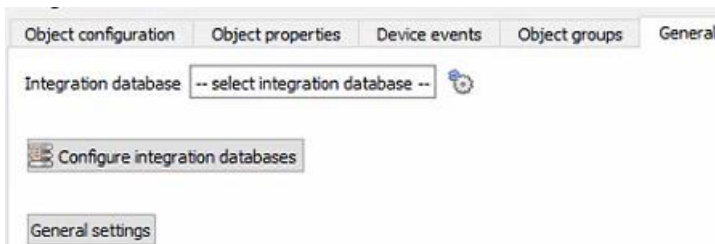Give the group a descriptive **Group name.**

Click on the drop-down menu to select the **object type** to group.
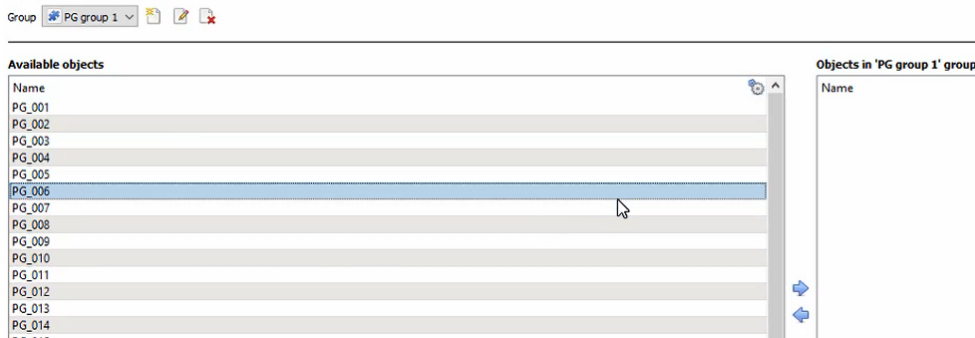
There a list of available objects. It is possible to select multiple objects at a time.

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

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

2.2.5 General tab

The general tab deals with the integration database. The user can select an existing database, or configure a new database for the integration.

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.

2.2.5.1 Configure a new database
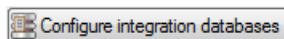
 If a database is not yet created, clicking on this button will navigate to the integration database setup.

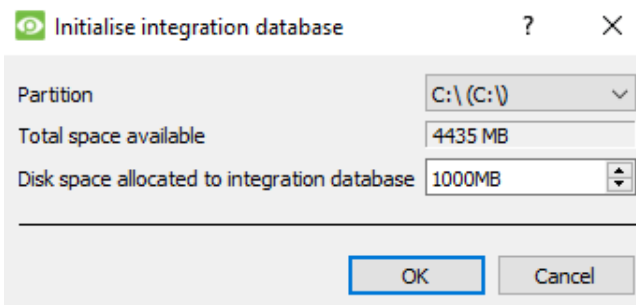#### Initialise the integration database
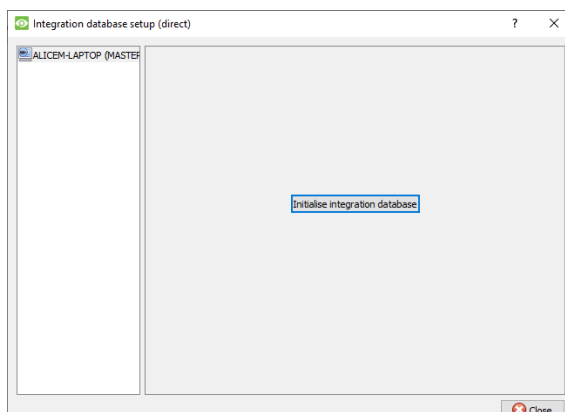
The first time an integration database is added, initialise this feature on the unit.

This will add a broad database, within which all of the integrated device's databases will be added.

From the list on the left, select the unit to which to add the database.

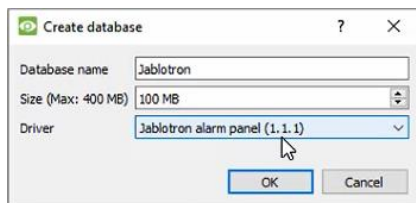Click on **Initialise integration database**.

Choose which partition the database will be formed on, and select how much space it will take up.

Add a new devices database

After initialisation, add the database for the integration being worked with.

Click on the **New** button at the bottom of the **Integration database setup** window.

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

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

Choose the **Jablotron Alarm Panel (1.1.1) Driver**. Click on OK to create the database.

2.2.5.2 Select the integration database

Once a database has been created, the user may select it by clicking on the **gear icon**. In the dialogue that appears, select the database. Only databases relevant to the integration being added should appear.

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

3. Camera Tab Overlay Setup

Once all of the relevant settings have been configured, the alarm panel overlay can be pulled through over the appropriate camera feed.
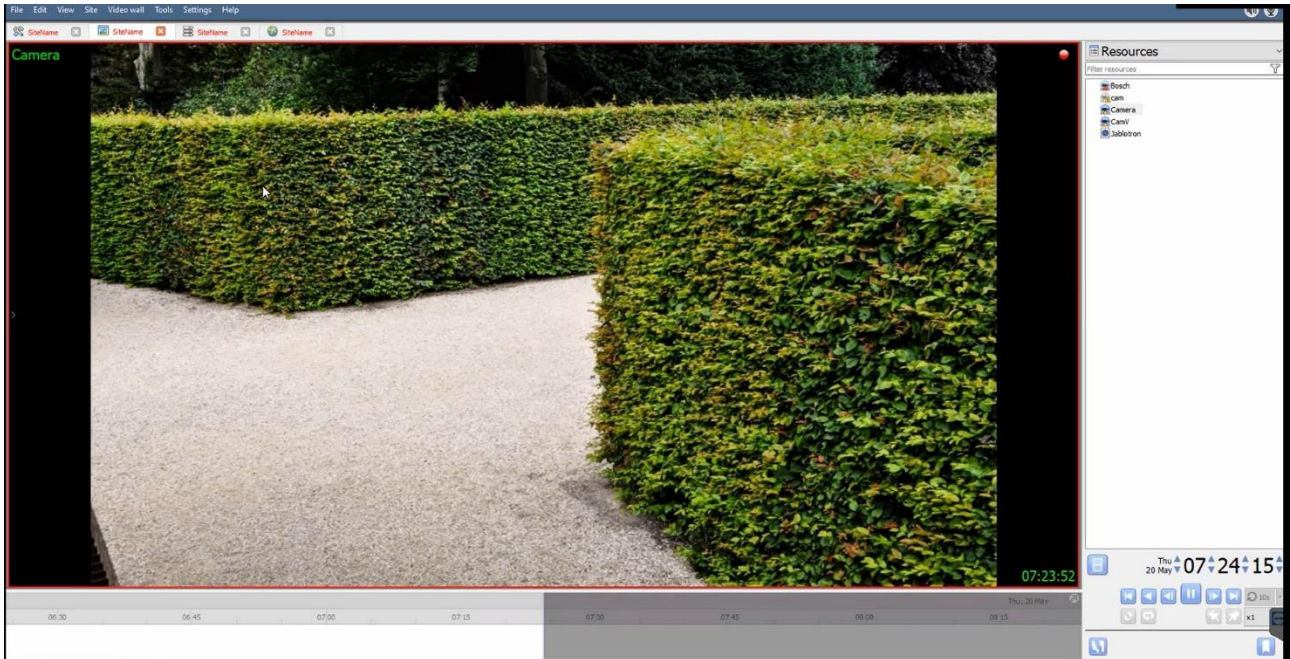
Note: cameras must already have been added to objects, and overlays must have already been configured.

3.1 Enable the overlay

To bring up the overlay, click the arrow to the left of the screen. This pops out the Video feed options panel. The Video feed options panel will present a number of options specific to the settings configured for that video feed.

Clicking on this icon will bring up the overlay options for this video feed. Select the overlay.

When an event has been triggered on the object, the overlay will appear.

4. Database

The database tab allows the user 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, it is possible 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.
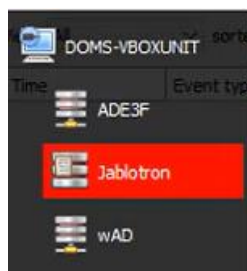
4.1 Navigate to the Database
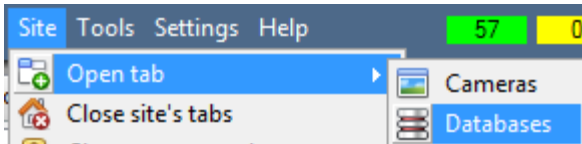
To view the information stored in the Integration database, follow the path shown to the left.

Site / Open tab / Databases
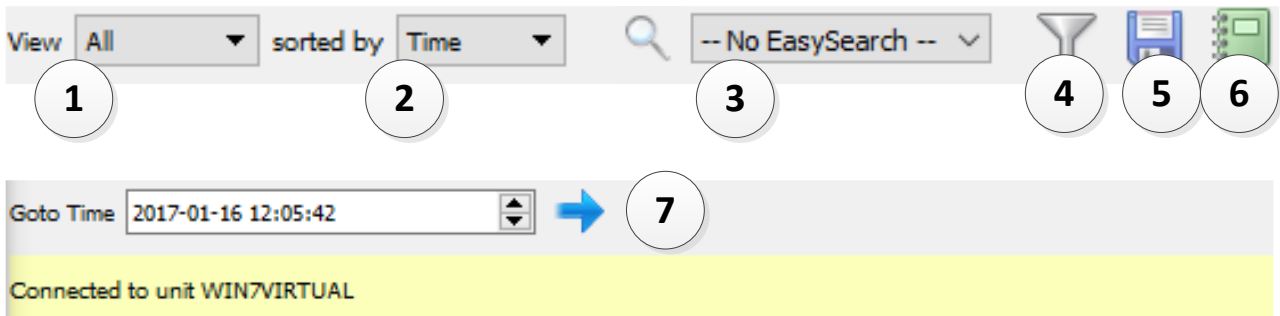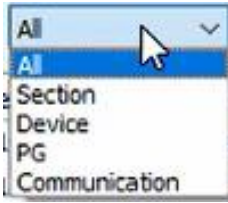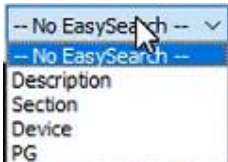
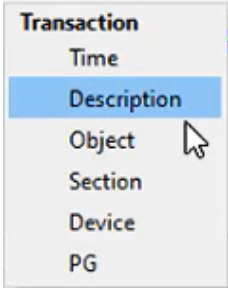This will open the Database Tab.

Once in the databases tab, select the relevant integration database from the database panel that opens on the left side. The databases are ordered under the NVRs to which they are attached.
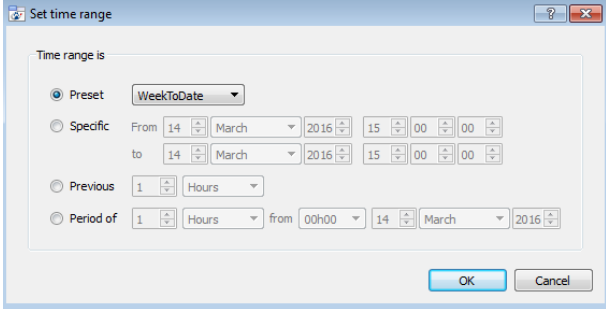

Hover over the arrow on the left-side of the camera image to bring up the database panel on the left.

4.2 Database Interface

① **View**	The way the database is presented may be changed. The **Jablotron Alarm Panel** database allows the user to view the following options:
② **Sorted By**	Events may be further sorted based on the following parameters: **Time.**
③ **Easy Search**	The easy search option allows for a quick search of the database within one of the following options:
④ **Filter**	Filter offers a more advanced way to sort information in the Integration Database table. Once the filters dialogue is open, the following options are available: To enable filters, check this box. To add a new filter, click on this icon. The filter icon will change to when filters are active. To delete an added filter, click on this icon. **Filter options**:

	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 (for example, _in the Week to date_). This will bring up the following dialogue box, where the time range can be defined: **Note**: 1. Multiple filters may be run simultaneously. Filters with the same perameters may be run more than once. 2. To change a filter, click on the blue hyperlinked text.
⑤ **Export**	Generate meta-database reports in PDF or CSV format. See below.
⑥ **Go to Time**	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, and then click on the ➡ icon.

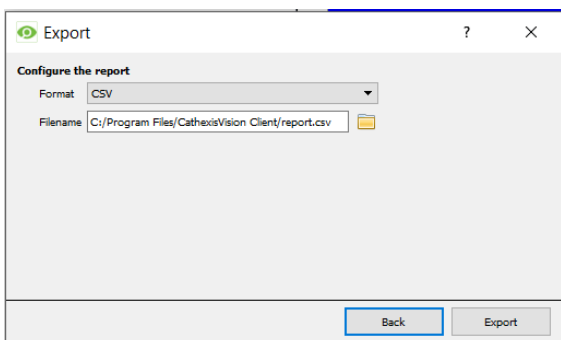## 4.2.1 Generate Meta-Database Reports

 Click this icon to open the Export window.
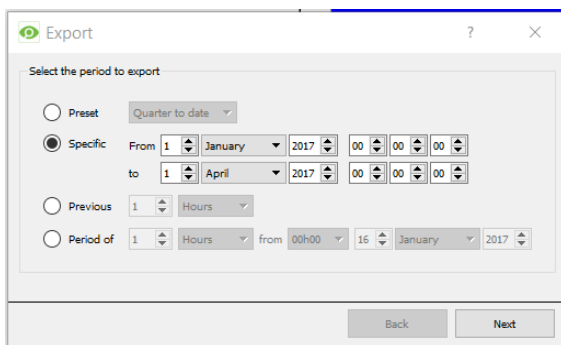
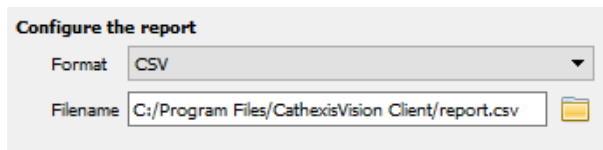Select the **Period** to export, and enter the required details.

Click **Next**.

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

See below for the two options.
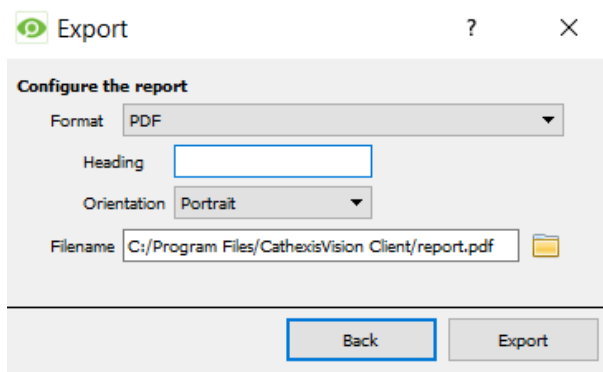
4.2.1.1 Export CSV

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.

4.2.1.2 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.csv)**, or click the folder icon to choose a new save folder and filename.

4.2.2 Metadata

On the right-hand side of the database, meta-data about the event entry is displayed.

4.2.3 Viewing an Entry's Associated Recording

To view an entry's associated recording, left-click on a database entry which has this icon in the **Links** column:

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

5. Events

A CathexisVision event has a trigger, which causes an action. Integrated devices may be set to act at triggers, or as actions. This chapter details the Jablotron-specific aspects of Events.

Refer to the *CathexisVision Setup Manual* for a comprehensive guide to CathexisVision events. Most of the data that CathexisVision receives from a device is presented in the Events interface.

5.1 Event Window

Events in CathexisVision are set up via the Event Window. This has 4 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 actions which the event takes are defined; in the **Resources Tab**, the various site resources (which can be used as part of an event) are defined.

5.2 Creating an Event

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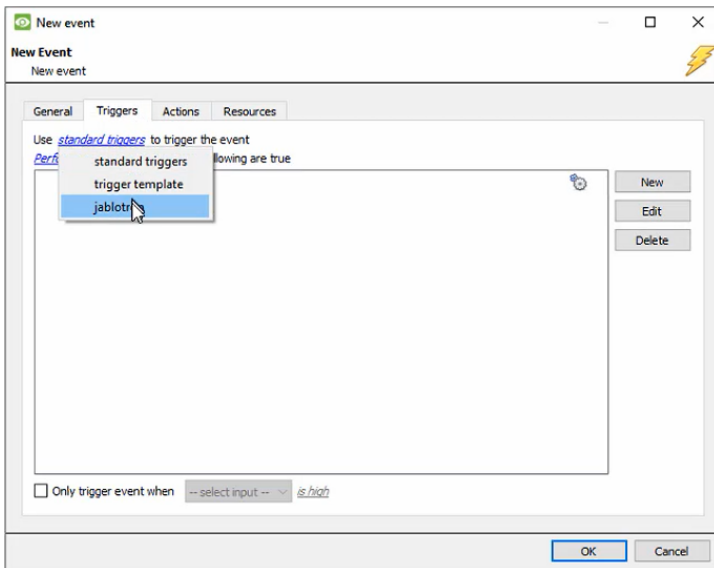

 Once in the Events management area, click on **New**. This will open up the New Event window:

Give the event a descriptive **name**.

Set the event **schedule** and **priority**.

5.3 Triggers

A trigger is the user-defined input that prompts the event to start. The trigger causes the subsequent action, which the user will also define.

In this window, define the rules and constraints which will trigger an event on the Jablotron device.

To add/edit/delete a rule, use the New, Edit, and Delete buttons on the right side.

Note: The user may set multiple constraints, choosing if *any*, or *all* constraints need to be fulfilled to set off a trigger.
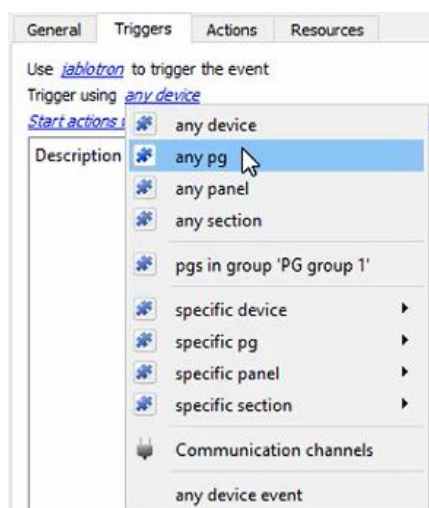
5.3.1 Set the device as the trigger

When creating a new event, the trigger type will default to: Use *standard triggers* .

To define what will trigger the event, click on the hyperlink after "use". To **set it as the Jablotron device**, click on the hyperlink, and select the relevant name from the drop-down menu.

5.3.2 Trigger Using

It is useful to think of the "Trigger using" option as the **master trigger type**. Choose whether certain **device objects** or **any device** event will trigger an event.

5.3.2 While/When and Any/All

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

To change these settings, click on the related blue hyperlinks.
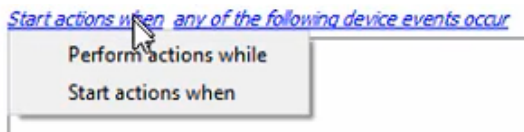
When using the device to trigger the event, there are options to **perform actions while** or **start actions when (while/when)** a trigger is active.


The user will be able to select multiple triggers, and define whether events will be set off while/when **any of the following device events occur** or **any of the properties meet the following criteria.**

To change these settings, click on the blue hyperlinks.

5.3.3 Trigger Types/Define the trigger

5.3.3.1 Device Event Triggers

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:
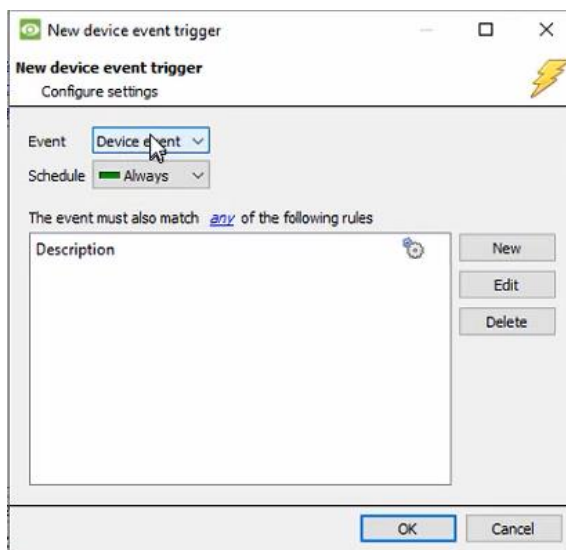
Select the **Event** type.

Define the **Schedule**.

Note: Multiple constraints may be set (**Device Event Triggers**). If no constraint is 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 side.

Click on the blue hyperlink to define whether the *any* or *all* of the configured device event rules should trigger an event.

Next, add rules to the device event trigger.

Add Rules to Device Event Triggers

If no constraints are set, every device event will cause a trigger. Once constraints are set, only the constraints chosen will trigger the event.

Once the type of device event that will be the trigger is selected, add a new **device event rule.** To do this, click on [New] in the **New Device Event Trigger** window.
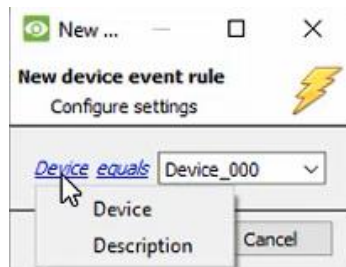
To change the constraint, click on the first hyperlink. This will bring up the full list of available rules: **Device** or **Description**.

To modify the way this rule will be treated, click on the second hyperlink (*equals* in the example). This will display the rules options.

5.3.3.2 Object Property Triggers

After selecting a master trigger type, add a trigger to the event. Click on New in the Triggers tab.

If the user has selected for events to be trigger while/when any of the **properties meet certain criteria**, this will bring up the **New object property trigger** box:
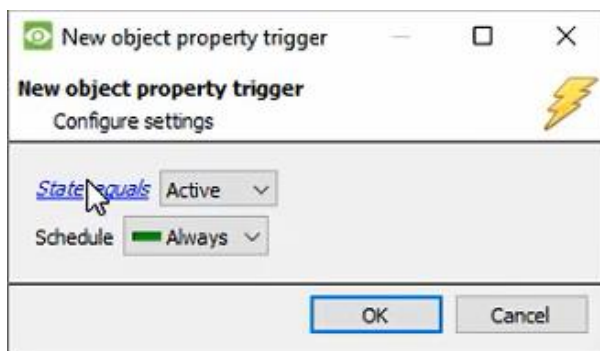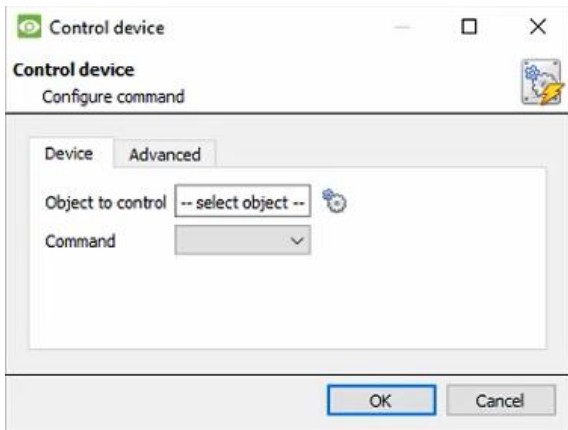
5.4 Actions

Once the triggers that are going to initiate the event have been defined, to define some Actions in the **Actions tab** of the **New Event** window. To set an action for an event trigger, click [New]. Select an action from the available options:
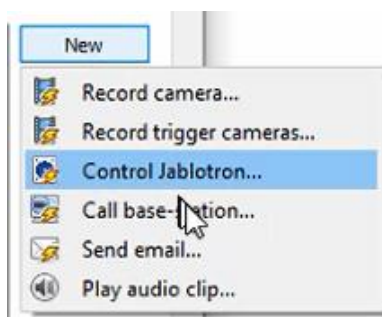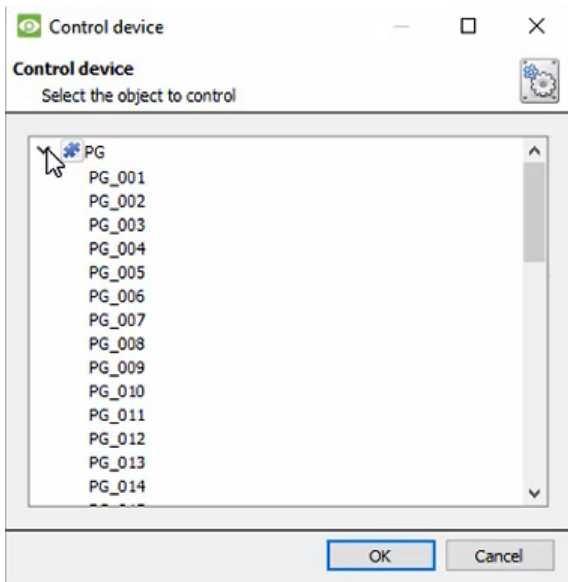
If the user selects **Control Jablotron…**, the **Control device** window will open. See below.
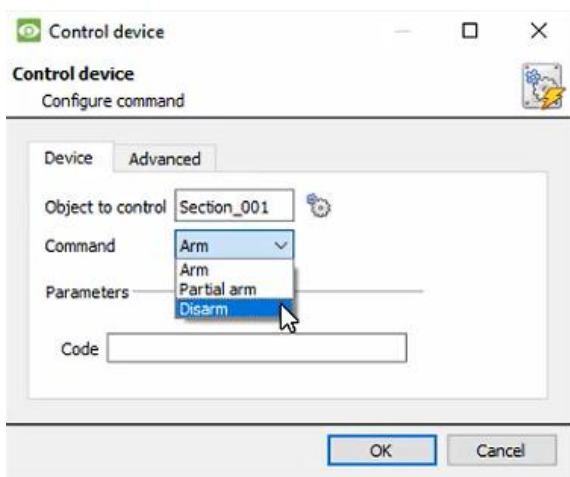
5.4.1 Control device

To select the objects to control, click on the gear icon.
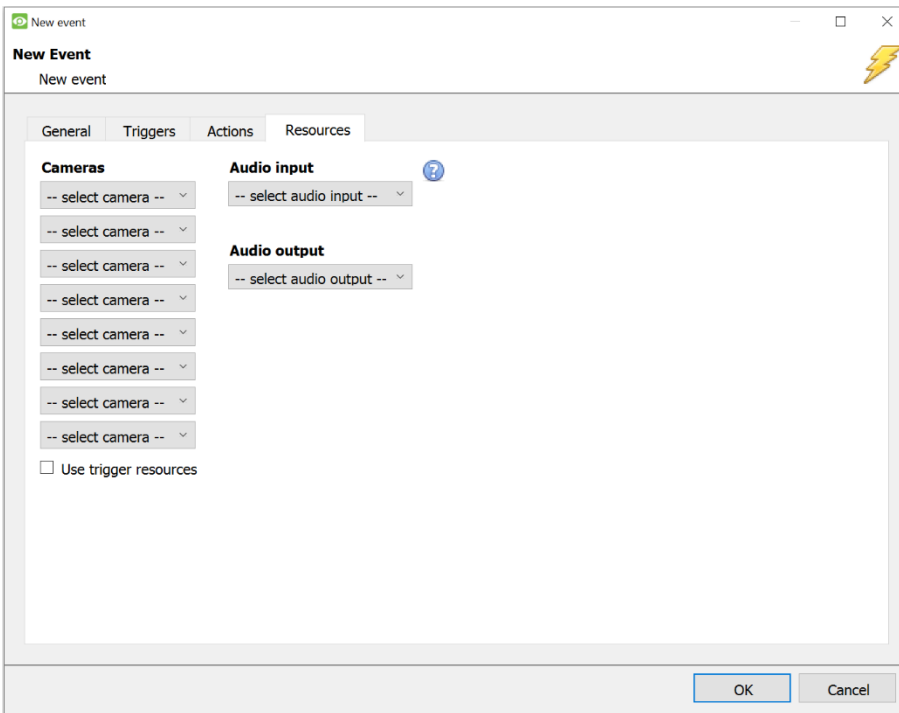

Select the PG or Section to control.

5.4.1.1 Control PG or Section

If the Section to control has been selected, commands can be configured. Select from **Arm, Partial arm,** or **Disarm**.

Enter parameters.

5.5 Resources

Users can configure resources in this tab.

6. Map

It is possible to add the Jablotron device to a site map, which will allow for a number of action options. These options include the animation of triggered zones and connecting to site cameras when zones are triggered. **Note**: This section will only deal with the specifics of the Jablotron device. For more information on using the CathexisVision Map Editor and Map Tab, please consult the ***Map Editor Operation Manual***.

6.1 Add the Jablotron Alarm Panel device as a resource

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

6.1.1 Add the Device in the Resource Panel

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

6.2 Add the Device in Map Editor

Once the Jablotron device has been added as a **Resource**, it will be available to drag onto the map area from the **Site Resources** list.
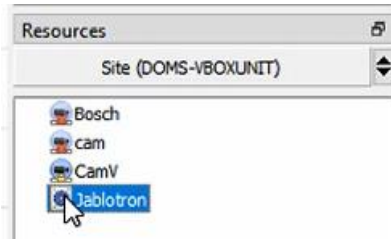
6.2.1 Open Map Editor and Log in
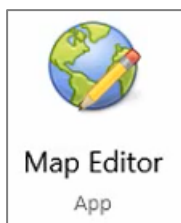
Open the Map Editor.

Enter the login details.

6.2.2 Adding Device Objects

In the Resources panel in the bottom-right corner, select the site. The Site Resources will be listed below.
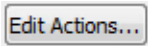

Drag the Jablotron device from the Site Resources list onto the map area.

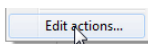Then, select one of the associated objects.

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

6.2.3 Adding Device Actions

To add actions to the device objects, either:

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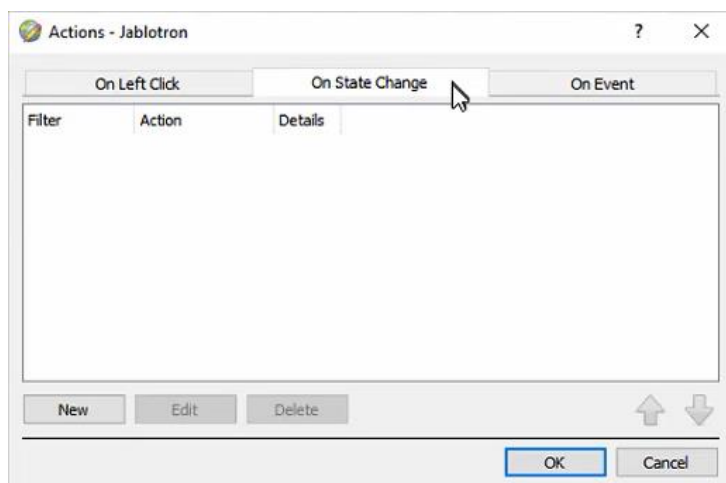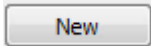

Right-click the map object and select **Edit Actions**.

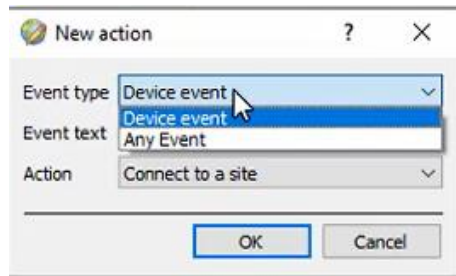The **Actions window** will open.

6.2.3.1 Action Options

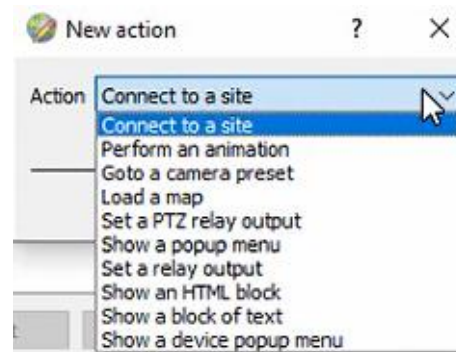Actions may be set for **Left Clicks**, **State Changes** and **Events**.

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

The action triggers will differ according to the object selected.

Event type options:

Action options:

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

Once finished, save the map. **Note**: the map must **not be saved** in the Work folder of the installation directory.

6.3 Map Tab

Upload the saved map 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.

7. Conclusion

Note: this app-note was designed to deal specifically with this integration. For further information about the CathexisVision software, please consult the *CathexisVision Setup Manual* (http://cathexisvideo.com/).

For support, please contact support@cat.co.za