Jablotron CLOUD Integration App-note

Contents

1. Introduction

This document will detail the integration of the Jablotron CLOUD with CathexisVision's software. Functionally, this integration will entail the triggering of standard CathexisVision Events, based on triggers from the Jablotron CLOUD.

Note:

1. For information regarding the regular operation of Jablotron CLOUD services, please consult the relevant Jablotron documentation.
2. The NVR does not communicate with the alarm panel directly.
3. The NVR must also connect to the Jablotron CLOUD and the CLOUD will then send Events to the NVR.
4. Jablotron manages the CathexVision VMS as if it were an Alarm Receiving Centre (ARC). Therefore, the end user who owns the VMS has to sign the SLA agreement with Jablotron in order to register the VMS in the Jablotron cloud.
5. The CathexisVision VMS needs to have a public static IP address.
6. The actual IP address and port of the Jablotron cloud server is given by Jablotron after signing the SLA agreement.
7. The security system – the signals of which should be integrated in CATVMS – needs to be a part of the registered ARC. This can be done on the administration website: jablonet.net
8. The security system will automatically get an account number from Jablotron CLOUD. This can also be checked at jablonet.net
9. An ARC at Jabotron can communicate with one IP address at a time. The other addresses which are registered at Jablotron are for backup purposes only. This means that if a user wants their security system to be connected to a monitoring station, and for it to be integrated into CATVMS at the same time, this will not work. This is because only one security system can be part of a single ARC.

1.1 Requirements

1.1.1 Software

CathexisVision 2019 Service Pack 2 and later.

1.1.2 License requirements

The Cathexis Jablotron CLOUD integration license requirements are as follows:

License Name	License Description
CJAB-2000	Jablotron CLOUD alarm panel device

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

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.

1.1.3 Operating systems

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

1.2 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. There are different types of objects.

1.3 Features and Abilities

The CathexisVision NVR does not communicate with the alarm panel directly. The alarm panel needs to be configured to send Events to Jablotron's CLOUD servers. The CathexisVision NVR must also connect to the Jablotron CLOUD, the CLOUD will then send Events to the CathexisVision NVR.

Note: the CathexisVision system NVR is not able to send any messages to the alarm panel. There is also no way to discover the devices that have been configured on the alarm panel. Each alarm panel has a unique Jablotron CLOUD account number. This ensures that Events are only generated for the correct panel.

1.3.1 Integration Objects

This integration has four object types: CLOUD, PG, Zone, and Communication channel.

USEFUL LINKS

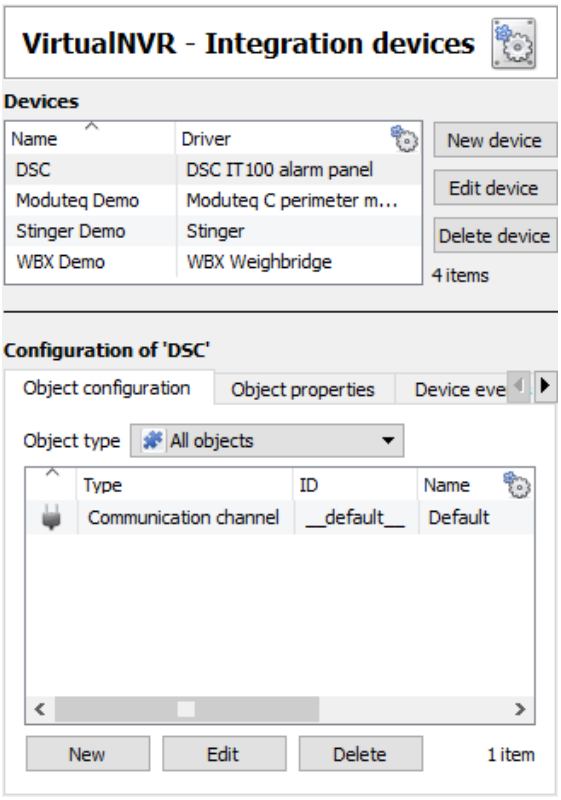
*To view **tutorial videos** on CathexisVision setup, visit https://cathexisvideo.com/resources/videos*

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

2. Device Addition and Configuration

This section will detail the procedure for setting up Cathexis and Jablotron to effectively communicate with each other. The Jablotron Alarm Panel can be configured using the F-Link software from Jablotron. The application can also be used to modify the panel configuration. To do this, use a USB cable.

There are two sections in the Integration Panel:

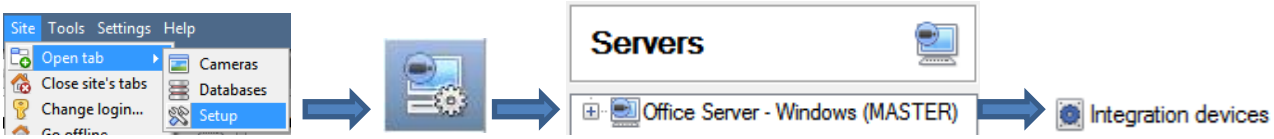


The **Devices** list will list the integration devices that are attached to the server.

The **Configuration** section enables editing /reviewing, the device selected in the **Devices** section.

2.1 Devices Section (Add a New Device in CathexisVision)

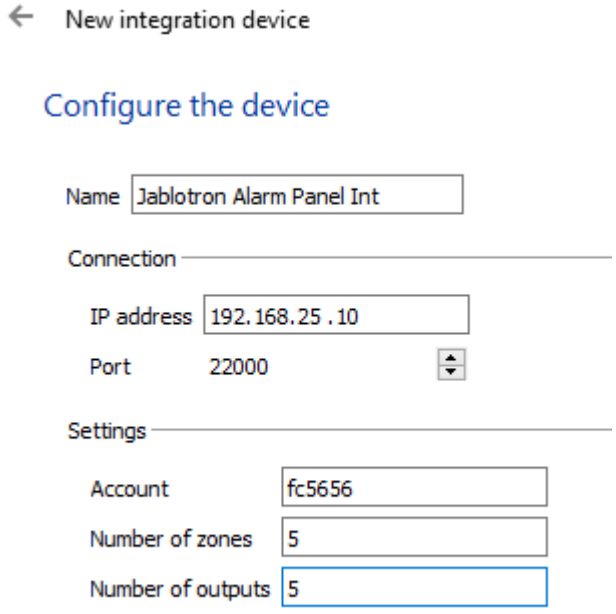
Integrations are added on a server-by-server basis. They are managed in the Integration Devices panel, under the **Setup Tab** of the servers to which they are added. To get to the Integration Panel, follow this path:



2.2.1 Device Addition

1. Once in the Integration Panel, click on 

in the Devices section. This will open the addition dialogue.
2. Select **Jablotron CLOUD alarm panel** driver from the list.



Give the device a descriptive **name.**

Enter the **IP address** of the Jablotron CLOUD Server that is linked with the alarm panel being configured.

Enter the **port number**.

Enter the **Account**.

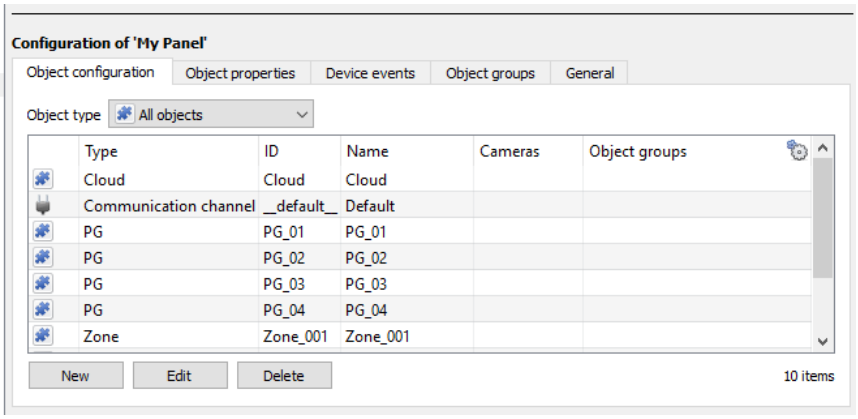
Enter the **Number of zones** configured on the alarm panel.

Enter the **Number of outputs (PG)** configured on the alarm panel.

2.2 Configuration Section (Tabs)

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

2.2.1 Object Configuration Tab

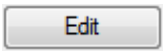


The object configuration tab is the tab where all the individual objects that comprise the integration may be viewed.

The Jablotron CLOUD Alarm Panel device has four object types **CLOUD, PG, Zone, and Communication channel.**

2.2.1.1 Object Configuration Buttons

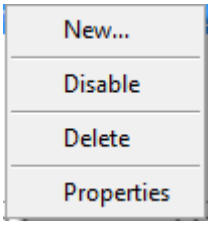
Add a new object by clicking on New.



Will open up an existing object for edition.

Is used to delete an existing object from the CathexisVision configuration.

2.2.1.2 Object Configuration Right-click Options



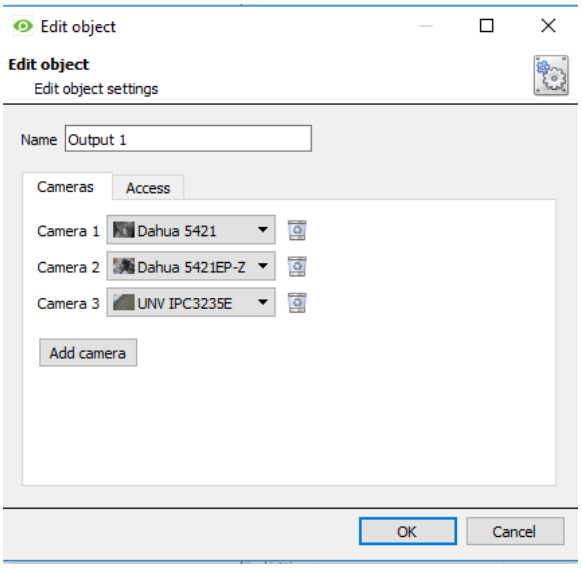
New will open up the dialogue to add a new object.

Disable/Enable allows manually enabling/disabling individual objects.

Delete will permanently remove this object from the list.

Properties will open up the object properties. Edit the object from here, specifically, assign cameras to this object, as well as define user access levels for it.

Properties: Cameras



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

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

To delete a camera, click on  .

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

Properties: Access

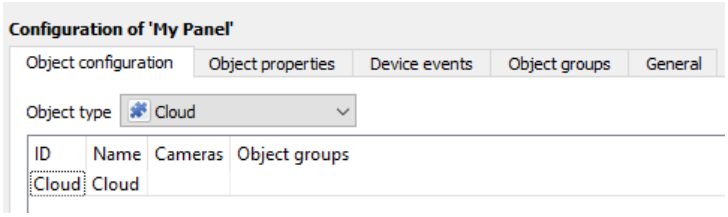
Access protects sensitive objects, by only allowing certain user levels access to them.

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

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

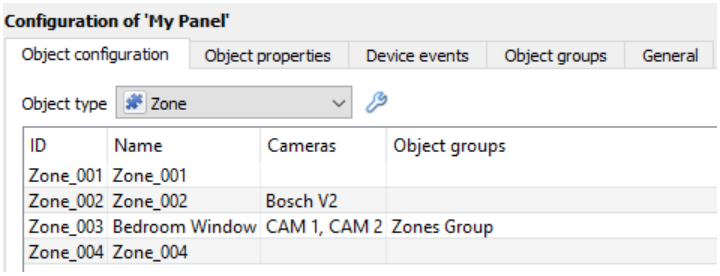
2.2.1.3 Right-clicking on objects

CLOUD



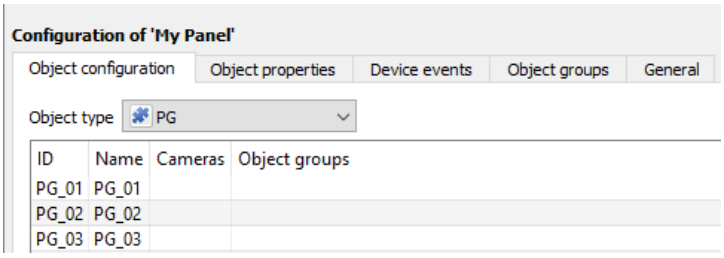
Right-clicking on a zone gives the user the option to **Disable** the CLOUD object. And if the CLOUD goes offline the **State** also change to **Offline.**

Zone



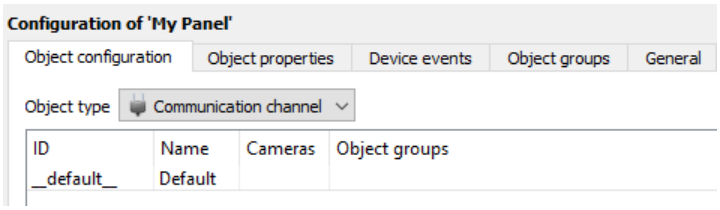
Right-clicking on a **zone** gives the user the option to **Disable** that zone notifications from the cloud.

PG (output)



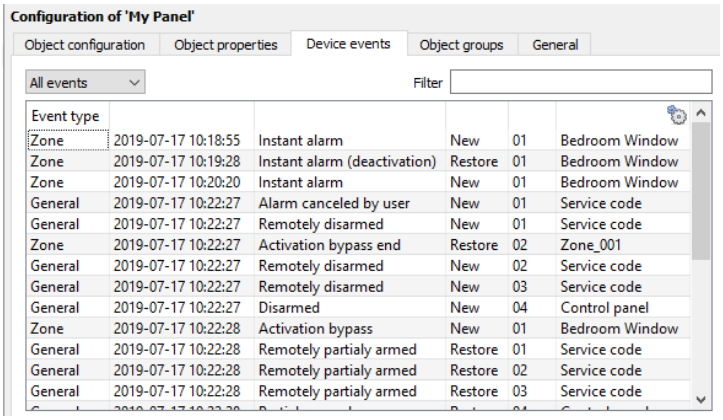
Right-clicking on a **PG** gives the user the option to **Disable** that zone notifications from the cloud.

Communication channel



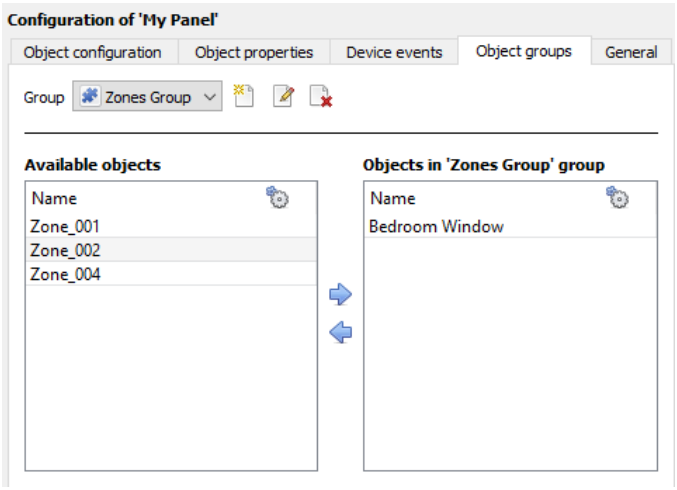
Right-clicking on a **Communication channel** gives the user the option to **Disable** that zone notifications from the cloud.

2.2.2 Device Events Tab



This lists all Events sent from the device. It is an excellent way for installers to see that the integration is functioning, and to monitor the Events happening on site.

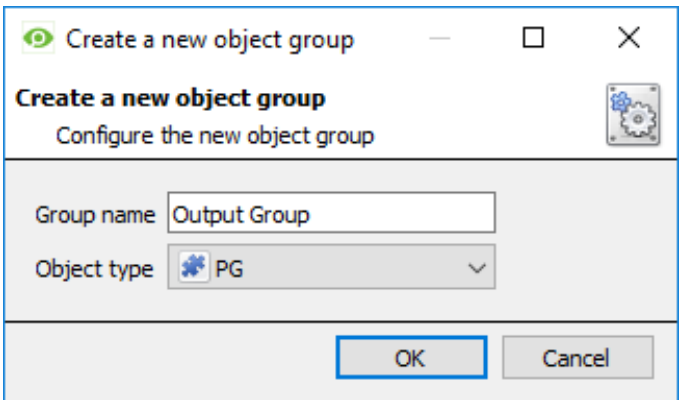
2.2.3 Groups Tab



Create groups of the same type of object.

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

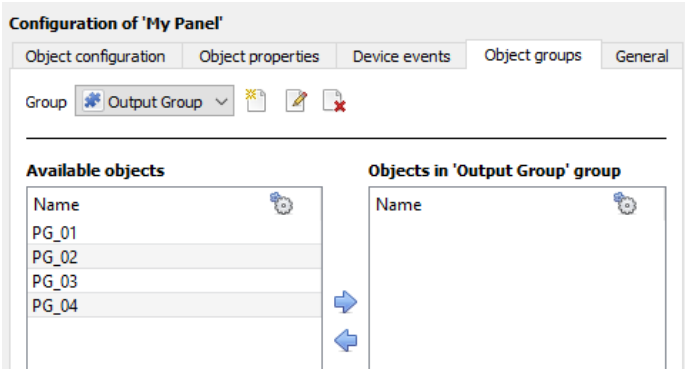
2.2.3.1 Create a Group



To create/edit an object group click on / . (**Note**: Once a group has been created, the object type of the group may not be edited.)

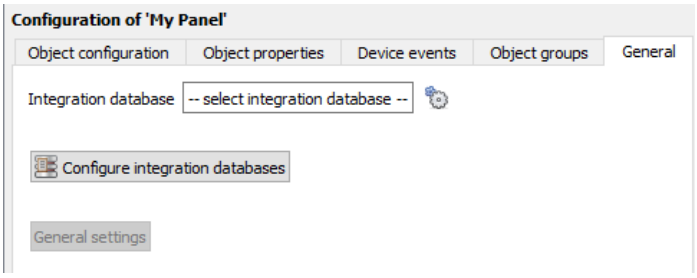
Give the group a descriptive **Group name.**

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



A list of Available Objects will appear. To add/remove these objects to or from the group, select them (multiple objects may be selected at a time), and click / .

2.2.4 General tab



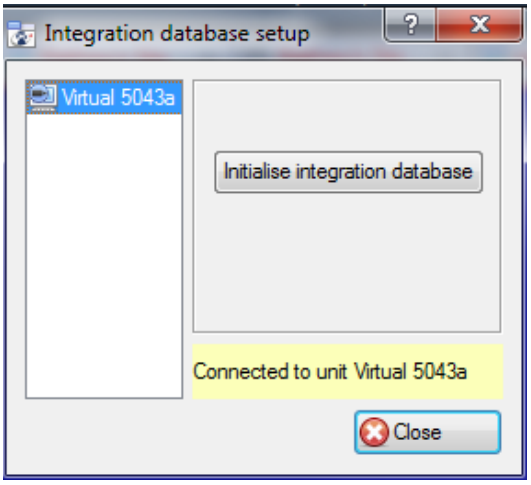
Currently the general tab deals with the **Integration database**. Here, select an existing database, or configure a new database for the integration.

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.

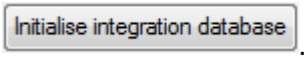
2.2.4.1 Configure a new database

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

2.2.4.2 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.

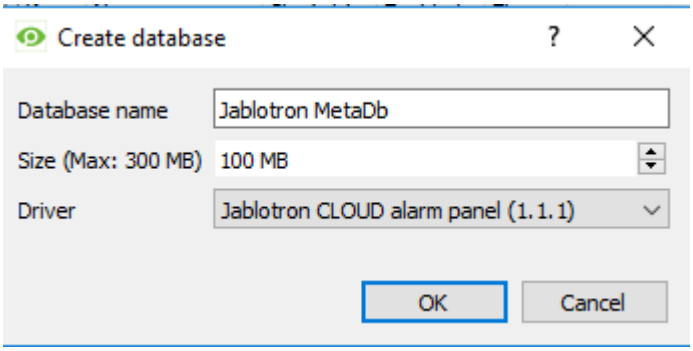
Select the unit to add the database to, from the list on the left, and click 

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

2.2.4.3 Add a New Devices Database

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

button, at the bottom of the **Create database** window.

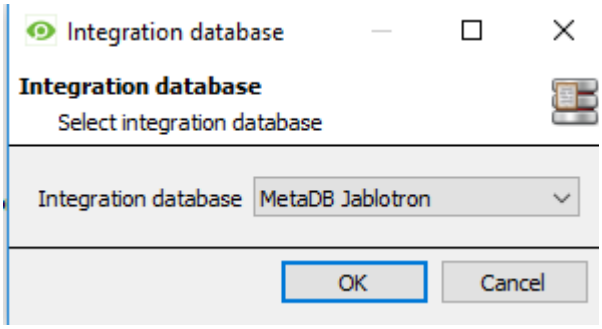


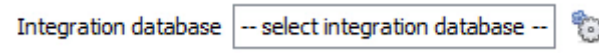
Give the Integration database a descriptive **Database Name**. For example, Jablotron MetaDb.

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

Choose the device **Driver** that the device will be using. Click on **OK** to create the database.

2.2.4.4 Select the Integration database

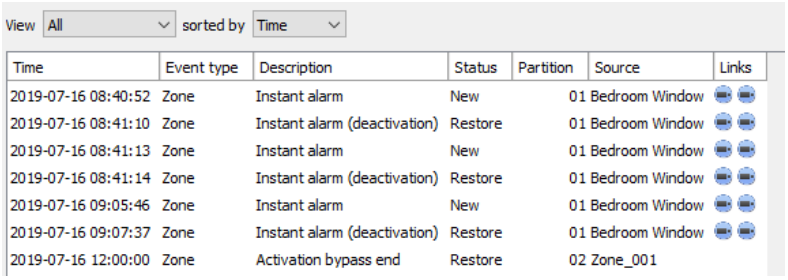




Once a database has been created, the user may select it by clicking on the  icon, and selecting it in the dialogue that appears. Only databases which relate to the device being added should appear.

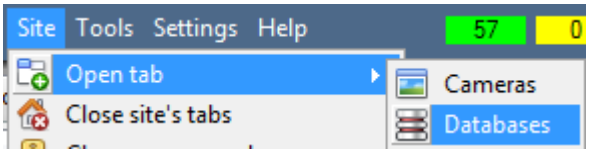
3. Database

The database tab 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, it is possible to launch this recording, from within the database tab.



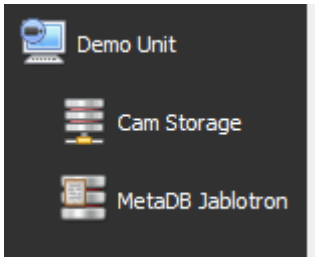
Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathexisVision by the integrated device.

3.1 Navigate to the Database



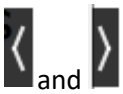
View the information stored in the Integration database, by following the path seen to the left.

This will take navigates to the Database Tab.

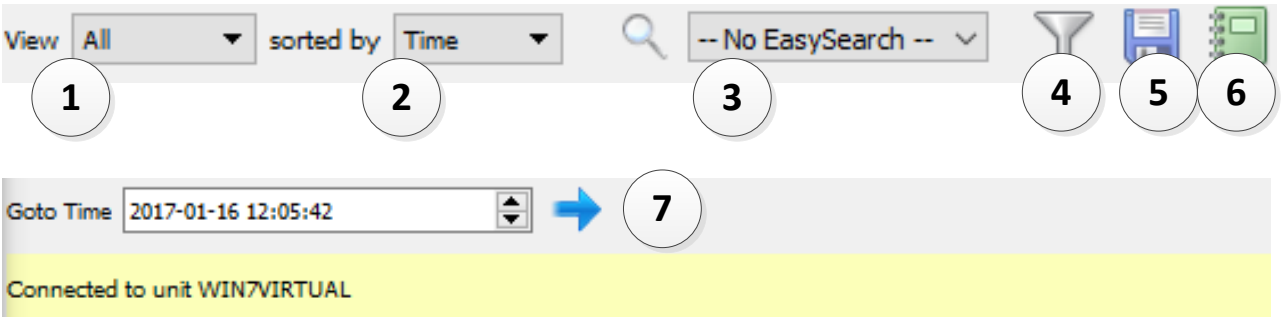


When the database tab opens, select the relevant integration database from the database panel that opens on the left-hand side. The databases are ordered under the NVRs that they are attached to.

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

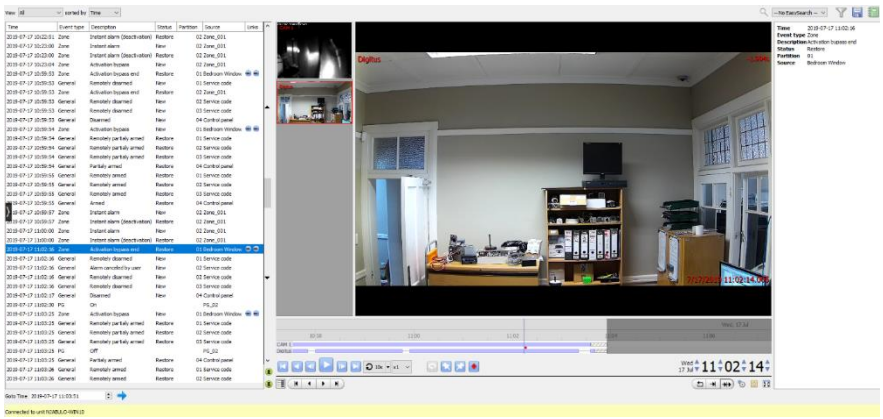
 and

3.2 Database Interface



① **View**	**View** changes the way the database is presented. Some integration databases have multiple view options.
② **Sorted By**	Events may only be sorted by Time .
③ **Easy Search**	The easy search option quickly searches the database.
④ **Filter**	Filter offers a more advanced manner of sorting information in the Integration Database table. Once the filters dialogue is open, these are the options: 1. To **enable** filters check this box: Enable filters 2. To **add** a new filter click on . The filter icon will change to when filters are active. 3. To **delete** an added filter click on . **Note**: 1. Multiple filters may be run simultanously. 2. The same perameter may be used more than once. 3. To change a filter click on the blue hyperlinked text. (For example, click on Timestamp to change the filter from Timestamp, to any of the other available options.)
⑤ **Export**	Generate metadatabase reports in PDF or CSV format. See below.
⑥ **Manage Reports**	Generate scheduled metadatabase reports. See below.
⑦ **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.

3.2.1 Viewing an Entry's Associated Recording



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

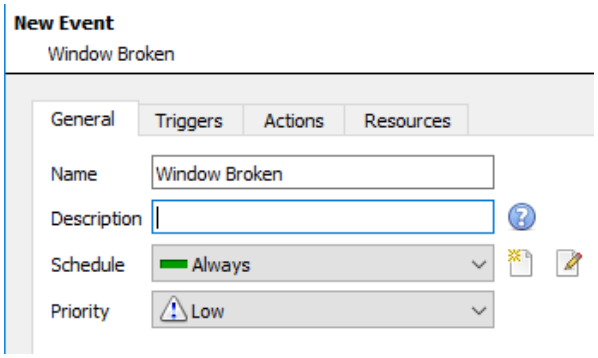
To view an associated recording, simply left-click on a database entry, which has the icon in the **Links** column. Then click play in the video player.

4. Events

A CathexisVision Event has a trigger, which causes an action. Integrated devices may be set to act as triggers, or as actions. This document will detail the Jablotron CLOUD specific aspects of Events. There is a comprehensive guide to CathexisVision Events in the main setup manual.

Most of the data that CathexisVision receives from a device is presented in the **Events interface**. This is done in order to give the user a full range of options. As a result, some of the options presented in the interface may be impractical as event triggers, or actions.

4.1 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 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 Jablotron device, enter the **Events management area**:

Once in the Events management area, click on 

. This will open up the New Event window.

4.2.1 While/When and Any/All

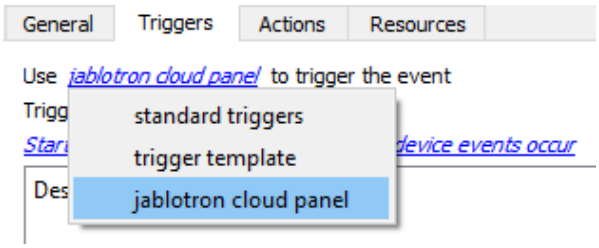
When triggering on an object, there is the option to trigger **while/when** a trigger is active. It is also possible to select multiple triggers, and define whether **all/any** of the triggers need to be active to start an event.

To change these settings, click on the related blue hyperlinks.

4.3 Triggers

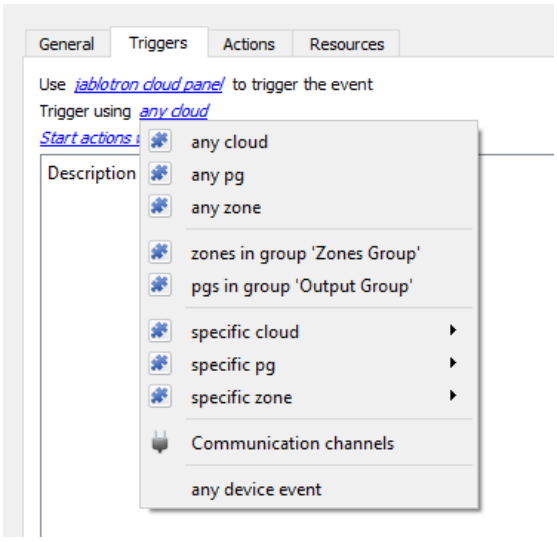
A trigger is the user-defined input that prompts the event to start. The trigger causes the subsequent action, which the user will also define.

4.3.1 Set the device as the trigger



When creating a new event, the trigger type will default to: Use *standard triggers*. To define which device will trigger the event, click on the hyperlink after "use". To set it as the Jablotron device, click on the hyperlink, and select the relevant device name from the drop-down menu.

4.3.2 Trigger Types (Trigger Using)



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

Any CLOUD/pg/zone will trigger when any of these objects sends the selected trigger.

Object in group... If there is a group set up, it will appear here in this list.

Communication channels will trigger only on the Communication channels.

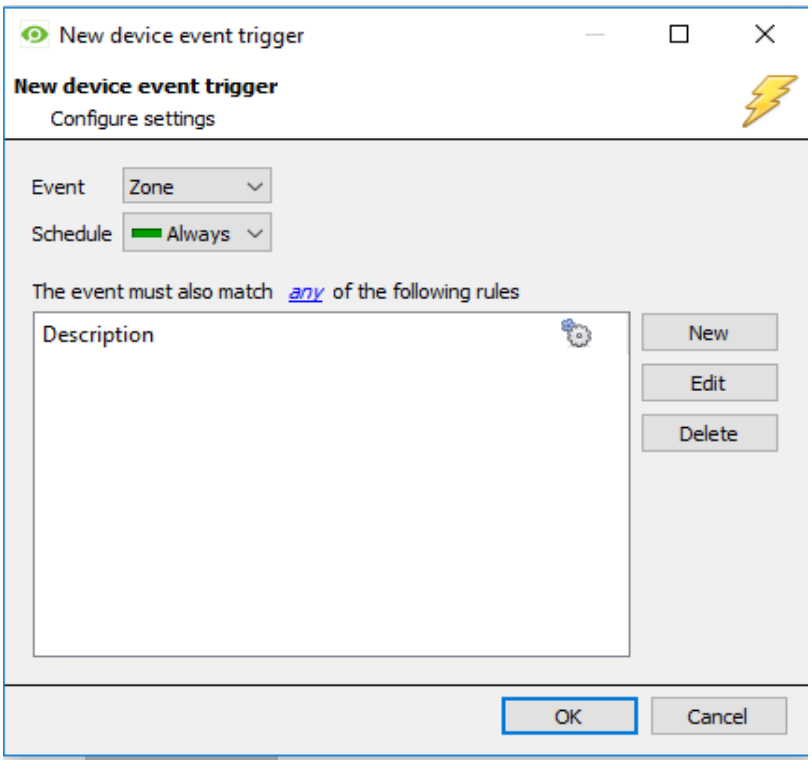
Specific CLOUD/pg/zone will trigger on an event from the specific object selected.

Any device event will trigger on any event that occurs on the device. Within the "any device event" setup, set "device event rules", which will constrain the device Events that trigger the event.

Note: For this 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 to see a list of available descriptions. Here is an example: Description $msg_time

4.3.3 Define the Trigger

After selecting a master trigger type, add a trigger to the event. Click on New in the Triggers tab. This will bring up the dialogue box seen below:

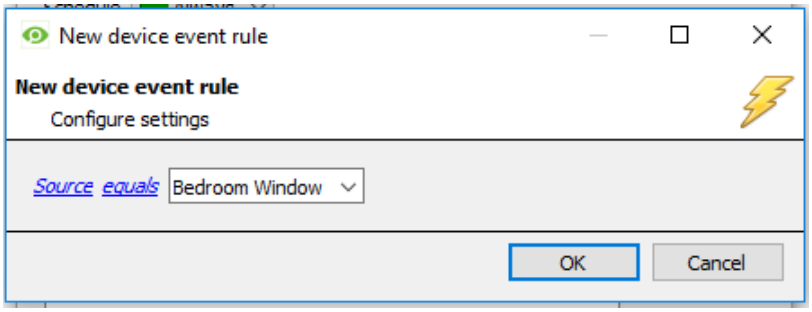


For example, within the *any device event* option, choose the type of device Event to be the trigger. Choose an event type from the drop-down menu.

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 hand side.

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

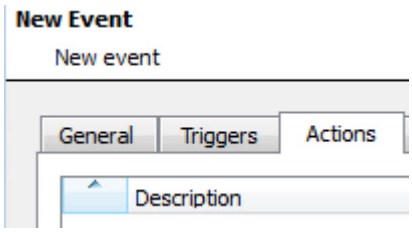


To change the constraint, click on the first hyperlink. This will bring up the full list of available rules.

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

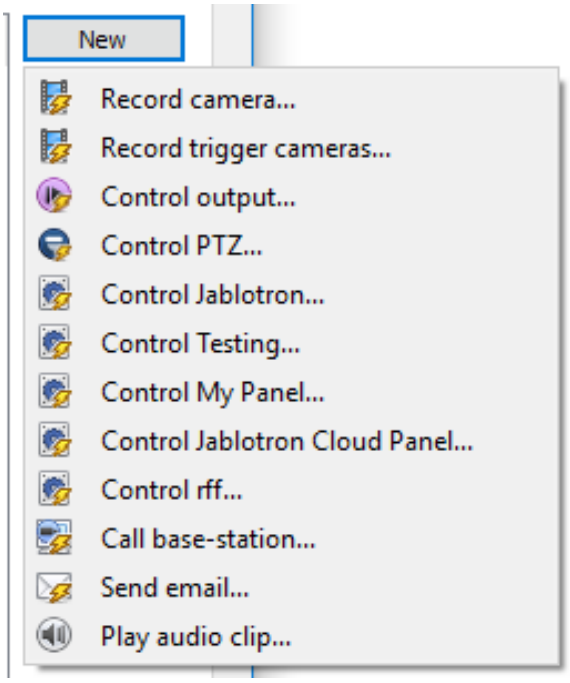
Note: When all available options are known to CathexisVision, a drop-down menu will appear. When these variables are not pre-defined, fill them in. The information pulled through to the Events is information sent to CathexisVision from the Jablotron CLOUD Alarm Panel device.

4.4 Actions



Once the triggers that are going to initiate the event are defined, define some Actions. With many integrations, there will be the option to control the integrated device, as one of the actions.

4.4.1 New Action

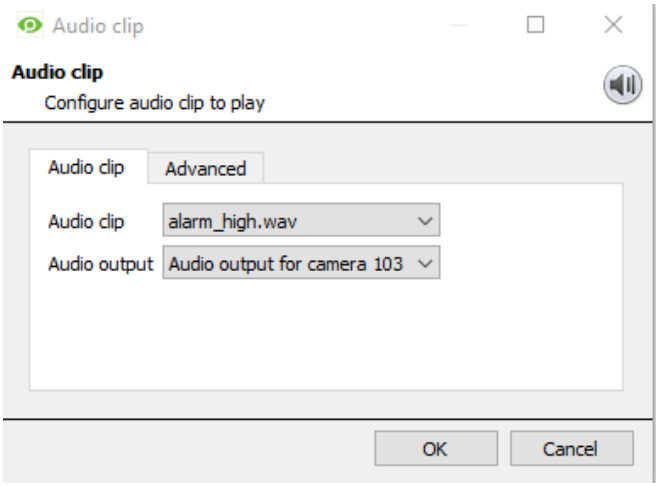


To create a **new Event Action** click on 

.

Select **Play audio clip** to control this device with the CathexisVision event.

Note: you cannot control the Jablotron panel via the cloud.



5. Conclusion

This app-note was designed to deal specifically with this integration. For further information about the CathexisVision software, consult the main manual (http://cathexisvideo.com/).

For support, email support@cat.co.za.