



# Ziton ZP3 Fire Alarm Panel Integration Document

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<sup>1</sup> While Cathexis has made every effort to ensure the accuracy of this document, there is no guarantee of accuracy, neither explicit, nor implied. Specifications are subject to change without notice.

# 1 Introduction

This document will detail the integration of the Ziton ZP3 Fire Alarm Panel, with CathexisVision's software. Functionally this integration will entail the triggering of standard CathexisVision Events, based on the triggers from the Ziton device.

## General Requirements

- CathexisVision 2015 Service Pack 3 and later only supports a RS232 connection to the panel.
- CathexisVision 2016 Service Pack 3 and later also supports connecting via port 1 on the ESP3102.
- Information on the ESP devices may be found on the CathexisVision website: [www.cathexisvideo.com](http://www.cathexisvideo.com).

## Ziton Panel Firmware Requirements

- Software 71910 version 3.10 (053).
- Peripheral boards software version:
  - Display (Local) SW 72101 version 3.00
  - Line Driver software 72001 version 3.05
- The Ziton panel connects via a RS232 interface module (Ziton part no. 48601). This module has a male DB-9 connector. If the panel is connected via port 1 on an ESP3102, then the female DB-9 interface connector must be modified such that pins 4, 7, and 8 are bridged. This is to support hardware flow control required by the panel. See **2b**, below.

### **Note:**

1. If you need information regarding the regular operation of a Ziton device, please consult the relevant Ziton documentation.
2. There is a General Integration section in the main CathexisVision manual. It has vital information about creating an integration database, as well as a general introduction to the Integration Panel. **Read over this section.**
3. CathexisVision is unable to detect that the communication channel is down, when the Ziton panel is connected via RS232.
4. When the Ziton panel is connected via an ESP3102, CathexisVision will only show that the communication channel is down when the network connection to the ESP3102 is lost.
5. Connecting via the ESP1204 is not supported because it does not support hardware flow control.

## **a. License requirements**

The Cathexis Ziton integration license requirements are as follows:

License Name	License Description
CFPL-2000	Fire Panel integration license

## **b. 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 you add an integration to the CathexisVision system, you add a device. The messages received from the device are called Device Events.

**Objects** Objects are the individual pieces of hardware that comprise the integration. You may have 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

### Ziton Integration Features

The driver connects to a single master fire panel through a serial port using hardware flow control. The master panel may have additional panels connected to it. The devices features are as follows:

- Three object types: Panel, Zone and Device.
- Three message types: Panel Event, Zone Event and Device Event.
- Each transaction event is stored in a meta-database.
- The following commands can be sent to the integration device.
  - Panel:
    - Evacuate.
    - Reset Panel.
    - Reset all Panels.
    - Synchronize panel time to NVR time.
    - Silence Panel.
    - Request Isolation Status.
  - Zone.
    - Isolate.
    - Enable.
  - Device.
    - Isolate.
    - Enable.

## 2 Device Addition and Configuration

### a. Introduction

This section will detail the procedure for setting up the two systems to effectively communicate with each other.

### b. CathexisVision Specific Ziton Setup (Set up the Ziton device)

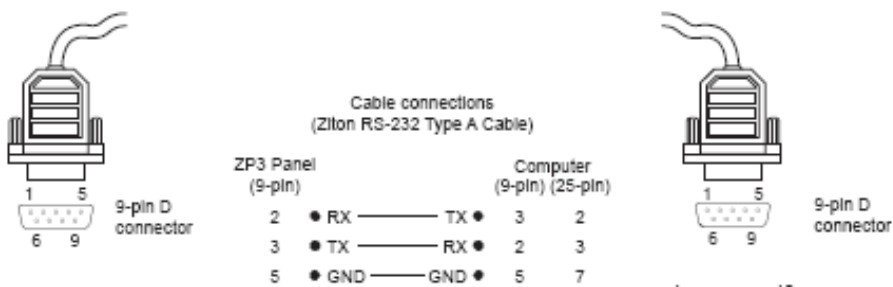
#### Ziton Panel Setup

To set up the Ziton device for communication with CathexisVision you will need to do the following:

1. On the Ziton panel, go to **Setup → System Configuration → Peripheral Comms → Comms Parameters**.
2. Change the Z Port number to 7. This is the ZCP2 protocol, single telegram, full handshaking.
3. By default, Parity is set to “even”. You will have to change it to “none”.

#### Serial Cable Configuration

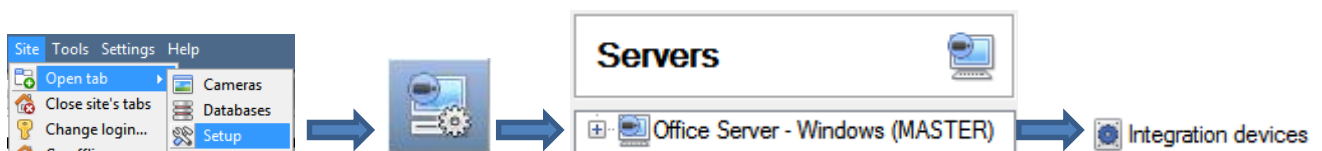
The serial cable for this integration should resemble the diagram below:




### c. 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:

#### The Integrations Panel



**Security system - Integration devices** 

**Devices**

Name	Driver
Alarm Panel	Paradox EVO192
Impro AP Lite	Impro IXP20 / APLITE access control
Paradox	DSC IT100 alarm panel
Ziton Demo	Ziton

4 items

**Configuration of 'Ziton Demo'**

Object configuration | Object properties | Device events | Groups

Object type: All objects

Type	ID	Name	Cameras
Communication channel	__default__	Default	

1 item

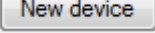
New Edit Delete

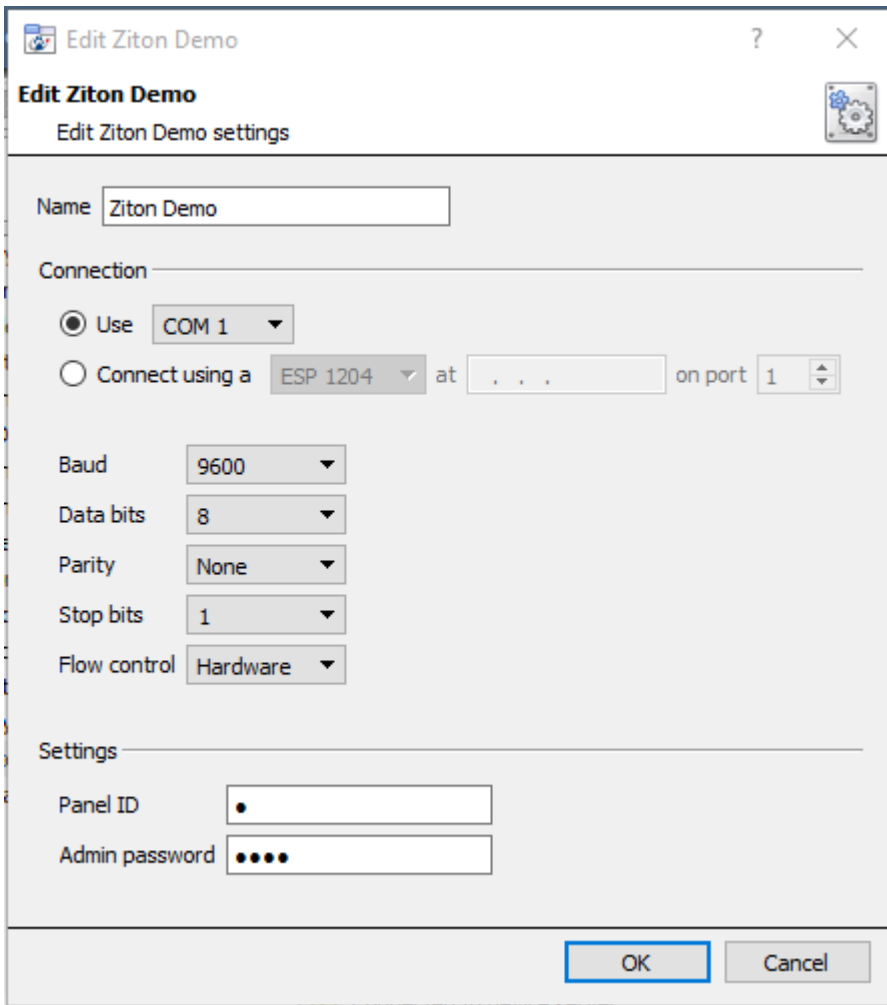
You will notice two sections in the Integration Panel:

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

The **Configuration** section enables you to edit/review, the device which you have selected in the **Devices** section.

- **Device Addition**

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



Give the device a descriptive name.

Choose your connection type. If connected directly via RS232 select the COM port number. **Or** choose the ESP3102 on port 1, enter the IP address and default username/password as "admin/admin".

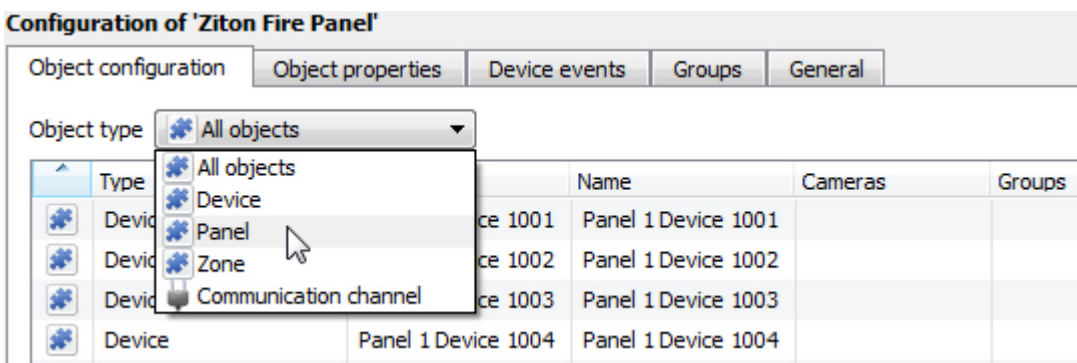
Set the **Baud rate, Data bits, Parity, Stop bits, and Flow control** to match those of the Ziton panel.

Also set the **Panel ID** and **Admin password** used by the master Ziton panel.

## d. Configuration Section (Tabs)

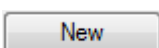
The configuration section is divided up into a number of tabs. These tabs are: **Object configuration, Object properties, Device events, Groups, and General.**

### Object Configuration Tab

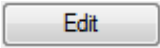


The object configuration tab is the tab where you may view all the individual objects that comprise the integration.

- **Object Configuration Buttons**



You may add a new object by clicking on New.

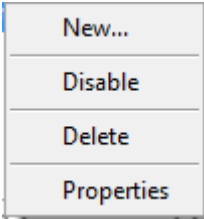


Will open up an existing object for edition.



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

### • Object Configuration Right-click Options



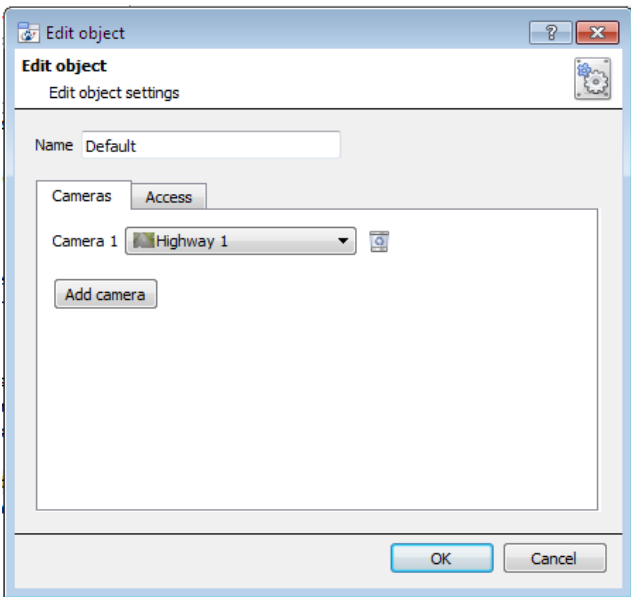
**New** will open up the dialogue to add a new object.

**Disable/Enable** allows you to manually enable/disable individual objects.

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

**Properties** will open up the object properties. You may edit the object from here. (Specifically you will be able to 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:** While you can add multiple cameras here, only the first camera added with the object will be linked in the integration database.

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

### Properties: Access



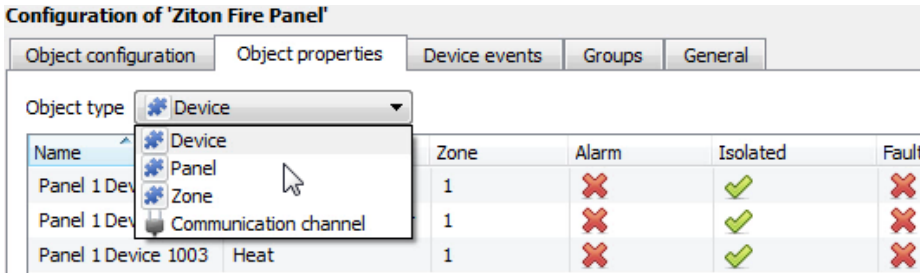
**Access** allows you to protect sensitive objects, by only allowing certain user levels access to them.

Under **View** you will be able to set the access levels.

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

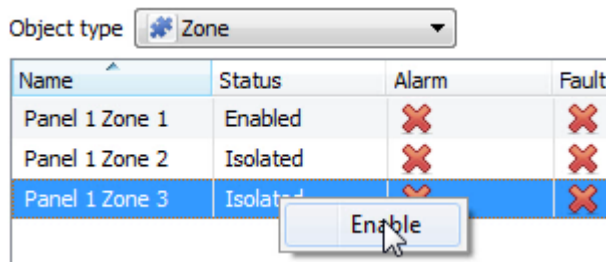


## Objects Properties Tab



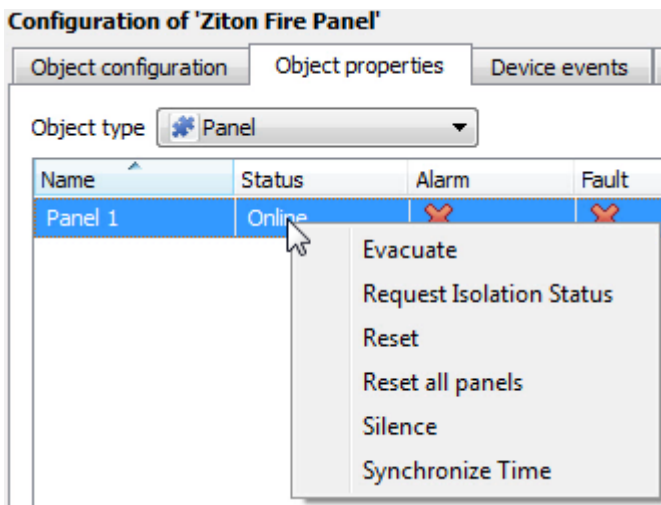
The Object properties tab allows you to view the objects, sorted by type. In the case of the Ziton device you will have the options of viewing by **Device**, **Panel**, **Zone**, or **Communication Channel**.

### • *Ziton Device/Panel Right-click Options*



Right-clicking on a Device or Zone object, will give the user the option to either Enable, or Isolate (disable) the selected object.

### • *Ziton Zone Right-click options*



Right-clicking on a panel, in Object Properties provides the following options:

Send an **Evacuate** command to the panel. (Will set off alarms, and sounders.)

**Request the isolation state** of all the objects.

**Reset one/all** panels. (Will reset all alarm, and sounder states.)

**Silence** sounders. (Silencing sounders will silence the alarm noise, but the alarm will still be active.)

**Synchronise time** will synchronise the time of the panel with that of the CathexisVision server.

## Device Events Tab

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

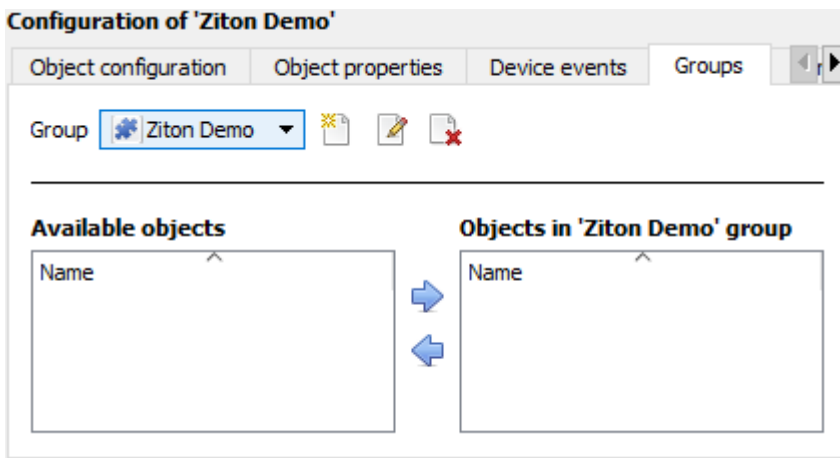
**Configuration of 'Ziton Fire Panel'**

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

All events

Event type				
Zone Event	2015-06-18 11:51:41.620	2015-06-18 11:51:25	Zone partially disabled	Device disable/Zone partial disable
Device Event	2015-06-18 11:51:39.620	2015-06-18 11:51:25	Device enable	Disablement restored
Panel Event	2015-06-18 11:51:37.630	2015-06-18 11:51:25	Panel data accessed/changed	User action response
Panel Event	2015-06-18 11:47:49.621	2015-06-18 11:47:35	Panel alarms/faults cleared after reset	Panel Reset
Panel Event	2015-06-18 11:47:47.621	2015-06-18 11:47:35	Panel reset	User action response

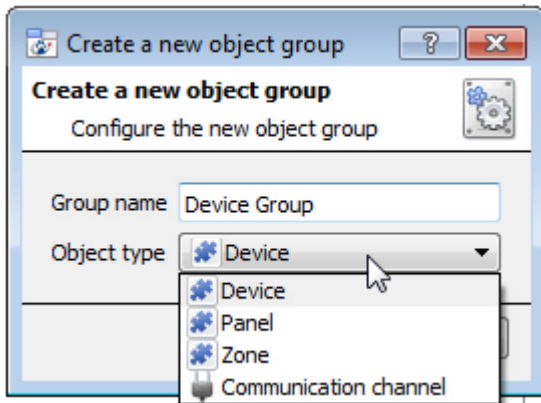
## Groups Tab



You can create groups of the same type of object.

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

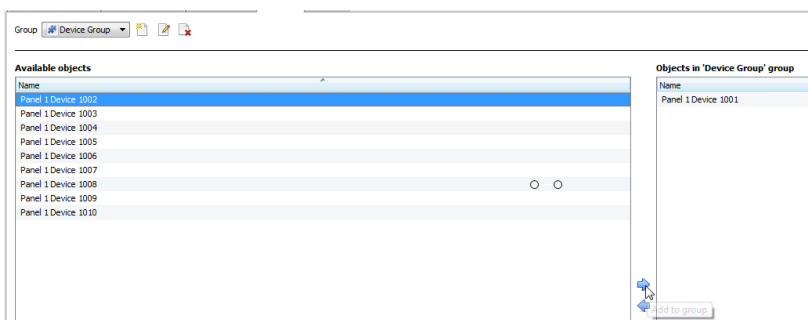
- **Create a Group**



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

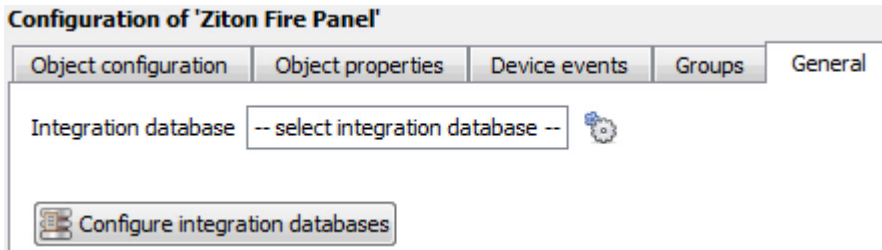
Give the group a descriptive **Group name**.

Click on the drop-down menu to select the **Object type** that you would like to group.



You will then see a list of Available Objects. To add/remove these objects to the group select them (you may select multiple at a time), and click on / .

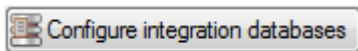
## General tab



Currently the general tab deals with the **Integration database**. Here you will be able to select an existing database, or you will be able to configure a new database for your integration.

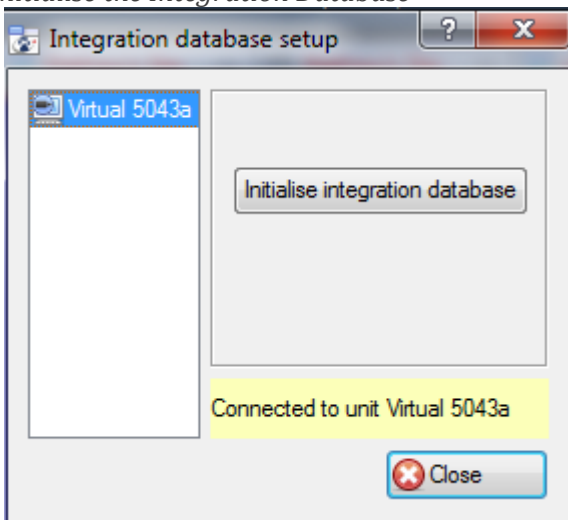
**Important Note:** Each integrated device needs to be attached to an Integration database. Without setting up/adding a database here your integration will not function properly within the CathexisVision system.

- **Configure a new database**



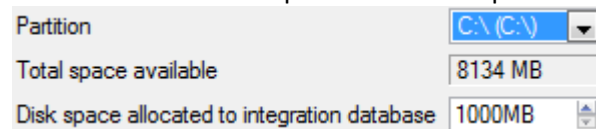
If there is no database created yet, clicking on this button will take you to the integration database setup.

### Initialise the Integration Database



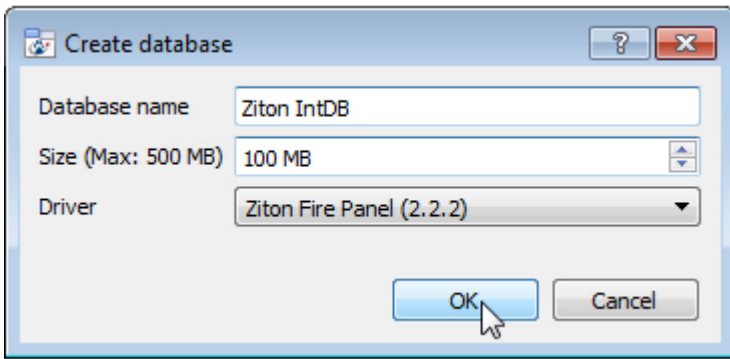
The first time you add an integration database you will have to initialise this feature on the unit. This will add a broad database, within which you will be adding all of your integrated device's databases.

Select the unit you wish to add the database to, from the list on the left, and click **Initialise integration database**. You will have to 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, you will be able to add the database for the integration that you are working with. Click on the **New** button, at the bottom of the Create database window.

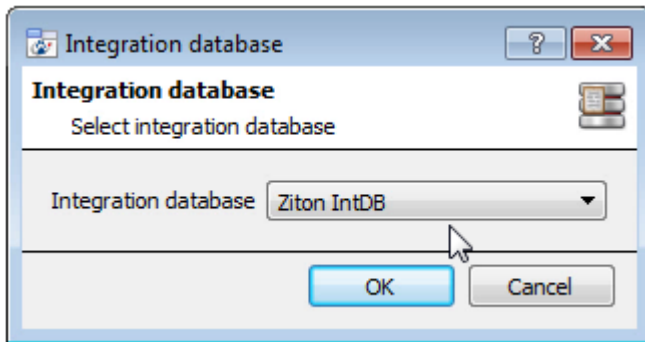



Give your Integration database a descriptive **Database Name**. e.g. Ziton.


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

Choose the device **Driver** that your device will be using, And click on OK to create the database.

- *Select the Ziton Integration database*



Integration database -- select integration database -- 

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

# 3 Database

## a. Introduction

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

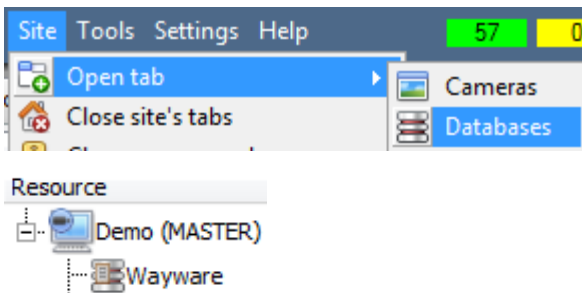
Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathexisVision by the integrated device.

The Ziton database is information rich. This is an example of some of the information that is included:

View Standard sorted by Time

Time	Panel Time	Event Type	Status Description	Panel ID	Zone ID	Device ID	Device Type	Links
2015-06-18 11:51:37	2015-06-18 11:51:25	Panel data accessed/changed	User action response	Panel 1				
2015-06-18 11:51:39	2015-06-18 11:51:25	Device enable	Disablement restored	Panel 1	1	Panel 1 Device 1001	ZP755 Line Sounder	
2015-06-18 11:51:41	2015-06-18 11:51:25	Zone partially disabled	Device disable/Zone partial disable	Panel 1	1			
2015-06-18 11:52:01	2015-06-18 11:51:49	Panel data accessed/changed	User action response	Panel 1				
2015-06-18 11:52:03	2015-06-18 11:51:49	Device enable	Disablement restored	Panel 1	1	Panel 1 Device 1002	Paradigm Multi-sensor	
2015-06-18 11:52:05	2015-06-18 11:51:49	Device enable	Disablement restored	Panel 1	1	Panel 1 Device 1003	Heat	
2015-06-18 11:52:07	2015-06-18 11:51:49	Zone enabled	Zone fully enabled	Panel 1	1			
2015-06-18 11:52:19	2015-06-18 11:52:07	Panel data accessed/changed	User action response	Panel 1				
2015-06-18 11:52:23	2015-06-18 11:52:07	Panel data accessed/changed	User action response	Panel 1				

## b. Navigate to the Database



You may view the information stored in the Integration database, by following the path you see to the left.







This will take you to the Database Tab.

Once in the databases tab you will have to select the relevant integration database. The databases are ordered under the NVRs that they are attached to.

## c. Database Interface

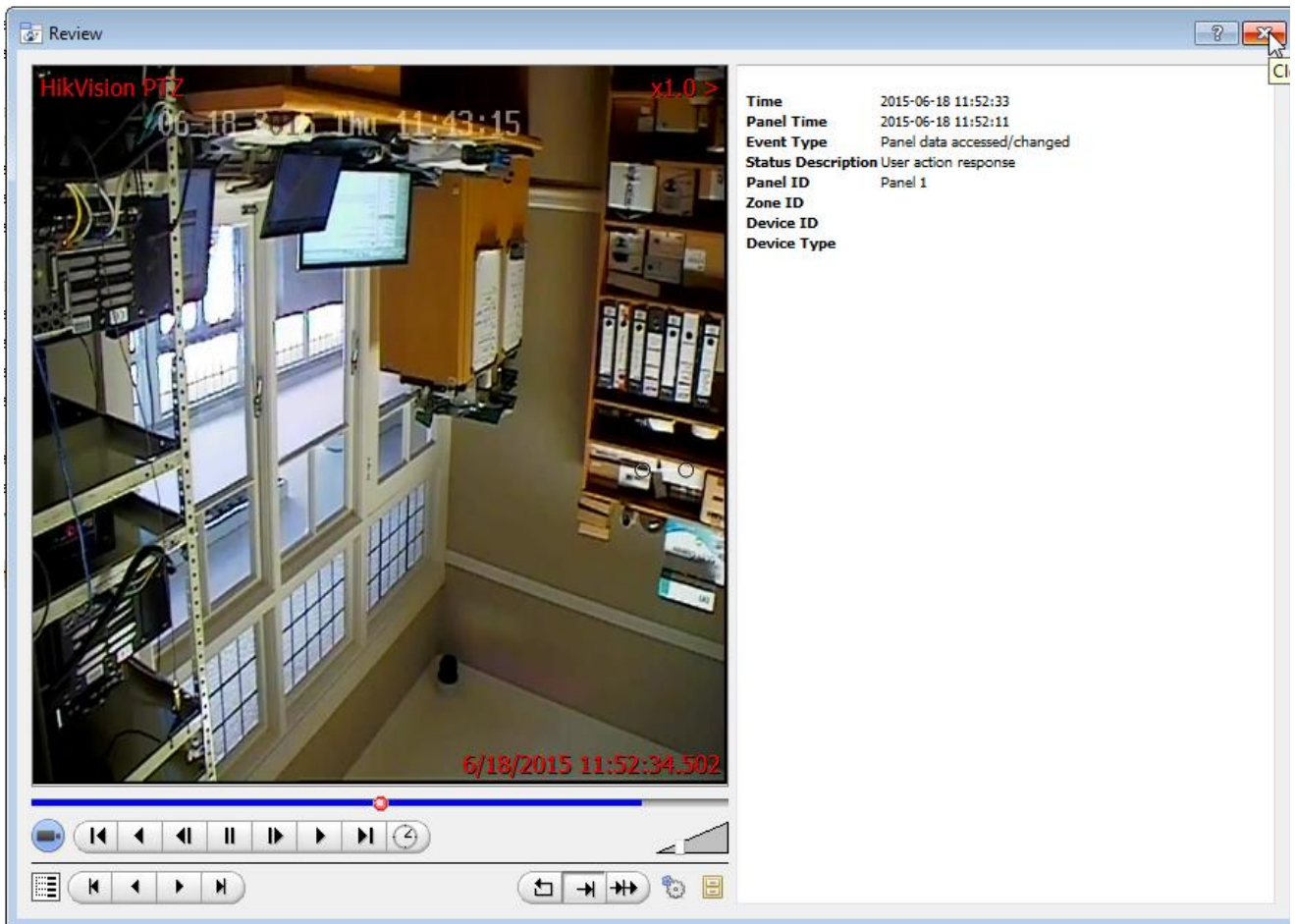


① <b>View</b>	You may change the way that your database is presented. Some integration databases have multiple view options. The Ziton database has <b>Standard, Panel, Zone, and Device</b> options.
② <b>Sorted By</b>	You may sort the Events based on the following parameters: <b>Time</b> .
③ <b>Easy Search</b>	The easy search option allows you to quickly search the database within one of the following options: <b>Panel ID, Zone ID, Device ID, Device Type, Event Type, and Status Description</b> .

<p>④ <b>Filter</b> </p>	<p>Filter offers a more advanced manner of sorting information in the Integration Database table.</p> <p>Once you have the filters dialogue open you will have the following options:</p> <ol style="list-style-type: none"> <li>1. To <b>enable</b> filters check this box: <input checked="" type="checkbox"/> Enable filters</li> <li>2. To <b>add</b> a new filter click on .</li> <li>3. To <b>delete</b> an added filter click on .</li> </ol> <p>The filter icon  will change to  when filters are active.</p> <p>The Ziton panel has the following filter options: <b>time, panel time, event type, status description, panel ID, zone ID, device ID, and device type.</b></p> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>1. You may run multiple filters simultaneously. And you may even filter using the same parameter more than once.</li> <li>2. To change a filter click on the blue hyperlinked text. (For example, click on <a href="#">Timestamp</a> to change the filter from Timestamp, to any of the other available options.)</li> </ol>
<p>⑤ <b>Go to Time</b></p>	<p>This will allow you to go 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.</p>

## Viewing an Entry's Associated Recording

If you have attached cameras to device objects in the Integration setup and if there are available recordings for those cameras, then each Integration database entry will have a corresponding recording. To view a data-based event's recording double click it. A floating replay window will appear, from which you may review and archive video content.





## 4 Events

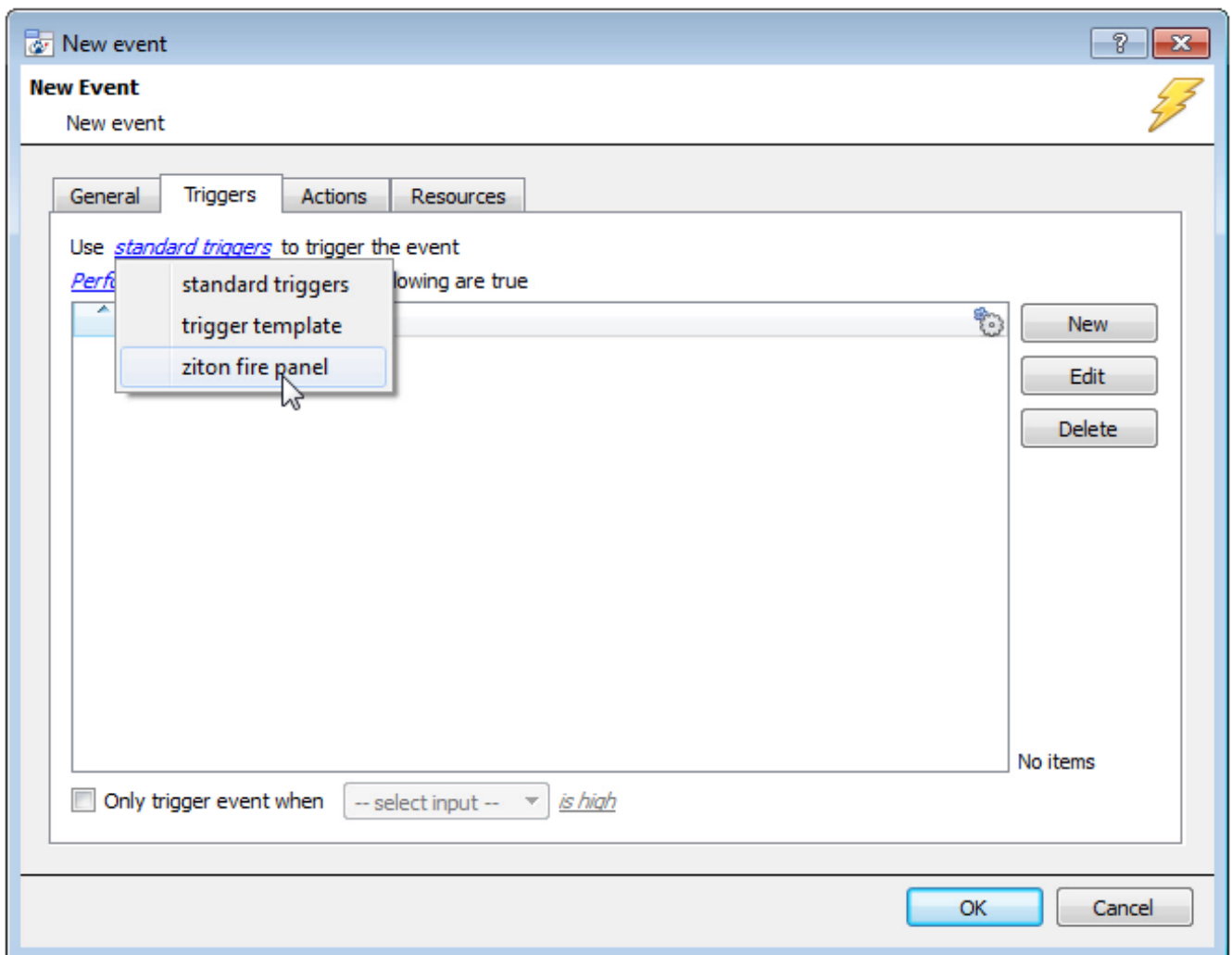
### a. Introduction

A CathexisVision Event has a trigger, which causes an action. You may set integrated devices to act at triggers, or as actions. This document will detail the Ziton 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* for being used as an event trigger, or action.

#### Event Window

Events in CathexisVision are setup 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 defined. In the **Actions Tab** the action/s which the event takes is defined. In the **Resources Tab** the various site resources which can be used as part of an event are defined.




### b. Creating an Event

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





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

- **While/When and Any/All**

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

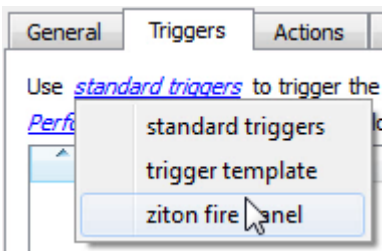
Use [ziton fire panel](#) to trigger the event  
 Trigger using [any device](#)  
 Start actions when [any of the properties meet the following criteria](#)

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

### c. Triggers

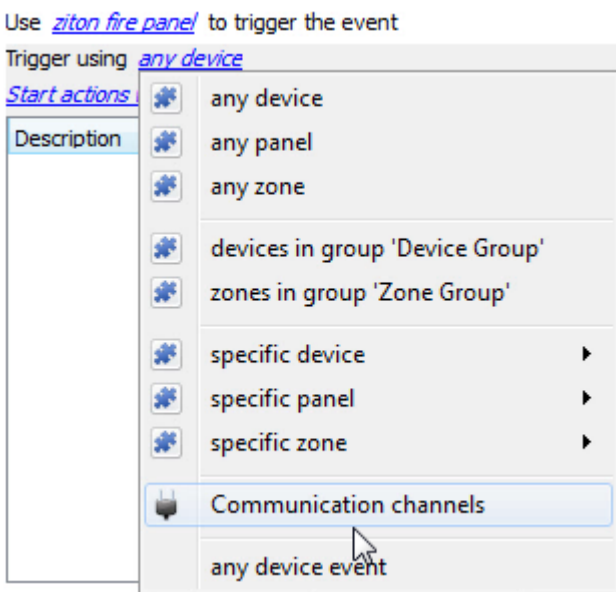
A trigger is the user defined input that tells the event to start. The trigger causes the subsequent action (which the user will also define).

#### Set your device as the trigger



If you are creating a new event, the trigger type will default to: Use [standard triggers](#). To define which device you want to trigger the event, click on the hyperlink after “use”. To set it as the Ziton device, click on the hyperlink, and select the relevant device name from the dropdown menu.

#### Trigger Types (Trigger Using)



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

**Any device/panel/zone** will trigger when any of these objects sends the selected trigger.



**Object in group...** If you have set up a group it will appear here in this list.

**Specific device/panel/zone** will trigger only on a specific object sends the selected trigger.


**Communication channels** will trigger only on the Communication channels.

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

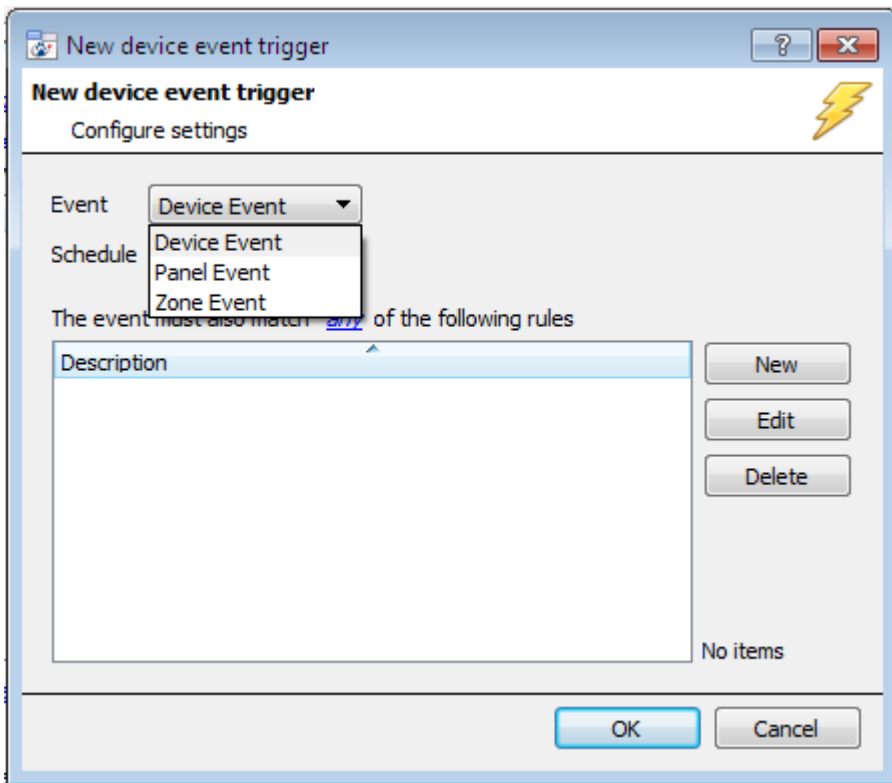
**Note for group triggers:** If you want this event to be databased under the name of a specific object, and not the name of the triggering group, you will need to modify the Description field in the **General tab** of the Event setup.

Click on the  to see a list of available descriptions. Here is an example which send the triggering object's name to the database, for the event: Description  

### Define Your Trigger

After selecting a master trigger type, you will need to add a trigger to the event. Click on  in the Triggers tab. This will bring up the dialogue box you see below, for the various trigger types:

- **Any Device Event**

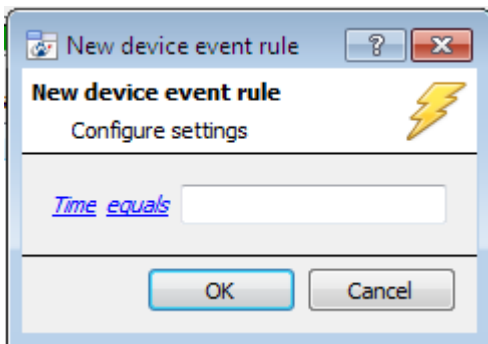


For example within the [any device event](#) option you may choose what type of device Event will be your trigger. Choose from the drop-down menu. The Ziton device offers **Device, Panel and Zone Events**.

**Note:** You may set multiple constraints (**Device Event Triggers**). If you do not define a constraint, every single device event will trigger this event.

To add/edit/delete a **Device Event 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.



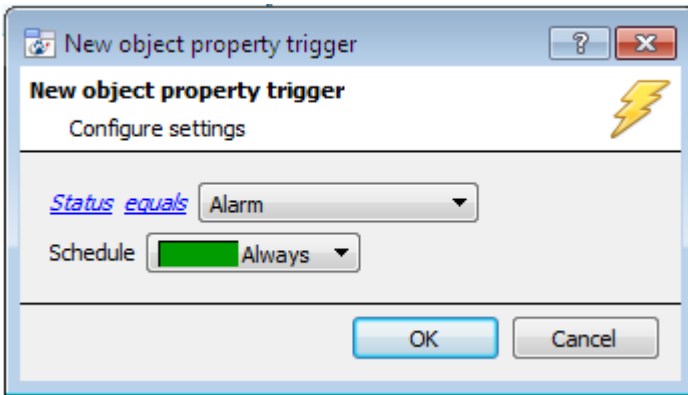
To change the constraint click on the first hyperlink, this will bring up the full list of available rules.

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

**Note:** When all available options are known to CathexisVision you will see a drop-down menu. When these variables are not pre-defined you will need to fill them in yourself. The information pulled through to the events is information sent to CathexisVision from the Ziton device, see the Ziton settings for the strings needed here.

- **Any Device/Zone/Panel, or Group**

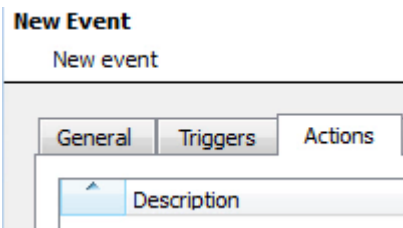
The non-**Any Device Event** triggers have a slightly different setup window. In these instances you do not need to set constraints, since you are essentially adding them one at a time. This option is better if you have a select few triggers that you want to use.



Since you are only using one type of object to trigger the event, the dialogue will appear as the **New Device Event Rule** window did previously.

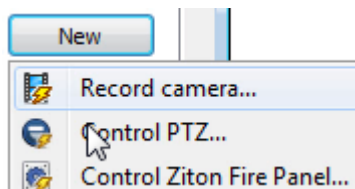
**Note:** this is true for groups as well, since a group may only be made up of one object type.

## d. Actions



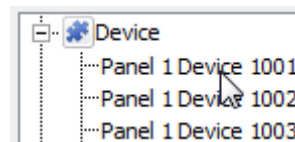
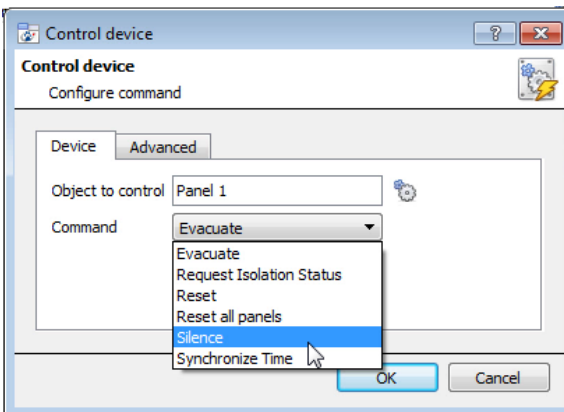
Once you have defined the triggers that are going to initiate your event, you will need to define some Actions. With many integrations there will be the option to control the integrated device, as one of the actions.


### New Action



To create a new Event Action click on .

Select **Control Ziton Fire Panel** if you wish to control this device with the CathexisVision event.



Clicking on the  icon will bring up a list of the Ziton objects which may be controlled by this event.

In the example to the left you can see that the **Panel 1 object** was selected.

The **Command** options are all the options which the event can control on this panel.

As an example: If **Evacuate** is selected, and this event is triggered. The Evacuate command will be sent to the Ziton Fire Panel.

## 5 Conclusion

Please remember that this appnote was designed to deal specifically with this integration. For further information about the CathexisVision software please consult the main manual (<http://cathexisvideo.com/>).

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