



Jakarta/Interseptor Pro  
Environmental Monitoring  
Device  
Integration App-note

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# 1. Introduction

This document will detail the integration of the Interceptor Pro Environmental Monitoring device, with CathesisVision’s software. Functionally this integration will entail the triggering of standard CathesisVision Events, based on the triggers from the Interceptor Pro.

The Interceptor Pro is an environmental monitoring device. It is able to connect to temperature, humidity and dry contact sensors.

**Note:** For information regarding the regular operation of a Interceptor Pro Environmental Monitoring device, please consult the relevant Jacarta/ Interceptor Pro manufacturer’s documentation.

There is a General Integration section in the main *CathesisVision Setup Manual*. It contains information on creating an integration database, as well as a general introduction to the Integration Panel. **Read over this section.**

## 1.1 Requirements

### 1.1.1 General Requirements

- CathesisVision 2015 Service Pack 2 and later.
- Win 7 - 64bit and later; Win Server 2008 R2 and later.
- Minimum of 4 GB of RAM required.

### 1.1.2 License Requirements

License	Name	Description
CDEV-2000	Other Device Licence	This license is the “base” license to integrate with an environmental monitoring system. It is applied to the server to which the environmental monitoring device is connected. It will allow for the connection of a single Interceptor Pro Environmental Monitoring device.

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

## 1.2 Specifications

- Third-party software version 1.08.

## 1.3 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.

## 1.4 Features and Abilities

- Up to 24 temperature sensors.
- Up to 24 humidity sensors.
- Up to 48 addition alarm sensors (water leak, smoke, power, etc.).
- The triggers from these sensors are modelled as temperature, humidity, or dry contact events.
- The driver also includes temperature, humidity and dry contact objects.
- The events are stored in a metadatabase.

### A NOTE ON CAMERA CHANNELS

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

### USEFUL LINKS

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

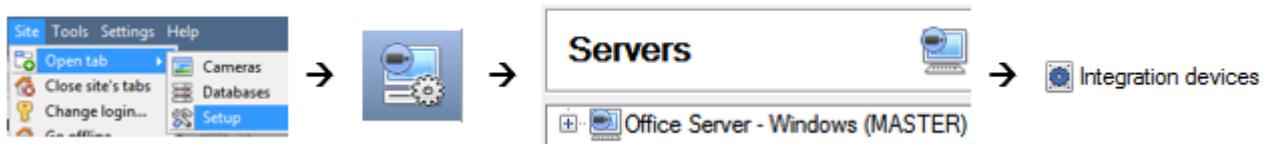
Find answers to Cathesis **Frequently Asked Questions**: <https://cathesis.crisp.help/en/?1557129162258>

## 2. Device Addition and Configuration

### 2.1 Devices Section (Add a New Device in CathesisVision)

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

#### 2.1.1 The Integration Panel

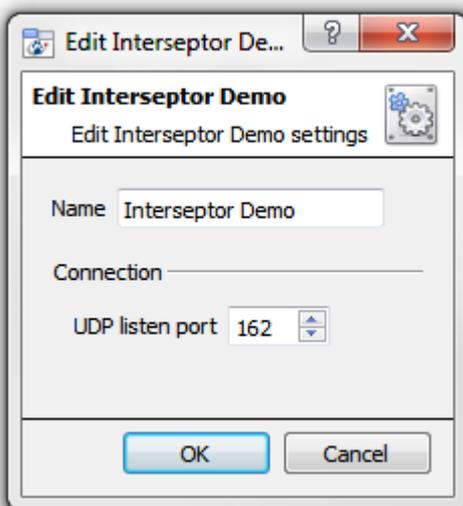


There are two sections in the Integration Panel:

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

##### 2.1.1.1 Device Addition

1. Once in the Integration Panel, in the devices section, click on . This will open the addition window.
2. Select **Interceptor Pro** from the list.



Give the device a descriptive name.

Then select the UDP listening port. This must match the port that the Interceptor Pro device is set to transmit data on.

## 3. Configuration Section (Tabs)

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

### 3.1 Object Configuration Tab

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

**Configuration of 'Interseptor'**

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

Object type: All objects

Type	ID	Name	Cameras	Groups
Dry contact	1	Alarm1-1		
Dry contact	2	Alarm2-1		
Humidity sensor	1	Humidity1		
Humidity sensor	2	Humidity2		
Temperature sensor	1	Alarming		
Temperature sensor	2	Temperature2		
Communication channel	__default__	Default		

Filter by object type. The Interseptor Pro integration allows filtering by the dry contact, humidity, and temperature sensor options.

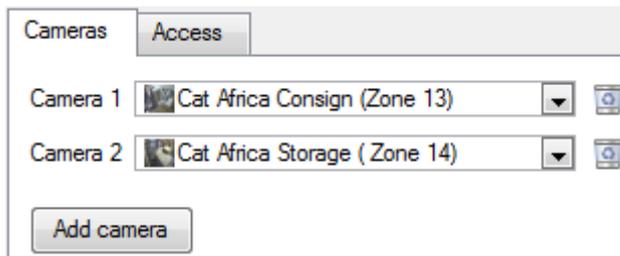
#### 3.1.1 Object Configuration Buttons

- Click **New** to add a new object.
- Click **Edit** to change an existing object.
- Click **Delete** to remove an existing object from the CathexisVision configuration.

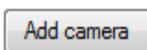
#### 3.1.2 Object Configuration Right-click Options

- New** opens up the dialogue to add a new object.
- Disable/Enable** allows manually enabling/disabling individual nodes.
- Delete** will permanently remove this object from the list.
- Properties** will open up the object properties. The object may be edited from here. Specifically, assign cameras to this object, as well as define user access levels for it.

### 3.1.2.1 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.



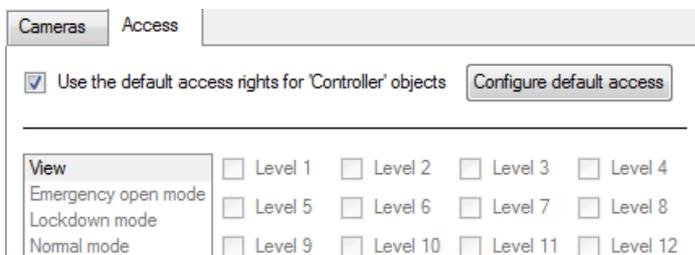
To **add** a camera, click Add camera, and select the relevant camera from the drop-down menu.



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

**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.

### 3.1.2.2 Properties: Access



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

There will be a list of objects, whose access level may be set.

**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.

## 3.2 Objects Properties Tab

The Object properties tab allows viewing objects, sorted by type. In the case of the Interceptor Pro device there are the options of viewing by **Dry contact**, **Humidity sensor**, and **Temperature sensor**.

## 3.3 Device Events Tab

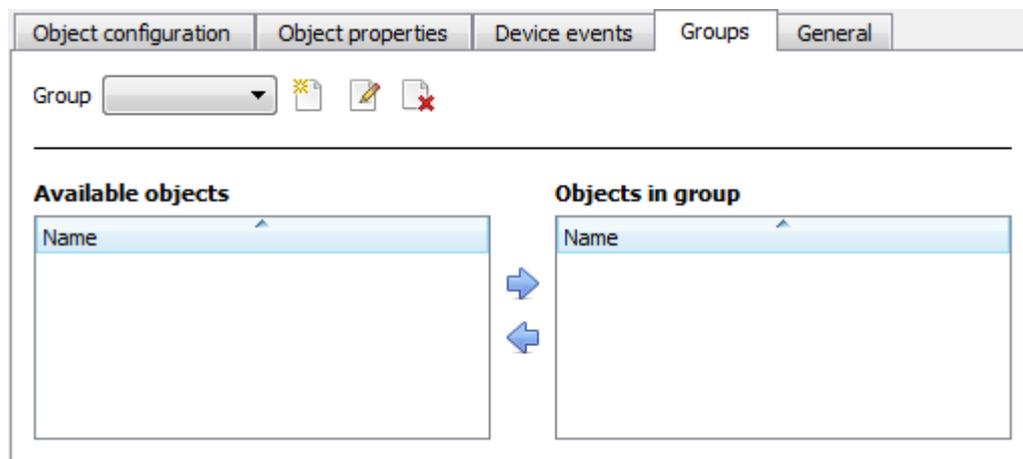
The Device events tab lists real-time events happening on this device. Installers can ensure that the integration is functioning, and monitor the Events happening on site.

**Configuration of 'Interseptor'**

Configuration of 'Interseptor'					
Object configuration		Object properties	Device events	Groups	General
All events <span style="float: right;">Filter</span>					
Event type					
Humidity event	2014-12-12 11:55:08.190	Humidity2	Critical	18	Humidity2 of Sensor1-2 (31.1 %) over high critical humidity (25.0 %)
Humidity event	2014-12-12 11:55:00	Humidity1	Critical	18	Humidity1 of Sensor1-1 (57.0 %) over high critical humidity (55.0 %)
Temperature event	2014-12-12 11:54:53.530	Temperature2	Information	9	Temperature2 of Sensor1-2 (21.1 deg.C) not over high critical temperature (30.0 deg.C)
Temperature event	2014-12-12 11:54:46.920	Alarming	Critical	10	Alarming of Sensor1-1 (9.9 deg.C) over high critical temperature (8.0 deg.C)
Dry contact event	2014-12-12 11:54:38.833	Alarm2-1	Information	3	Alarm2-1 of Sensor1-2 back to normal
Dry contact event	2014-12-12 11:54:25.132	Alarm1-1	Warning	4	Alarm1-1 of Sensor1-1 triggered

## 3.4 Groups Tab

Groups of the same type of object can be created.

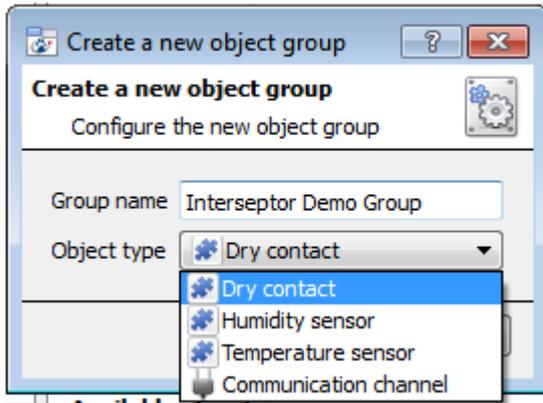


**Tip:** This is useful when setting up events, because events can be triggered by an object group. (E.g. a group will trigger an event if any of the doors in that group are triggered.)

### 3.4.1 Create a Group

-  To **create** a server group, click on this icon.
-  To **edit** a server group, click on this icon.
-  To **delete** a server group, click on this icon.

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

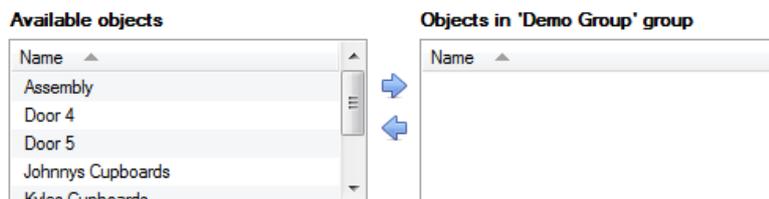


When creating a group, select the object type. Once the group is created the available objects panel will fill up with all available objects of that type. From this list, choose which objects to use in the Group.

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

Click on the drop-down menu to select the Interseptor **object type** to be grouped.

### 3.4.2 Add or Remove Objects



A list of available objects will be displayed on the Available objects panel.



To **add** these objects to the group, select them 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.

## 3.5 General Tab

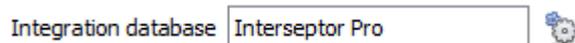
The General tab deals with the integration database. Here, select a pre-created database, or configure a new database.

### 3.5.1 Select an Integration Database



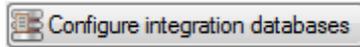
To select a database, click on the settings icon, and select the relevant database.

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



### 3.5.2 Configure a New Database

The first time an integration database is added, the feature will need to be **initialised**. Thereafter, databases can be **added**.



To create a new database, click the Configure integration databases button from the General tab.

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

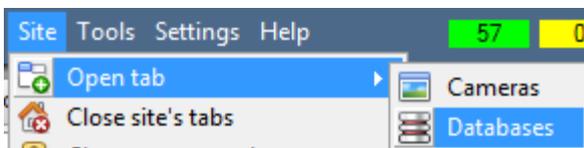
## 4. Database

The Databases tab allows the user to navigate to the databased entries, for each individual database. In the Databases 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.

### 4.1 Navigate to the Database

To view information stored in the Integration, first navigate to the Databases Tab.

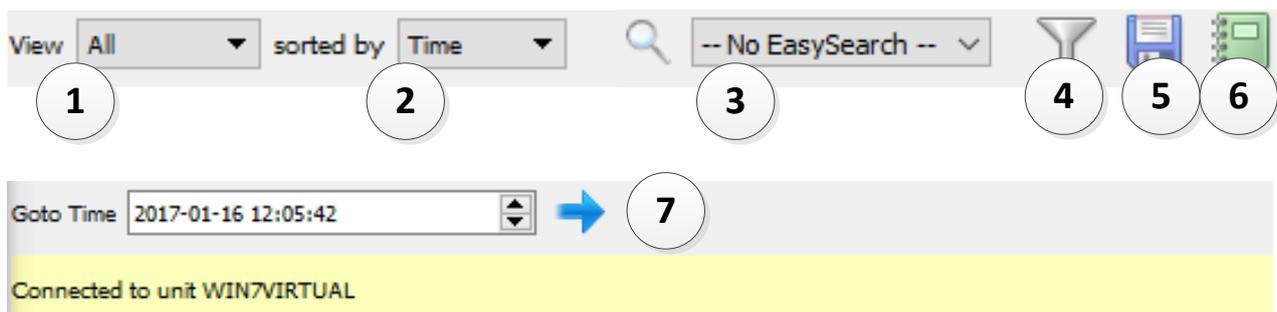


Follow the path on the left: **Site / Open tab / Databases.**

Select the Jakarta/Interseptor Pro 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.

### 4.2 Database Interface

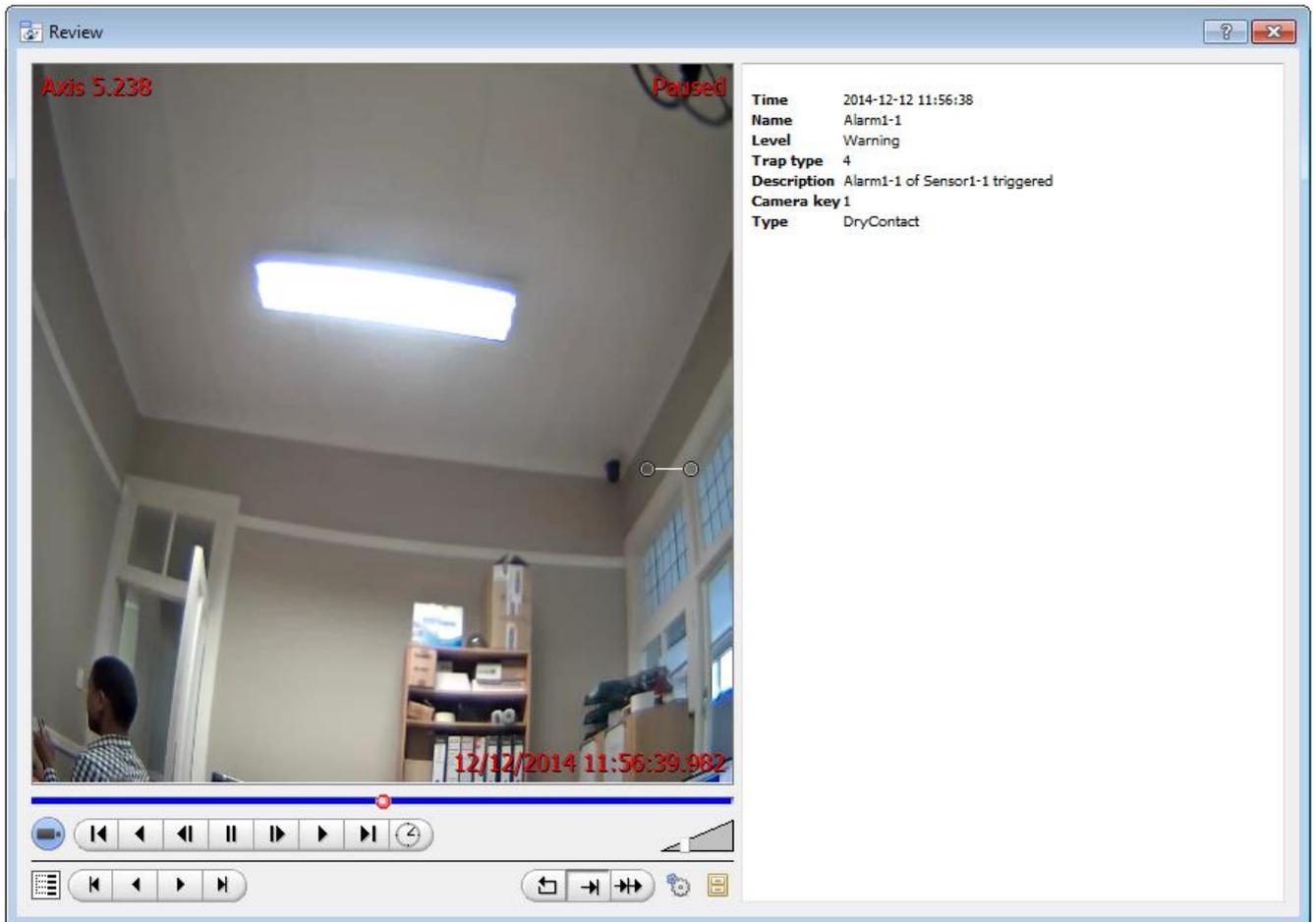


① <b>View</b>	Change the way that the database is presented. Some integration databases have multiple view options. The Interseptor Pro database only has one, <b>Standard</b> , option.
② <b>Sorted By</b>	Sort the Events based on the following parameters: <b>Time, ID, Description.</b>
③ <b>Easy Search</b>	The easy search option allows quick searching of the database within one of the following options: <b>ID, and Description.</b>
④ <b>Filter</b>	Filter offers a more advanced manner of sorting information in the Integration Database table.

	<p>Filter results using the following parameters: <b>Time, ID, and Description.</b></p> <p>Once the filters dialogue is open, the following options will appear:</p> <ol style="list-style-type: none"> <li>To <b>enable</b> filters check this box: <input checked="" type="checkbox"/> Enable filters</li> <li>To <b>add</b> a new filter click on . The filter icon  will change to  when filters are active.</li> <li>To <b>delete</b> an added filter click on .</li> </ol> <p><b>Note:</b></p> <ol style="list-style-type: none"> <li>Multiple filters may be run simultaneously. Filters with the same parameters may be run more than once.</li> <li>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>Export</b></p>	<p>If this feature is available, generate metadatabase reports in PDF or CSV format.</p>
<p>⑥ <b>Manage Reports</b></p>	<p>If this feature is available, generate scheduled metadatabase reports.</p>
<p>⑦ <b>Go to Time</b></p>	<p>This navigates to a specific point in time, down to the second. To navigate to a timestamp, set the time using the time and date boxes.  Then click on the arrow icon.</p>

### 4.3 Viewing an Entry's Associated Recording

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.

## 5. 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 Interceptor Pro specific aspects of Events. There is a comprehensive guide to CathesisVision Events in the main setup manual.

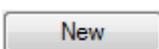
Most of the data that CathesisVision receives from a device is presented in the Events interface. This is done in order to give the user a full range of options. As a result, some of the options presented in the interface may be *impractical* as an event trigger, or action.

### 5.1 Event Window

Events in CathesisVision are set up via the Event Window, which 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 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.

### 5.2 Creating an Event

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



Once in Events management area, click the New icon at the bottom of the screen. This will open up the **New Event window**. Alternatively, right-click and select **New**.

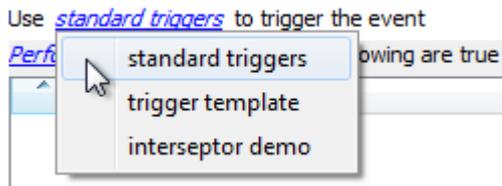
Once in this window, select the Triggers tab and click on the hyper link titled, [standard triggers](#).

From the menu that drops down, left-click the Interceptor Pro device that must trigger the event with.

### 5.3 Triggers Tab

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).

### 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 should trigger the event, **click on the hyperlink** after the word “Use”.

To set the the Interseptor Pro device as the trigger, **select the device name** ( Interseptor demo) from the drop-down menu.

### 5.3.2 While/When and Any/All

When triggering on a sensor the user will have the option to trigger **while/when** a trigger is active. Multiple triggers may be set. Define whether **all/any** of the triggers need to be active to set off an event.

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.

<a href="#">Start actions when</a>	<a href="#">any of the properties meet the following criteria</a> <a href="#">any of the following device events occur</a>
<a href="#">Perform actions while</a>	<a href="#">any</a> of the properties meet the following criteria <a href="#">all</a> of the properties meet the following criteria

Use [interseptor demo](#) to trigger the event  
 Trigger using [any dry contact](#)  
[Start actions when](#) [any of the properties meet the following criteria](#)

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

### 5.3.3 Trigger Types (Trigger Using)

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

Use [interceptor demo](#) to trigger the event

Trigger using [any dry contact](#)

**Start actions:** any dry contact

**Description:** any humidity sensor

any temperature sensor

dry contacts in group 'Interceptor Demo Group'

Communication channels

any device event

**Any dry contact/humidity sensor/temperature sensor** will trigger if anything happens if anything happens on any sensor.

**Objects in group...** will trigger on the specific object chosen.

**Any device event** will trigger, initially, when any event occurs on the device. Within the “any device event” setup, set “device event rules” which will constrain which events will trigger the event.

**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.

Name

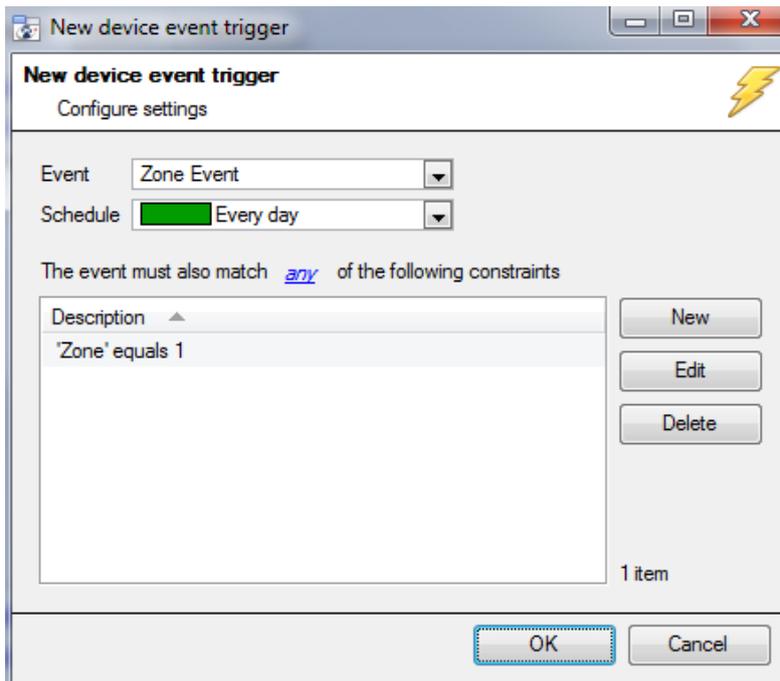
Description

### 5.3.4 Define the Trigger (Any Device Event)

After selecting a master trigger type, add a trigger to the event. The following example is based on a user having selected “Trigger using **Any device event**”.

Click on **New** in the Triggers tab. Clicking on New will bring up the **New device event trigger** dialogue box.

### 5.3.4.1 New Device Event Triggers



Choose the type of device Event that will be the trigger. Choose from the drop-down menu.

**Note:** The example alongside shows a different integration.

The Interceptor Pro device offers **Dry contact**, **Humidity**, and **Temperature events**.

Choose a schedule.

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

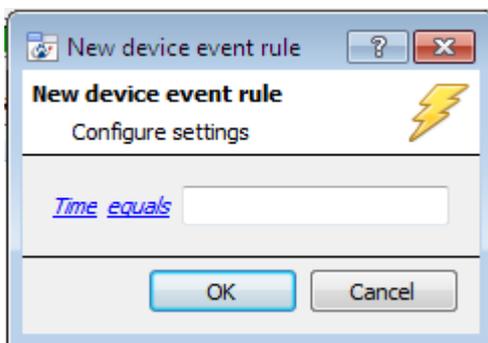
To add/edit/delete a **Device event rule** (a constraint to the device event trigger) use the **New**, **Edit**, and **Delete** buttons on the right-hand side.

**Note:** Multiple constraints can be set. If constraints are not defined, every device event will trigger this event.

#### New Device Event Rule



To configure a New device event rule, click on **New** in the New device event trigger window. This will bring up the New device event rule dialogue.



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

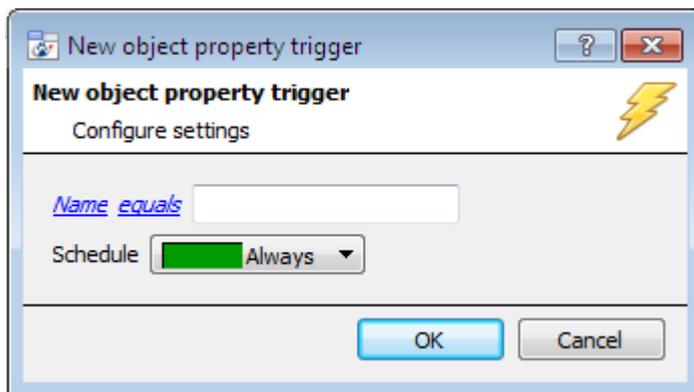
To modify the way this rule will be treated, click on the second hyperlink (which is [equals](#) in the example). This will display the rules options.

**Note:** When all available options are known to CathesisVision, 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 CathesisVision from the Interceptor device. See the Interceptor settings for the strings needed here.

### 5.3.5 New Object Property Trigger

If the user has defined the trigger according to properties meeting criteria (in while/when and any/all), the **New object property trigger** dialogue box will open. In these instances, further constraints need not be set, since they are being added one at a time. This option is better if a few triggers have been selected to use.



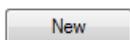
Since only one type of object is being used to trigger the event in this instance, the dialogue will appear as the **New object property trigger** window did previously.

**Configure the settings** on the event type that has been selected.

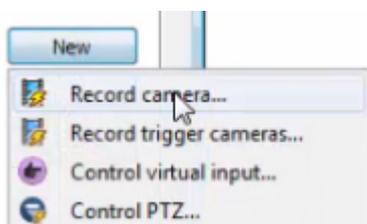
**Note:** This is true for groups too, since a group may only be made up of one object type.

## 5.5 Actions Tab

Having defined the triggers that will initiate an event, the user will need to define Actions. Many integrations offer the ability to control the integrated device via the CathesisVision interface. The Interceptor Pro device doesn't have this functionality. The other Action options afforded by regular CathesisVision operation may be used (as described in the Main Setup Manual).



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**.

## 6. Conclusion

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

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