Honeywell Pro-Watch Access Control Integration

Contents

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1 Introduction

This document will detail the integration of Honeywell's **Pro-Watch** Access control software, with the CathexisVision software. Functionally this integration will entail the triggering of standard CathexisVision Events, based on the triggers from the Pro-Watch software. Pro-Watch is Honeywell's access control software suite, which handles all of their access control hardware .

Requirements

- ⌡ CathexisVision 2016 Service Pack 2 and later.
- ⌡ Pro-Watch Software version: 4.2.0.10835.
- ⌡ Honeywell Software Development Kit (HSDK) Software version: **2.0.121.0** or **2.4.14.0**.
- ⌡ Panel used: PW-6000.
    - o Firmware 2.3.6.
- ⌡ Sub-panel used: PW5K1R2.
    - o Firmware 1.3.5.

Regarding the HSDK Software:
1. The HSDK needs extra setup and clients should follow Pro-Watch's documentation (included with the HSDK installation).
2. If HSDK Integration Software 2.0.121.0 is installed, the states of Inputs may not update correctly when triggered at the same time. Upgrading to HSDK Integration Software 2.4.14.0 will resolve this issue.

General Notes:
1. For information regarding the regular operation of a Pro-Watch device, please consult the relevant device documentation.
2. The Pro-Watch and HSDK software, and an HSDK license.

a. License requirements

The Cathexis Pro-Watch integration license requirements are as follows:

License Name	License Description
CPRW-2000	Device license.
CPRW-1001	Single reader license.
CPRW-3000	Bundle with device license and unlimited readers.

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 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. Multiple "object types" fall 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.

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 Pro-Watch Setup (Set up the Pro-Watch software)

The user needs to set up the Honeywell Software Development Kit (HSDK). This may be achieved by following the default HSDK set up information in the HSDK manual.

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

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 the user to edit/review, the device which was selected in the **Devices** section.

⟩ *Device Addition*

1. Once in the Integration Panel, click on [New device] ., in the Devices section. This will open the addition dialogue.
2. Select **Pro-Watch** driver from the list.
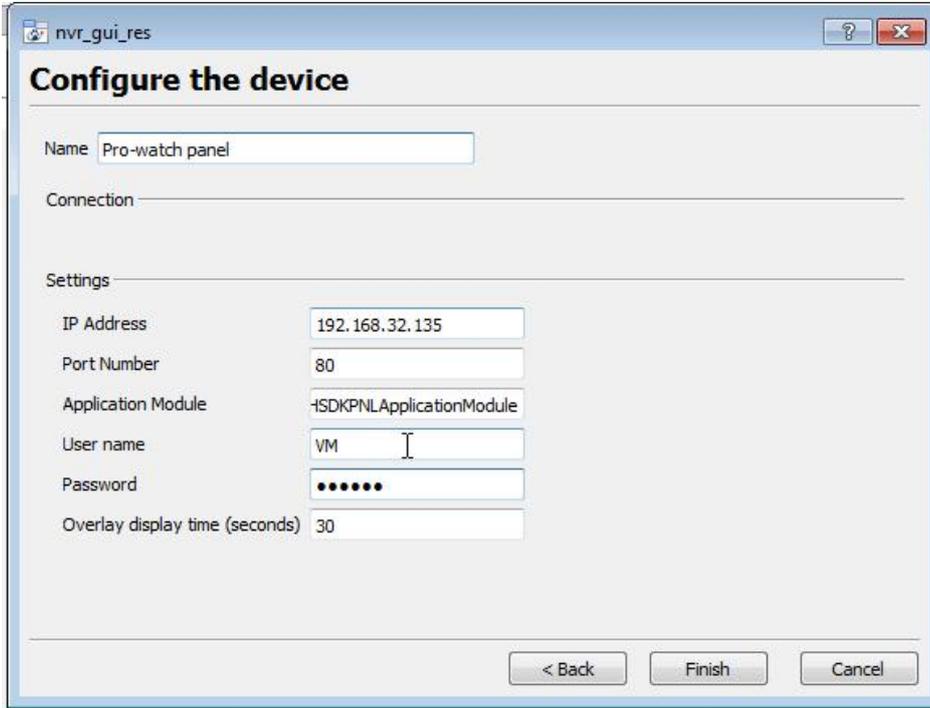
Give the device a descriptive **name.**

Add the **IP Address** and **Port** number of unit the Pro-Watch software is installed on.

Enter in the **Application Module** of the software.

Enter in the **Username,** and Password of the Pro-Watch software.

Define the **Overlay display time**, to determine how long Pro-Watch overlay's will be displayed.

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 the user may view all the individual objects that comprise the integration. The Pro-Watch device has **All objects, Input, Output, Pro-Watch HSDK Server,** and **Reader** options.

⟩ *Object Configuration Buttons*

New Add a new object by clicking on New.
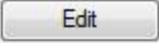
Edit Will open up an existing object for edition.
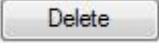
Delete Is used to delete an existing object from the CathexisVision configuration.

⟩ *Object Configuration Right-click Options*

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

Disable/Enable allows the user to manually enable/disable individual objects.

Delete will permanently remove this object from the list.

Properties will open up the object properties. The user may edit the object from here. (Specifically the user will be able to assign cameras to this object, as well as define user access levels for it.)

Properties: Cameras
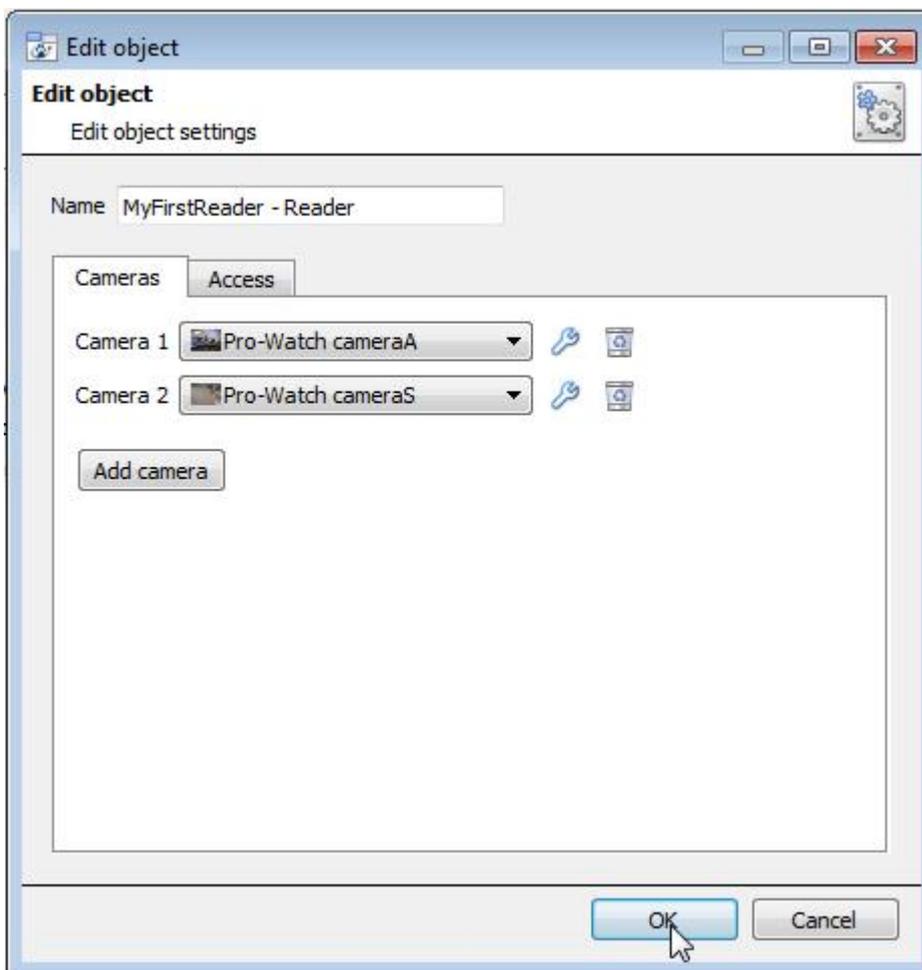
Adding a camera to an object will mean that, whenever there is an event on that object, the recording from that camera will be related to the time and date of the object event, in the Integration database. To add a camera, click on "Add Camera.

To delete a camera click on 🗑

To change the Pro-Watch overlay settings click on 🔧. (This is explained further, below.)

Note: The Pro-Watch integration supports multiple visible cameras in the integration database.

Note: If the user does not have *continuous recording* set up, on associated cameras, he/she will run the risk of device objects triggering while the cameras are not recording. 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 allows sensitive objects to be protected 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.

〕 *Pro-Watch overlay settings*

The Pro-Watch integration allows for the information received from the counter to be displayed as an overlay on the camera assigned to the Reader object, above.

After clicking on the 🔧 icon, the **Configure overlays** dialogue will open. To edit a custom overlay, uncheck the **Use defaults** option, which will expose the overlay options.
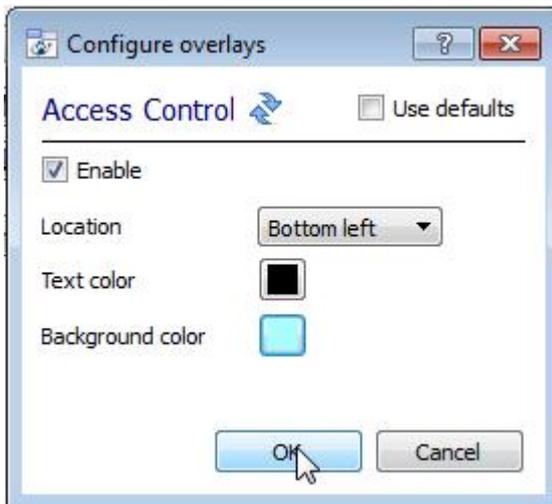
Location will define where on the camera feed's image the overlay is positioned.

Define the **Text** and **Background color**.

The settings to the left will look like so. With denomination, counted, and rejection information included in the overlay:

Objects Properties Tab

The Object properties tab allows objects to be viewed, sorted by type. In the case of the Pro-Watch device there are the options of viewing by **Input**, **Output, Pro-Watch HSDK Server,** and **Zone**.

〕 *Right-click Options*

| Input	The user may **Mask** input objects. Which will prevent input actions from coming through as device events. This will also prevent any CathexisVision event that triggers on this input from triggering.
Output	Outputs may be **activated/deactivated**.

Readers	Doors may be **locked, unlocked,** and **momentarily unlocked.**

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.

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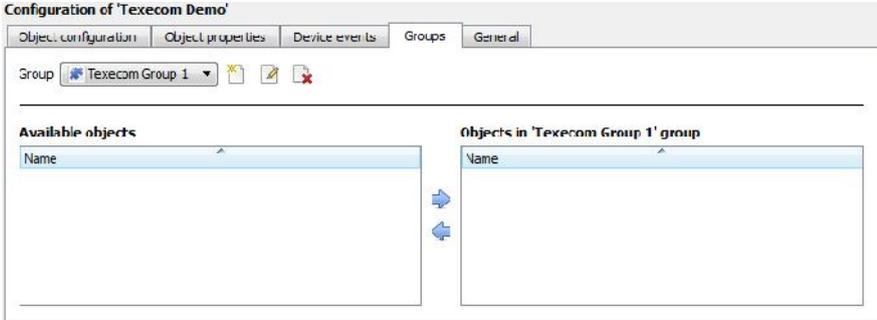
Groups of the same type of object can be created.

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.)
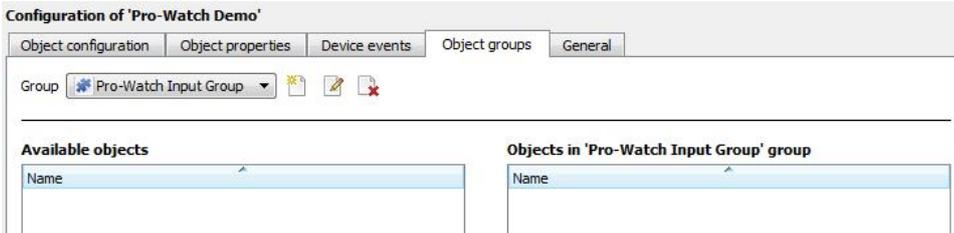
⟩ *Create a Group*

To create/edit a Pro-Watch group click on ⟨icon⟩/⟨icon⟩. (**Note**: Once a group has been created, the user may not edit the object type of the group.)
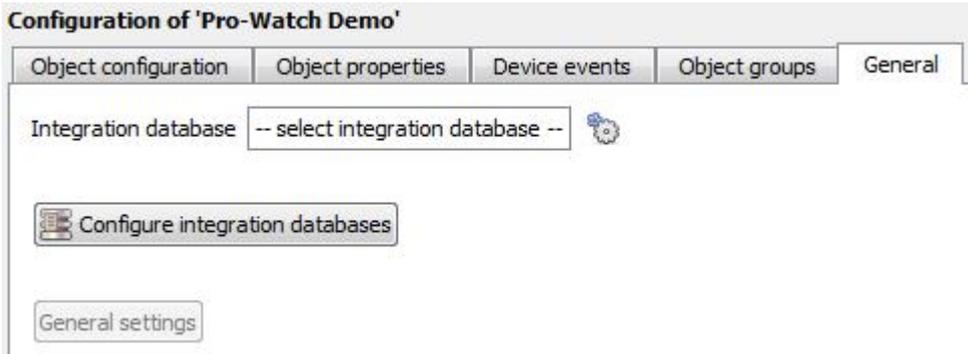
Give the group a descriptive **Group name.**

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

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

General tab

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

Important 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.
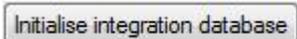
⟩ Configure a new database

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

Initialise the Integration Database
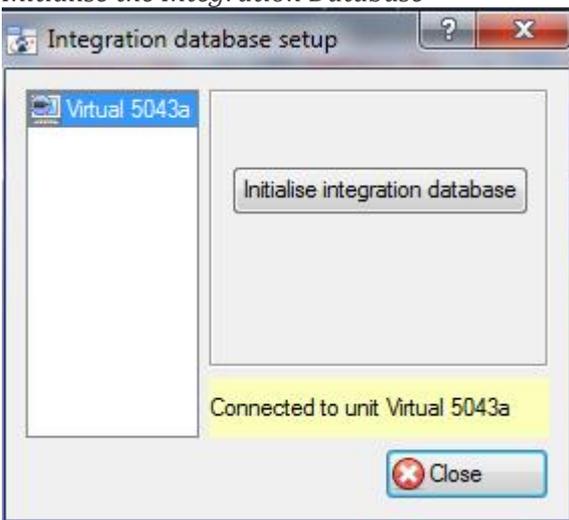
The first time the user adds an integration database, this feature will need to be initialised on the unit. This will add a broad database, within which all the integrated device's databases will be added.

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.

Add a New Device Database

After initialisation, add the database for the relevant integration currently being working with. Click on the button, at the bottom of the Create database window.
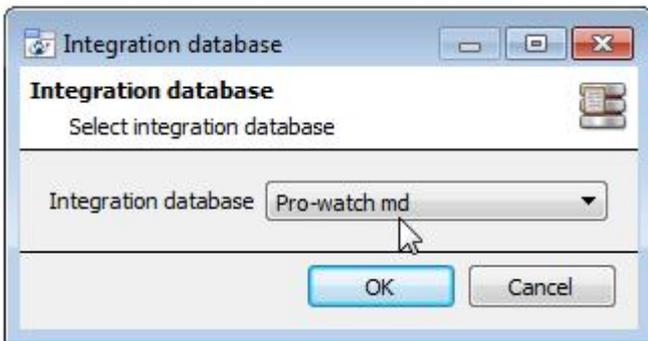
Give the Integration database a descriptive **Database Name**. e.g. Pro-Watch Integration database.

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

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

) *Select the Pro-Watch Integration Database*

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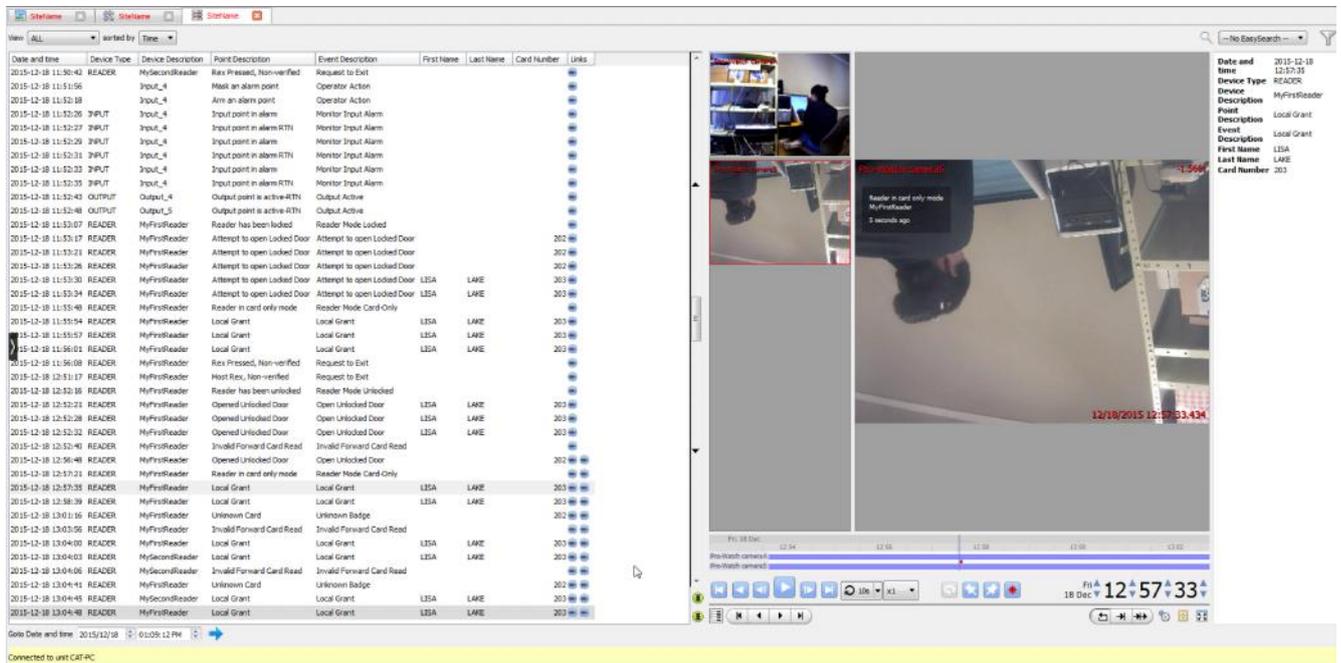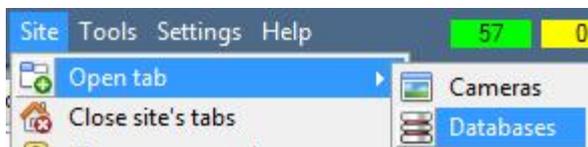
3 Database

a. Introduction

The database tab will allow the user 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 the user 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 Pro-Watch database is information rich. This is an example of some of the layout. With the database entries in the left panel, the associated video review panel in the middle, and meta-data information in the panel on the right.
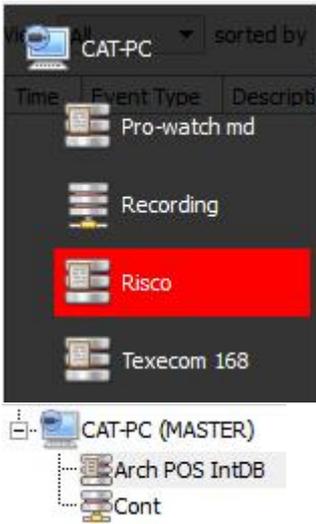

b. Navigate to the Database

The user may view the information stored in the Integration database, by following the path to the left.

This will open the Database Tab.

From 2016.2 onwards, 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❯

Pre 2016.2 databases will have a permanently visible tree of databases.

c. Database Interface

① View	Change the way that the database is presented. Some integration databases have multiple view options. The Pro-Watch device has **Reader, Input, Output,** and **Other Events** options.
② Sorted By	Sort the Events based on the parameters in this menu. The Pro-Watch integration may be sorted by **Time.**
③ Easy Search	The easy search option allows a quick search of the database within one of the options in this menu. The Pro-Watch integration has **Device Type, Device Description, Point Description, Event Description, First Name, Last Name** and **Card Number** options.
④ Filter	Filter offers a more advanced manner of sorting information in the Integration Database table.
	The Pro-Watch integration allows for filtering on the following options: **Date and Time, Device Type, Device Description, Point Description, Event Description, First Name, Last Name** and **Card Number**.
	Once the filters dialogue is open, the following options are available:
	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 simultaneously, and may be filtered using the same parameter more than once. 2. 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 Go to Time	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 Events

a. Introduction

A CathexisVision Event has a trigger, which causes an action. The user may set integrated devices to act at triggers, or as actions. This document will detail the Pro-Watch 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 Pro-Watch device, enter the Events management area:

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

⟩ *While/When and Any/All*

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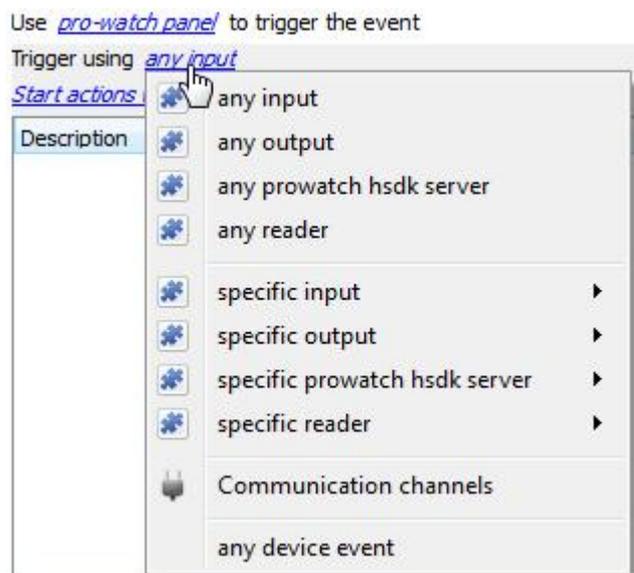
c. Triggers

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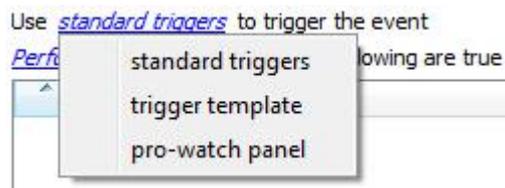
If creating a new event, the trigger type will default to: Use *standard triggers*. To define which device to use to trigger the event, click on the hyperlink after "use". To set it as the Pro-Watch device, click on the hyperlink, and select the relevant device name from the dropdown menu.

Trigger Types (Trigger Using)

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

Any input/output/hsdk server/reader will trigger when any of these objects sends the selected trigger.

Object in group... If group has been setup it will appear here in this list.

Communication channels will trigger only on the Communication channels.

Specific input/output/hsdk server 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, the user may set "device event rules" which will constrain which device events will trigger the event.

Note for group triggers: To database this event 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 ⑦ to see a list of available descriptions.

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 below, for the various trigger types:
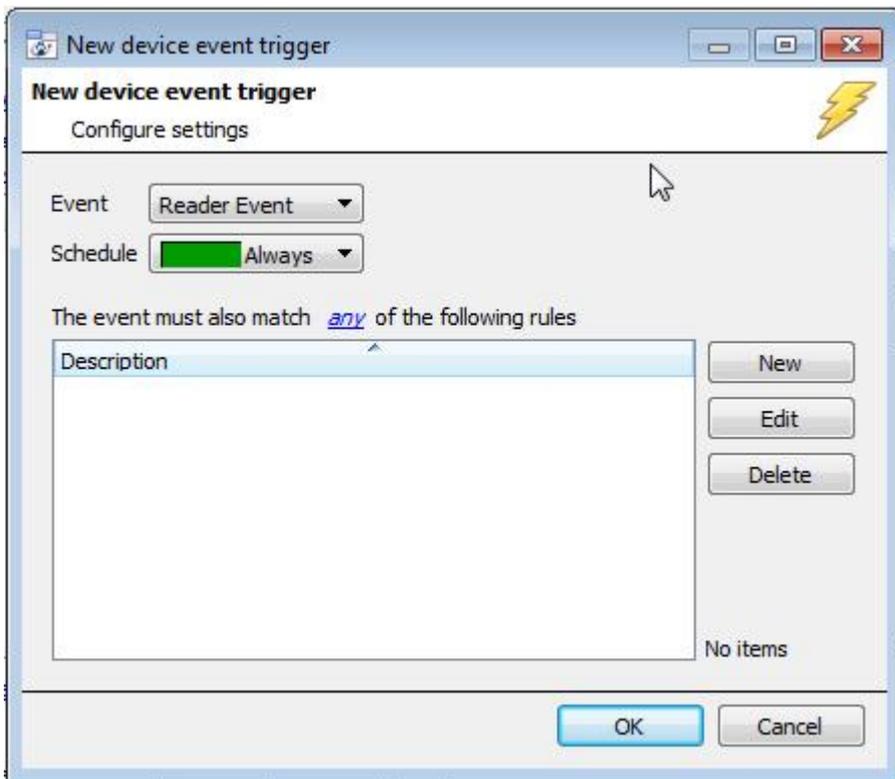

For example within the *any device event* option, choose what type of device Event will be the trigger. Choose an event type from the drop down menu.

Note: It is possible to set multiple constraints (**Device Event Triggers**). However, if constraints are not 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.
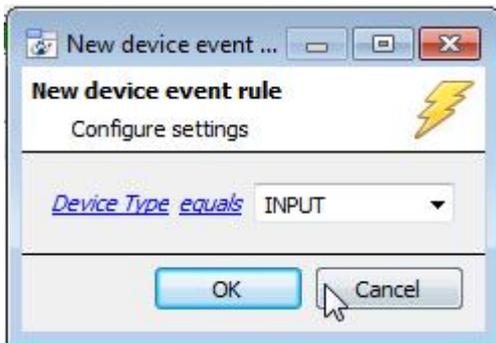
To change the constraint, click on the first hyperlink, this will bring up the full list of available rules.

To modify the way this rule will be treated click on the second hyperlink (*equals* in the example) to show 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 they will need to be filled in manually. The information pulled through to the events is information sent to CathexisVision from the Pro-Watch device, see the Pro-Watch settings for the strings needed here.

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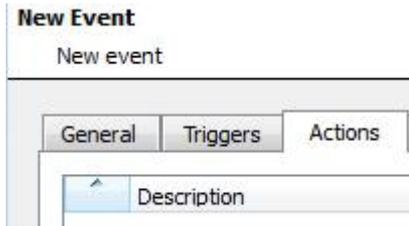
Once the user has defined the triggers that are going to initiate the event, define some Actions. With many integrations there will be the option to control the integrated device, as one of the actions.

The Pro-Watch integration allows for control of the Pro-Watch device via a **CathexisVision Event**.

New Action

To create a new Event Action click on [New]. Select **Control Risco panel** to control this device with the CathexisVision event.
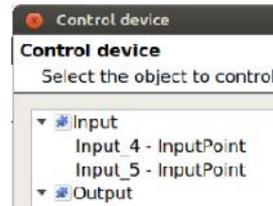
Clicking on the ⚙ icon will bring up a list of the objects which may be controlled by this event.

Click on the **Command** options drop-down menu, to see all the options which CathexisVision can control on the selected object.

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