



# SoftCon Access Control Integration

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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 SoftCon access control device, with CathexisVision software. Functionally this integration will entail triggering of standard CatVision Events using SoftCon triggers; as well as triggering certain SoftCon actions, using CatVision triggers.

## **Note:**

1. If you need information regarding the regular operation of a SoftCon device, please consult the relevant SoftCon documentation.
2. There is a General Integration section in the main CatVision manual. It has vital information about creating an integration database, as well as a general introduction to the Integration Panel. **Read over this section.**

## Requirements

- Softcon client version 1.03.90
- CathexisVision 2014.3 or later.

### **a. License Requirements**

#### Access control “device” license (CACC – 2000)

This license is the “base” license to integrate with an access control system. It is applied to the server to which the access control device is connected.

#### Access control “door” license (CACC – 1001 and 1008)

These licenses apply to the doors or nodes in an access control system. The CACC-1001 is for each door, and the CACC-1008 is a discounted license for 8 doors.

#### Access control “bundle” license (CACC – 3000)

This license includes the device license (CACC-2000) and enables an unlimited number of doors to be added to the system.

### **b. Integration Components**

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

**Device** The device is CatVision software’s interface, which handles all the interaction between CatVision and the integrated hardware. When you add an integration to the CatVision 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 object.

#### **1. Device Events**

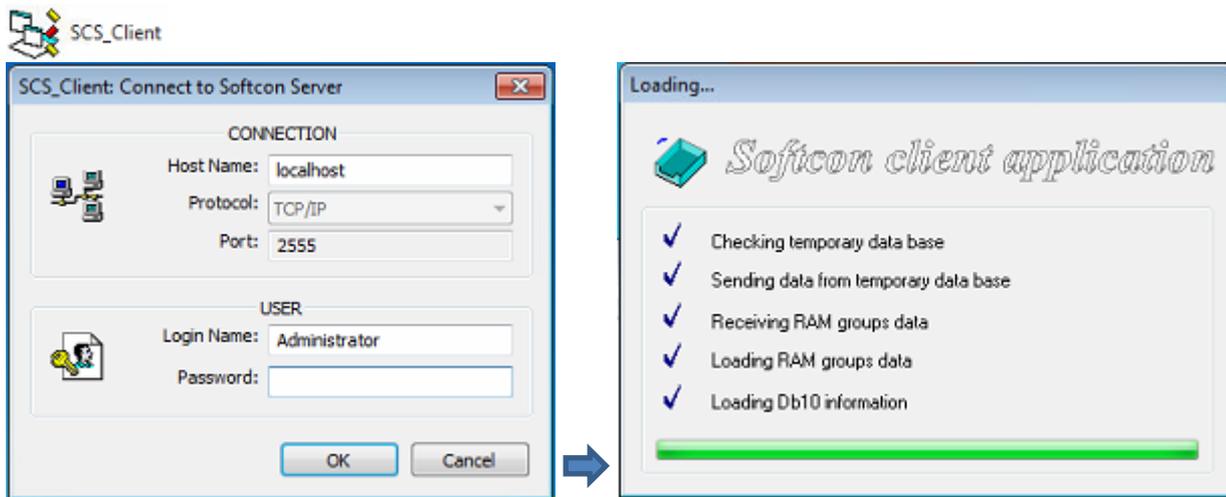
- a. Card event
- b. Informational
- c. Input event
- d. Output event
- e. Problem

- f. Reader event
- 2. Object Property**
  - a. Input
  - b. output
  - c. reader

### c. CatVision-Specific SoftCon Setup

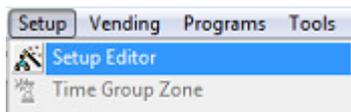
There are some CatVision-specific setups necessary to get the integration working.

#### Log in to the Softcon SCS Client Application



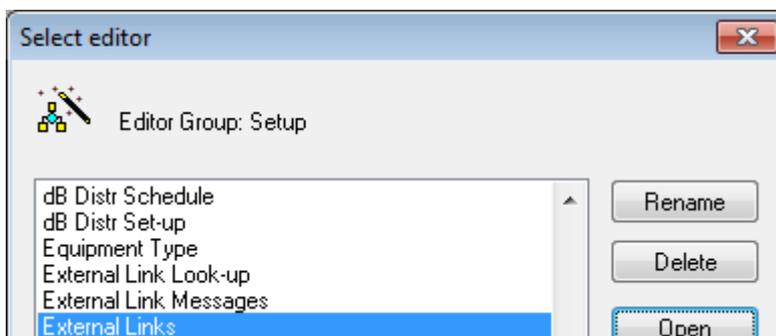
#### Setup Editor

- **Open the Setup Editor**



Once you are in the SCS Client application select the Setup menu, and open the Setup Editor.

- **Select: External Links**



The external system here is the NVR which the SoftCon software will be communicating with.

Select the editor group that you need. In this case it is the **External Links** option.

- **Define the External Links**

Ref	Name	PC	Application	Status	Talk	Delay	Log-file	Repeat	Host	Port
0				Off-line						
2	Cathexis	localhost	SCS_Client	On-line	TCP	0	c:\Log\logfarhaad\YY...	0	192.168.34.60	6000
5	Cathexis 2	localhost	SCS_Client	On-line	TCP	0	c:\Log\logfarhaad2\Y...	0	192.168.34.60	6001

The External Links settings are needed to configure the system that the Softcon messages are sent to.

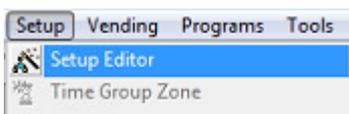
1. **Name:** A descriptive name for the Link.
2. **PC:** The computer that will be communicating with the external system?
3. **Application:** Which SCS (SoftCon System) will communicate with the external system? **Choose SCS\_Client.**
4. **Status:** On-line, or Off-Line, indicating the current status of the link.
5. **Talk:** Sets the communication protocol in use. **Select TCP.**
6. **Delay:** Sets the delay, in milliseconds, which SCS will wait for a response, before resending the message. **Make this 0.**
7. **Log-file:** Where to log the external messages sent and received (Debugging purposes).
8. **Repeat:** The number of attempts to send an external message before the link is disconnected, and set to off-line.
9. **Host:** The IP address of the external system. **This will be the NVR system.**
10. **Port:** The port number of the external system. **This will be the NVR system.**

**Note:** This integration requires two TCP external links to be set. These need to be identical except for the **Name** and **Port** fields.

### Define External Line Messages

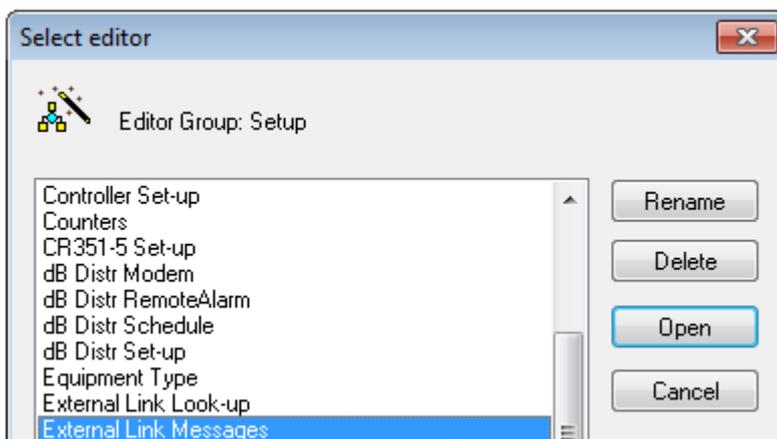
This will define which SoftCon messages are sent to our NVR.

- **Open the Setup Editor**



Select the Setup menu, and open the Setup Editor.

- **Open the External Link Messages Option**

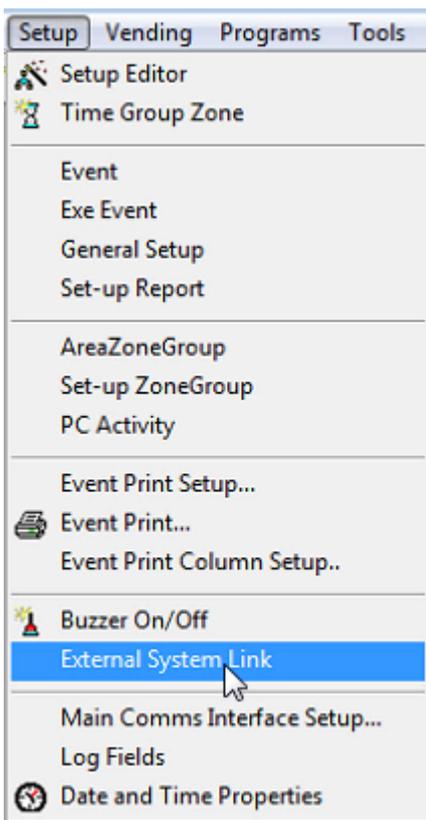


Ref	Link	Message
0	Cathexis	T0500
1	Cathexis	T0700
2	Cathexis	T0800
3	Cathexis	T1700
4	Cathexis	T1800
5	Cathexis	T1900
6	Cathexis	T2000
7	Cathexis	R2000
8	Cathexis 2	T2000
9	Cathexis 2	R2000
10		

Once in External Link Messages, select the friendly name that was set up in External Links and insert all the messages, as shown in the image to the left.

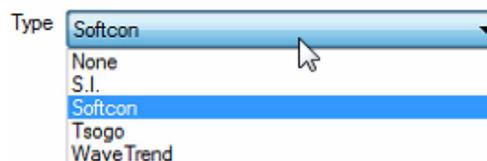
**Note:** Your first connection has 6 messages, and the second connection has only two. Make sure to match these.

### Define the External System Link



Select the Setup menu, and open the External System Link

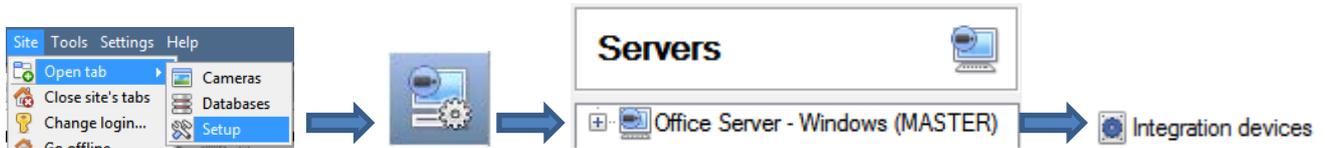
The External System here is the CathexisVision NVR that the SoftCon software will be communicating with.



Once in the editor select the "Softcon" type. Click on  and then .

## 2 Device Addition and Configuration

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:



You will notice two sections in the Integration Panel:

1. The **devices** list will list the integration devices that are attached to your integration database.
2. The **Configuration** section enables you to edit/review, the device which you have selected in the **devices** section.

### a. Devices Section (Add a New Device)

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

Name	Configuration
Channel 1	TcpInCommsConfig(6000,"")
Channel 2	TcpInCommsConfig(6001,"")

Give your device a descriptive name.

In the Connection section you have to set up two individual channels using the port numbers defined in the Softcon SCS Client software's External Links setup.

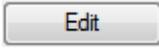
### b. Configuration Section (Tabs)

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

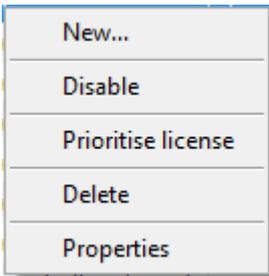
#### Object Configuration Tab

The object configuration tab is the tab where you may view all the individual objects that comprise the integration. The **SoftCon** integration has the following objects: **input**, **output** and **reader**.

• **Object Configuration Buttons**

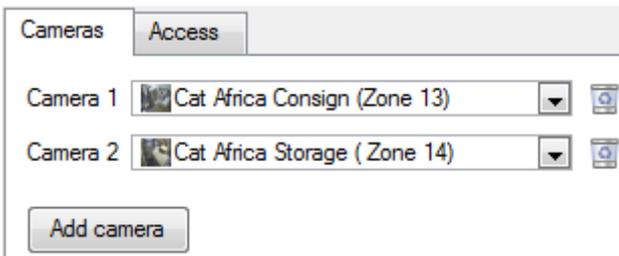
-  You may add a new object by clicking on New.
-  Will open up an existing object for edition.
-  Is used to delete an existing object from the CatVision configuration.

• **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.
- Prioritise license** will allow you to prioritise certain readers, such that they are licensed first, since you may have more readers than licenses.
- 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 defining 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 , and select the relevant camera from the drop-down menu.

To delete a camera click on .

**Note:**

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

Only the first associated camera listed here will be displayed in the Integration database

2. tab.

**Properties: Access**



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

You will see a list of objects, whose access level you may set.

**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.

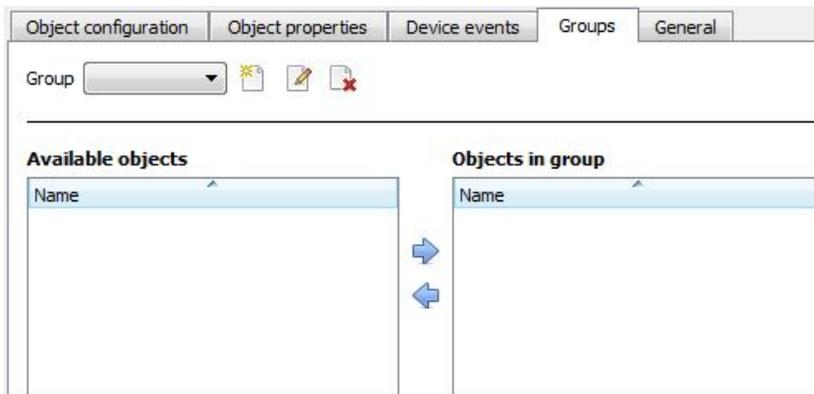
**Object Properties Tab**

The Object properties tab allows you to view the objects, sorted by type. In the case of the SoftCon device you will have the options of viewing by **input, output or reader**.

## Device Events Tab

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

## Groups Tab

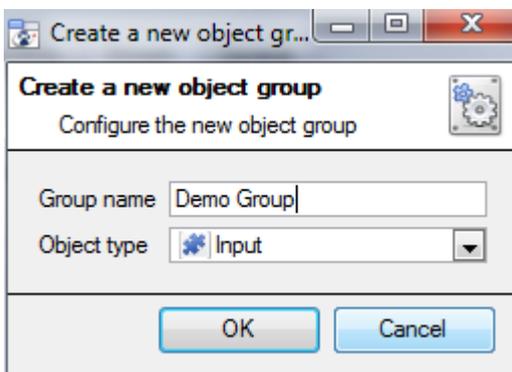


You can create groups of the same type of object.

**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 Inputs/outputs/readers in that group is triggered.)

### • *Create a Group*

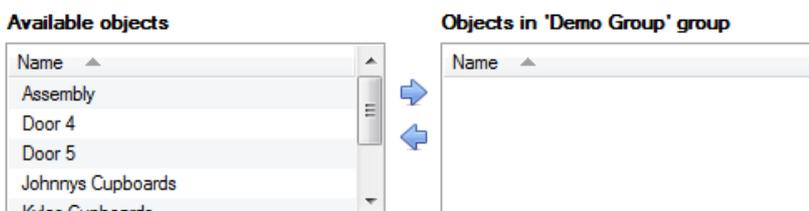
To create/edit a group click on  / . (**Note:** Once a group has been created, you may not edit the object type of the group.)



When creating a group you will select what object type to include in the group. Once the group is created the available objects panel will fill up with all available objects of that type. From this list you will choose which objects you want to use in your 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  / .

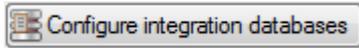
## General tab

Currently the general tab deals with the integration database. Here you will be able to select a pre-created database, or you will be able to configure a new database.

- *Select an Integration database*

Integration database   To select a database click on , and select the relevant database. Only databases which relate to the device you are adding should appear.

- *Configure a new database*



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

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

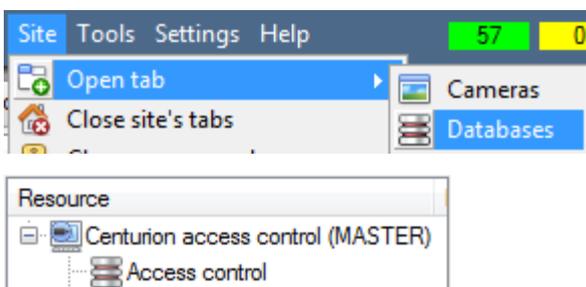
# 3 Database

## 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 CatVision by the integrated device.

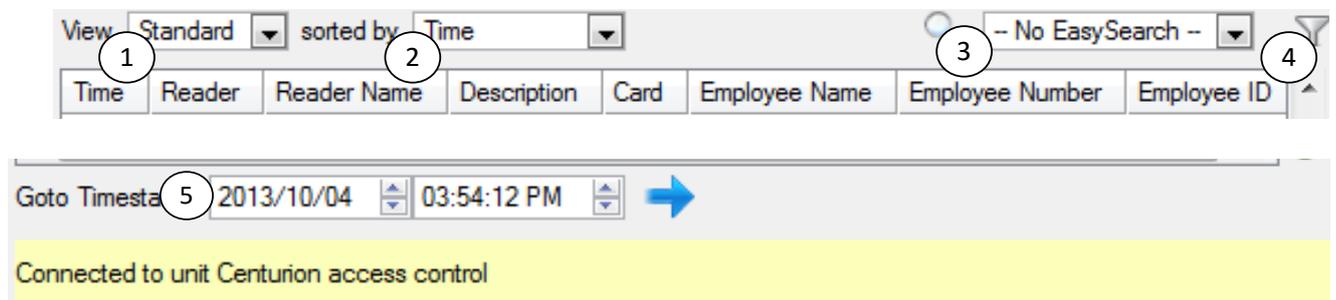
## b. Navigate to the Database



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.



<p>① <b>View</b></p>	<p>You may change the way that your database is presented. Some integration databases have multiple view options. The SoftCon database only has <b>Standard</b> option.</p>
<p>② <b>Sorted By</b></p>	<p>You may sort the Events based on the following parameters: <b>time, reader, reader name,</b> and <b>card number.</b></p>
<p>③ <b>Easy Search</b></p>	<p>The easy search option allows you to quickly search the database within one of the following options: <b>reader, reader name,</b> and <b>description.</b></p>
<p>④ <b>Filter</b> </p>	<p>Filter offers a more advanced manner of sorting information in the Integration Database table.</p> <p>You are able to filter based on the following parameters: <b>time, reader, reader name</b> and <b>description.</b></p> <p>Once you have the filters dialogue open you will have the following options:</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 .</li> </ol>

	<p>The filter icon  will change to  when filters are active.</p> <p>3. To <b>delete</b> an added filter click on .</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 Go to Time</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 the click on the  icon.</p>

*Viewing an Entry's Associated Recording*

**Note:** If you have attached cameras to device objects in the Integration setup, and have set these cameras up to record continuously, each Integration database entry will have a corresponding recording. To view a databased 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 CatVision 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 SoftCon specific aspects of Events. There is a comprehensive guide to CatVision Events in the main setup manual.

Most of the data that CatVision 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.

### Events

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



1. Once in Events management click on . This will open up the New Event window.
2. Once in this window, select the Triggers tab and click on the hyper link titled, [standard triggers](#).
  - a. From the menu that drops down, left-click the SoftCon device that you want to trigger the event with.

#### • **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 set-off an event.

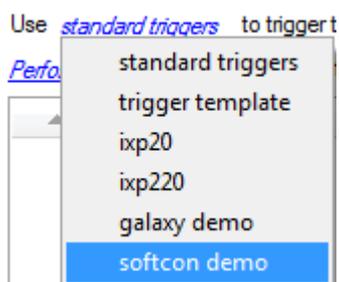
Trigger using [Door 3](#)  
[Perform actions while any](#) of the properties meet the following criteria

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

### b. Triggers

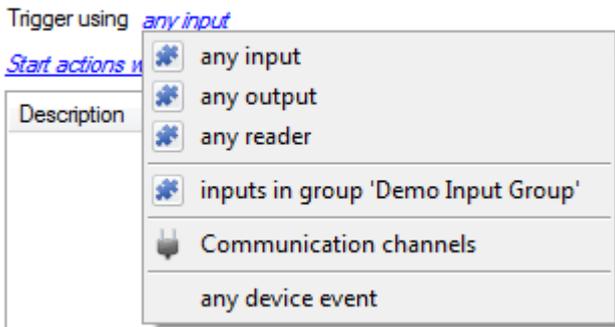
A trigger is the input that tells the event to start. The trigger causes the subsequent action (which the user will also define).

#### 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 SoftCon device, click on the hyperlink, and select the relevant device name from the dropdown menu.

- **Trigger Types**



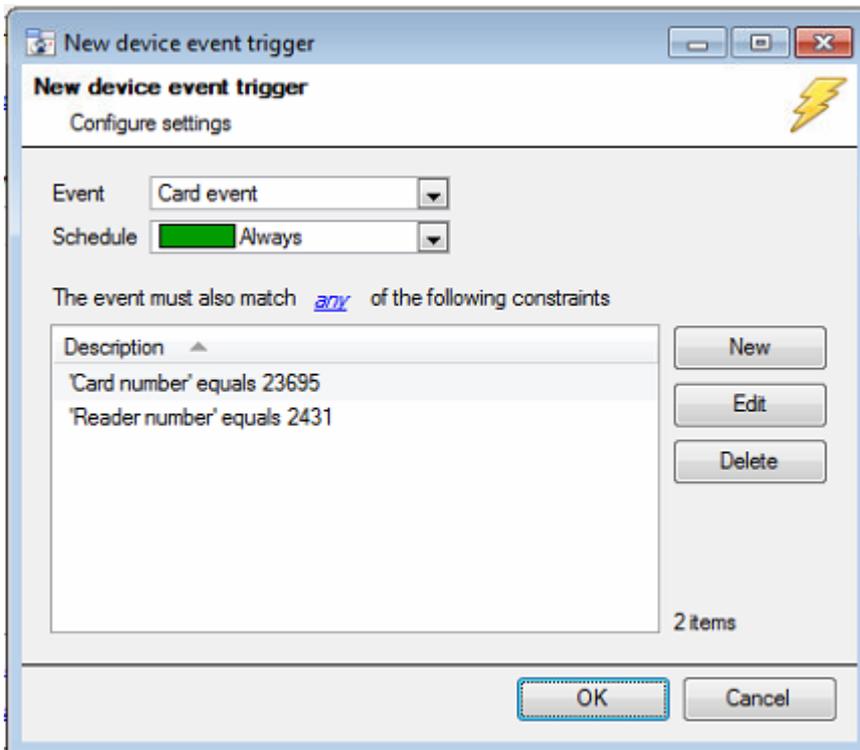
**Any input** will trigger using any available inputs.  
**Any output** will trigger using any of the outputs available.  
**Any reader** will trigger using any of the available readers.  
**Groups** if you have created any Object Groups they will appear here too.  
**Any device event** will trigger when any SoftCon event is sent to CatVision (you can specify which Events, in the setup, discussed later).

**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 will database the text "Door Name" along with the name of the *reader object* that triggered the event:

Description

### Device Events

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 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. SoftCon offers Card Event, Input Event, Output Event, Problem, and Reader Event

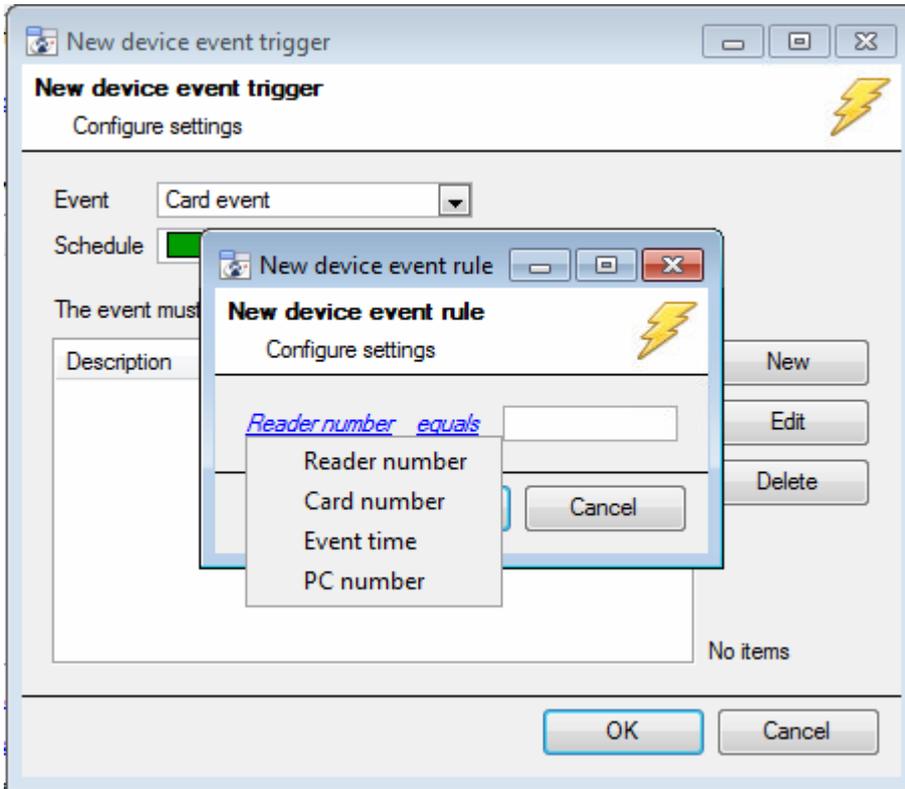
To add/edit/delete a **rule** use the New, Edit, and Delete buttons on the right hand side.

**Note:** You may set multiple constraints, choosing if *any*, or *all* constraints need to be fulfilled to set off a trigger. Here there are two Events, either of which will trigger the event.

**Note:** Once you have selected the type of **device event** that will be the trigger, you may add a new **device event rule**. To do this, click on . If you set no rules, every device event will trigger this main Event. Once you set constraints (via the rules) only the constraints chosen will trigger the event.

- **Any Device Event**

To add a device event rule click on , in the **any device event** dialogue (pictured above)



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

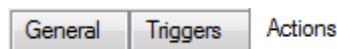
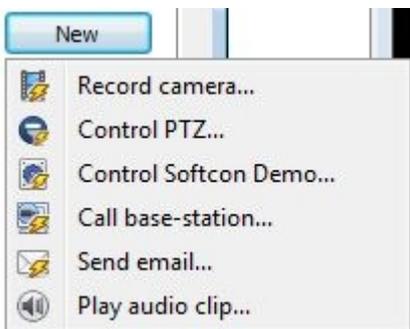
To modify the way this rule will be treated click on the second hyperlink (*equals* in the example) this will show you the rules options.

**Note:** When all available options are known to CatVision 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 CatVision from the SoftCon device, see the SoftCon settings for the strings needed here.

### c. Actions

Once you have defined the triggers that are going to initiate your event, you will need to define some Actions. One of the available actions will be to *control a SoftCon Device*.

- **Open Actions Tab and Select the SoftCon Device**



To get started left-click on the tab titled "Actions", and click on .

A menu will drop down containing all the available action types. The device action type is represented by this icon: . It will say "Control ..." and the name of your SoftCon device.

### Control device

CathexisVision has a number of action options available. Some integrated devices will offer the ability to control the integrated device as one of the options. Because of the nature of the Softcon integration this is not possible. The other CathexisVision action options are still available however.

## 5 Conclusion

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

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