



# Nedap AEOS Access Control Integration App-note

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# 1. Introduction

This document details the integration of the Nedap AEOS Device with CathesisVision software. Nedap AEOS is an access control system that connects physical door locks, readers and additional devices to enhance the flow of people through locations and resources. The system is capable of logging who accessed where and when, and through this integration provides valuable data to CathesisVision to help track how buildings and sites are being used with the associated video footage. Functionally, this integration entails triggering of standard CathesisVision Events, based on the triggers from the Nedap AEOS server.

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

**Note:** For information regarding the regular operation of a Nedap device, please consult the relevant manufacturer’s documentation.

## 1.1 Requirements

- CathesisVision communicates with the Nedap AEOS device via TCP using an IP address. This connects to the server which in turn connects to the device.
- This integration only runs on Windows units.
- This integration currently only supports ‘Standard door’ and ‘2Readers’ as access points. If other access points are required, please send a request to [support@cathesisvideo.com](mailto:support@cathesisvideo.com).

### 1.1.1 General Requirements

- CathesisVision 2022.1 and later.
- Windows 10-Pro; Windows Server 2008 R2 and later.
- Minimum 4GB of RAM required.
- Cathesis NVR 64-bit version supported.

### 1.1.2 License Requirements

License	Name	Description
<b>CNDP – 2000</b>	Nedap Access Control Device	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. It will allow for the connection of a single Nedap access control system.
<b>CNDP – 1001</b>	Nedap Access Control Door	These licenses apply to the doors, or readers, in an access control system. The <b>CNDP-1001</b> will license a single door/reader, and may be added on a door-by-door basis.
<b>CNDP – 3000</b>	Nedap Access Control Bundle	This license includes the <b>CNDP-2000</b> Nedap device license, and also provides support for unlimited <b>CNDP-1001</b> door licenses.

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

## 1.2 Specifications

This integration was tested on:

<b>Third-party software name</b>	AEOS – compatible with the API socket interface
<b>Third-party software version</b>	Version: 2021.1.1
<b>Third party API license/s required</b>	No

## 1.3 Integration Components

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

<b>Device</b>	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.
<b>Objects</b>	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

### 1.4.1 Device Objects

Device objects populate automatically once communication is established. As the panel supports many expansion modules, the objects displayed in CathesisVision will vary depending on the objects that are configured on the panel.

Object Type		Abilities
<b>General</b>		<ul style="list-style-type: none"> <li>• This integration has Door, System, and Communication Channel objects.</li> <li>• Objects are automatically created as soon as communication between the CathesisVision unit and device is established.</li> <li>• Door objects can be commanded as an action of a CathesisVision system event.</li> <li>• Door objects support overlays.</li> <li>• Objects may be linked to cameras to associate device events with video footage.</li> </ul>
<b>Door</b>	<b>Object properties</b>	<ul style="list-style-type: none"> <li>• IDs.</li> <li>• Name.</li> <li>• Controller name.</li> <li>• Type.</li> <li>• Input state.</li> <li>• Lock.</li> <li>• Unlock.</li> </ul>

		<ul style="list-style-type: none"> <li>• Emergency unlock.</li> <li>• Door open.</li> <li>• Alarm.</li> <li>• Open too long.</li> <li>• Licensed.</li> </ul>
	<b>Command</b>	<ul style="list-style-type: none"> <li>• Lock.</li> <li>• Unlock.</li> <li>• Normalise</li> <li>• Provide Access.</li> </ul>
	<b>Overlays</b>	<ul style="list-style-type: none"> <li>• The Door object supports overlays in the camera feed.</li> <li>• Overlays display time.</li> <li>• Overlay location, text size, text colour, and background colour are configurable.</li> <li>• Overlays displays the Device name and the Device event.</li> </ul>
<b>System</b>	<b>Object Properties</b>	<ul style="list-style-type: none"> <li>• IDs</li> <li>• Name.</li> <li>• Service version.</li> <li>• Login status.</li> </ul>
<b>Communication Channel</b>	<b>Object properties</b>	<ul style="list-style-type: none"> <li>• Name.</li> <li>• Channel Status.</li> <li>• Details.</li> <li>• Creation Type.</li> <li>• Creation Time.</li> <li>• Idle time (min).</li> </ul>

### 1.4.2 Device Events

The CathesisVision Nedap integration generates Door events, which are triggered on the device and reflected in CathesisVision.

Event Element		Features/Abilities
<b>General</b>		<ul style="list-style-type: none"> <li>• Events triggered on the device are sent to CathesisVision.</li> <li>• These device event messages can be used to trigger system events.</li> </ul>
<b>Device Event Types</b>	<b>Door Events</b>	<ul style="list-style-type: none"> <li>• ID.</li> <li>• Time.</li> <li>• Door.</li> <li>• Controller.</li> <li>• Type.</li> <li>• Description.</li> <li>• Carrier info.</li> <li>• Badge.</li> </ul>

### CathexisVision System Events

- Events generated by the device are reflected in CathexisVision and can be used to create CathexisVision system events.
- Door objects may be controlled as a result of a CathexisVision system event:
  - Lock.
  - Unlock.
  - Normalise.
  - Provide Access.

### 1.4.3 Metadatabase

A unique metadatabase is created on the CathexisVision server for this integration. It is fully searchable, with configurable filters based on device event information (as above), and time stamping. The filtered event/s, and the associated video, will then be available for review in a new window from which an archive can be created and exported.

Database Element	Features/Abilities
General	<ul style="list-style-type: none"> <li>• All device events are databased.</li> <li>• Database entries include the footage from cameras linked to device objects.</li> <li>• Multiple cameras may be linked to multiple objects.</li> <li>• Device event metadata is displayed where applicable.</li> <li>• Databased device events may be viewed in the embedded video player, which includes the usual CathexisVision video review tools.</li> </ul>
View Options	<ul style="list-style-type: none"> <li>• Standard.</li> </ul>
Sort Options	<ul style="list-style-type: none"> <li>• Device event time.</li> </ul>
Easy Search	<ul style="list-style-type: none"> <li>• Time.</li> <li>• Controller.</li> <li>• Door.</li> <li>• Carrier info.</li> <li>• Event description.</li> </ul>
Filter	<ul style="list-style-type: none"> <li>• Time.</li> <li>• Controller.</li> <li>• Door.</li> <li>• Carrier info.</li> <li>• Event description.</li> </ul>
Export	Database entries may be exported in CSV and PDF format.

#### USEFUL LINKS

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

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

## 2. Device Addition and Configuration

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

### 2.1 Nedap Setup

This integration requires Nedap API port configuration. Contact Nedap support for Nedap software setup questions.

The port can be configured in the `aeos.properties` file.

Open the `aeos.properties` file (...\AEOS\AEserver\standalone\configuration<sup>1</sup>).

Search for the following section:

```
#####
# aeos.service.InterfaceService
#####
aeos.service.InterfaceService.Port=8035
aeos.service.InterfaceService.UseSSL=false
aeos.service.InterfaceService.SSLClientAuth=false
aeos.service.InterfaceService.SocketTimeoutSeconds=0
aeos.service.InterfaceService.DelegateSubscriptions=true
aeos.service.InterfaceService.RMITimeoutMinutes=480
```

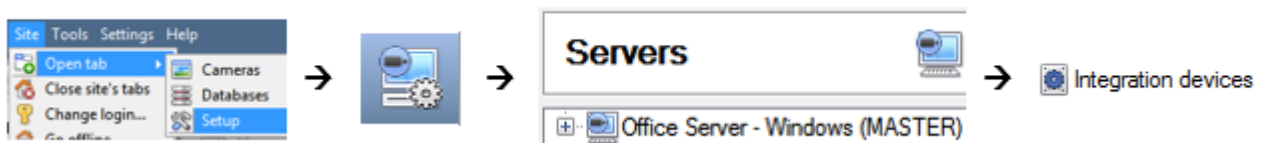
**Note:** In the above example, “false” is mandatory because SSL is not yet supported.

**Note:** Please consult the Nedap manufacturer’s guide for information about how to add a device and other Nedap configuration. Visit <https://portal.nedapsecurity.com/robohelp>.

### 2.2 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:

#### 2.2.1 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.



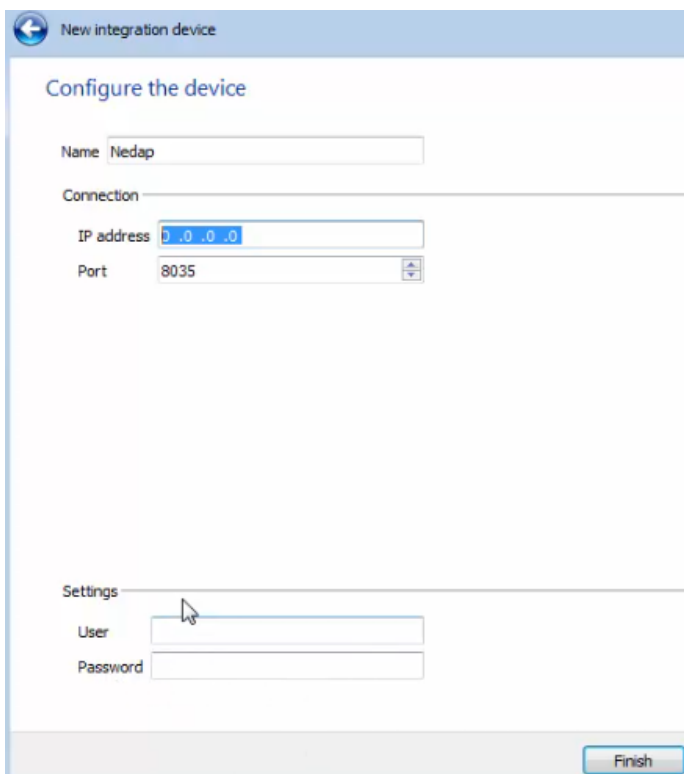
## 2.2.2 Device Addition

New device

1. Once in the Integration Panel, click on the **New device** button, in the Devices section. This will open the addition dialogue.



2. Select **Nedap** driver from the list.



3. Give the device a descriptive **name** e.g. Nedap device.
4. Enter the **IP address** of the server.
5. Check the **configure port** is the **same** as in the AEOS configuration
6. Enter the **Username and Password** for the server.
7. Click Finish.

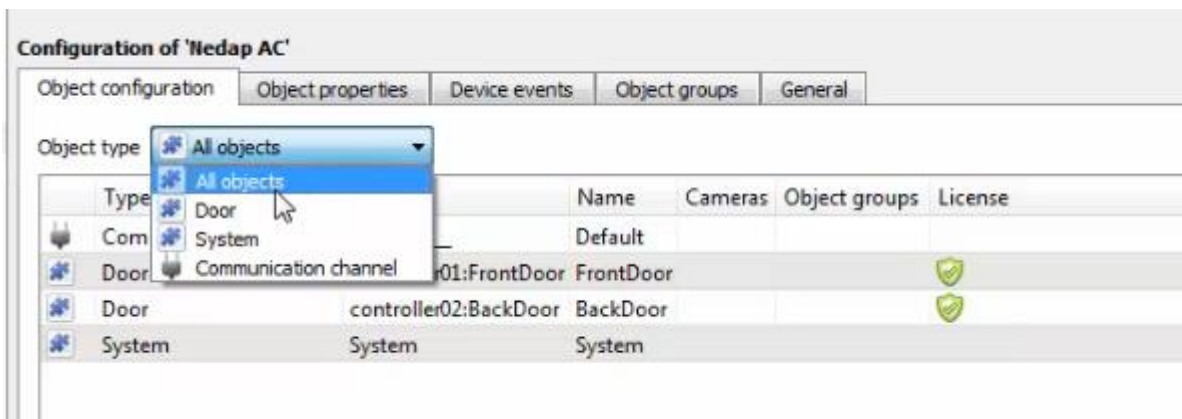
## 3. Configuration Section (Tabs)

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.

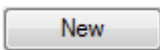
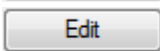

Nedap has three object types: **Door**, **System**, and **Communication channel**.



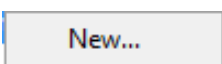
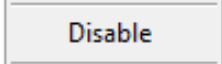

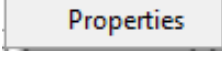
All Nedap objects (for Door, System, and Communication channel) are populated automatically when communication to the Nedap Server is established. It is not necessary to add new devices/readers manually.

**Note:** Do not use the special characters '|' and '=' in the naming of objects. These characters cause an issue with the Nedap integration.

#### 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 CathesisVision configuration.

#### 3.1.2 Object Configuration Right-click Options

-  **New** will open up the dialogue to add a new object.
-  **Disable/Enable** allows objects to be enabled/disabled manually.
-  **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.

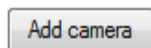
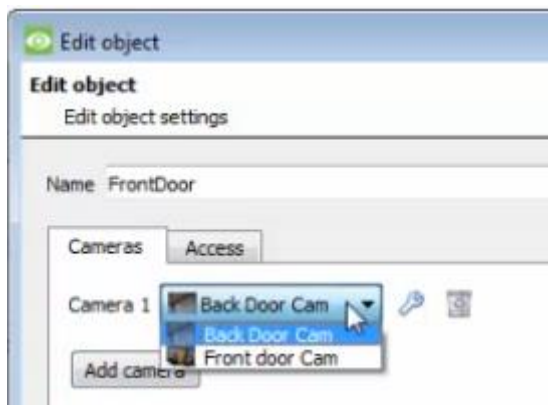
### 3.1.3 Edit Object

Open object **editing window** by selecting object and clicking **Edit button**, or **right-click Properties**.

This window is where cameras are added to objects, overlays are configured, and access rights to the integration are added. These are dealt with in two tabs: **Cameras** and **Access**.

#### 3.1.3.1 Properties: Camera

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.



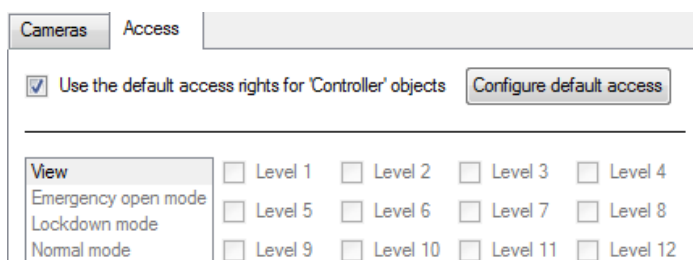
To **add** a camera, click Add camera, and select the relevant camera from the drop-down menu.



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.

#### 3.1.3.2 Properties: Access



**Access** can be used to protect 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.

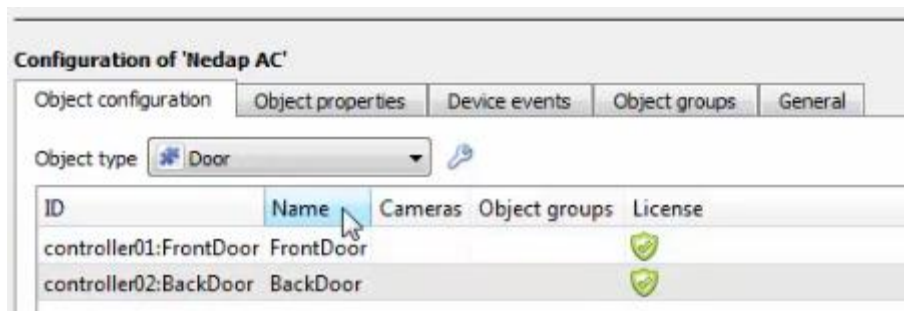
### 3.1.4 Configure Overlays

Overlays may be configured globally for all objects, or individually for selected objects. The path to follow for opening the configuration window for global or individual overlays is different, however the overlay configuration is the same. Overlays may be configured individually for **Device objects**.

#### 3.1.4.1 Configure Global Overlays

Global overlays may be configured for “Door”.

Navigate to the global overlays setup by first opening the Object configuration tab.

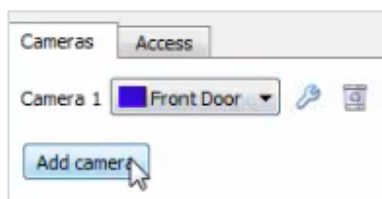


Select the spanner icon next to the drop-down menu to configure the global overlays.

#### 3.1.4.2 Configure Individual Overlays



Right-click an object and select **Properties** to edit the object.



Add a camera to the object, or, select a camera from the drop-down menu.


Then **click the settings** icon that appears next to the camera name.

## Overlay Configuration for Individual objects



Uncheck **Use defaults** to edit overlays, or override globally configured overlays for the selected device.

**Use Defaults:** This option is only available when editing individual overlays. Check Use defaults to use the global configurations for position, text size, and colour.

Click  to reset values




Select **Text Size** options from the drop-down menu.

Define the **Location** of the overlay panel.

Define the **Background Colour** of the overlay stream: set the panel appearance to default; remove the border or remove the panel entirely (so that only the overlay text appears). Adjust the opacity as required.

Choose **Text Colour**.

To set a custom panel colour, uncheck **Use Default background colour**.

 Click the colour box to bring up a colour chart.

**Enable:** Check the box to enable overlay configuration.

## 3.2 Objects Properties Tab

The Object properties tab allows viewing objects, sorted by type. In the case of the Nedap device, there is the option of viewing by **Door**, **System**, and **Communication channel**.

Configuration of 'Nedap AC'

Object configuration | Object properties | Device events | Object groups | General

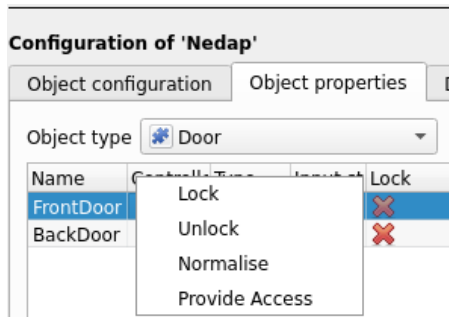
Object type: **Door**

Name	Input state	Lock	Unlock	Emergency unlock	Door open	Alarm	Open too long	Licensed	
FrontDoor	Communication channel	it_StandardDoor	Passive	✗	✗	✗	✗	✗	✓
BackDoor	controller02	AccessPoint_StandardDoor	Passive	✓	✗	✗	✗	✗	✓

Commands can be given from the Object properties tab.

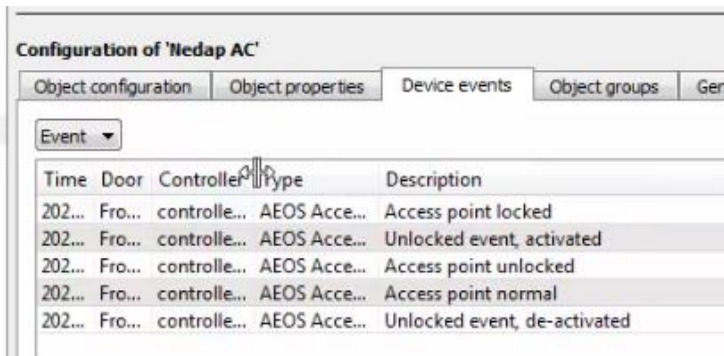
### 3.2.1 Controlling Commands on Device Objects

1. **Select Object type** from the drop-down menu on the **Object properties** tab.
2. **Right-click** an item on the list.
3. Choose a command from the drop-down menu.  
The options are **Lock**, **Unlock**, **Normalise** or **Provide Access**.



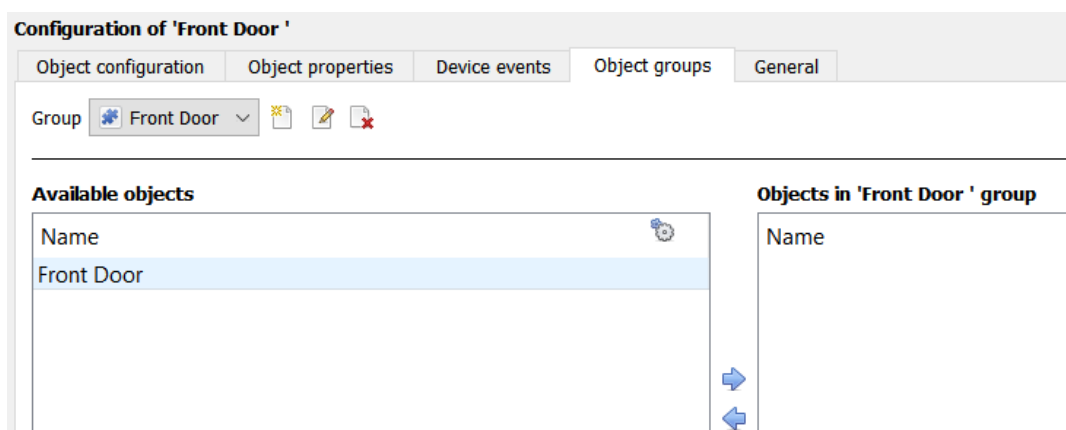
### 3.3 Device Events Tab

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.






### 3.4 Object 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. (For example, 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 Nedap group, click on this icon.
-  To **edit** a Nedap group, click on this icon.
-  To **delete** a Nedap group, click on this icon.

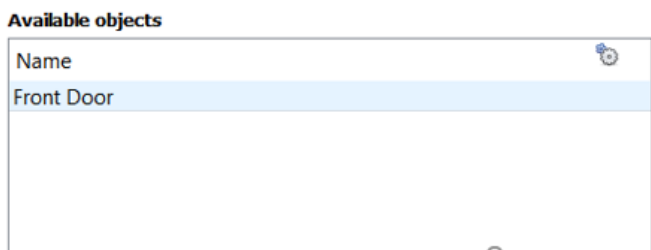


Give the group a descriptive **Group name**.



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

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

### 3.4.2 Add or Remove Objects



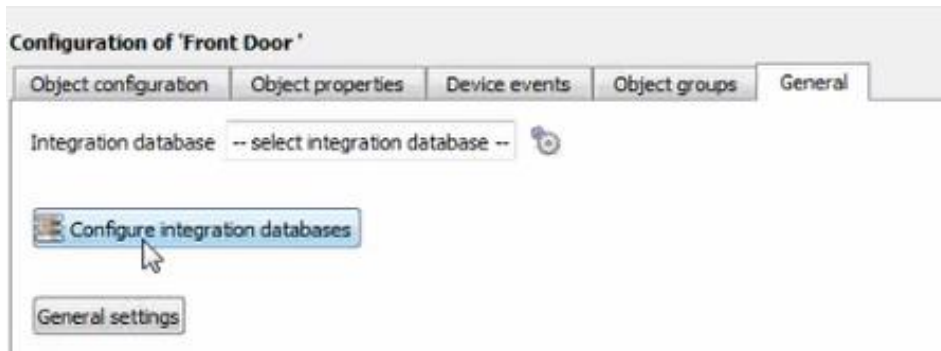
A list of available objects will be displayed in the Available objects panel.

-  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.



**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 CathesisVision system.

### 3.5.1 Select an Integration Database

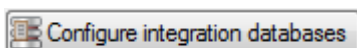


 To select a database, click on the settings icon, and select the relevant database.

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

### 3.5.2 Configure a New Database

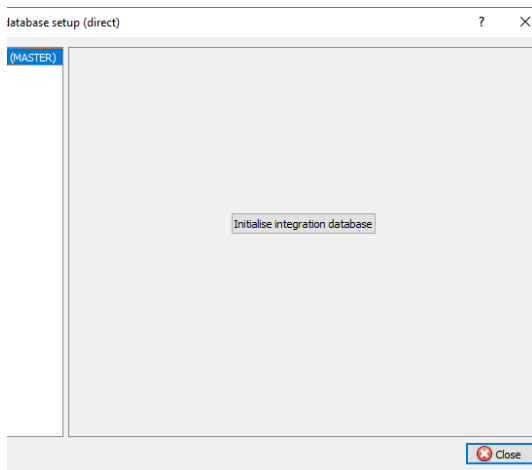
The first time an integration database is added, the general integration database will need to be **initialised**. Thereafter, a database for a specific integration can be **created**.



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

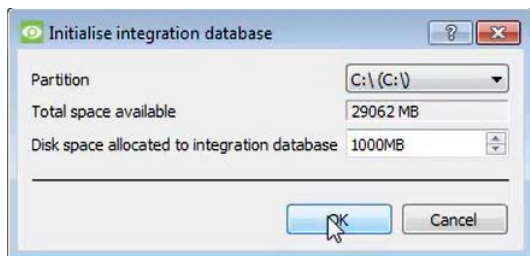
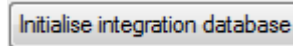


### 3.5.2.1 Initialise the Integration Database



Select the unit the database will be added to from the list on the left.

Click **Initialise integration database**.

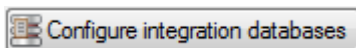


Choose the partition on which the database will be created.

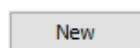
Select disk space allocation.

### 3.5.2.2 Add a New Device Database

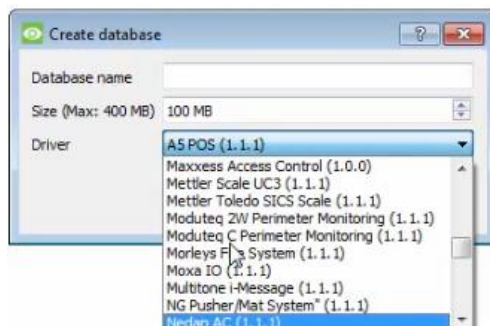
After initialisation, the database can be added to the integration.



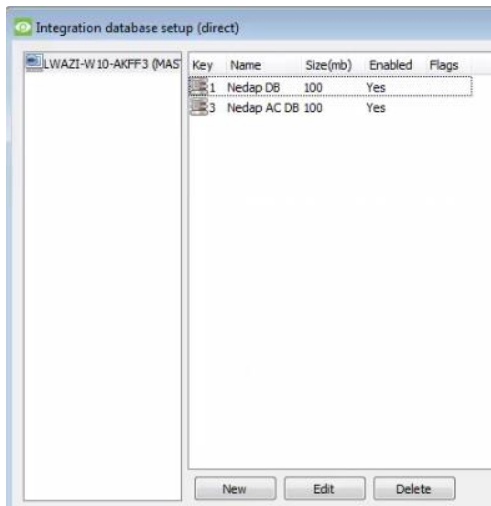
To create a new database, click the **Configure integration databases** button from the General tab.



Click the **New** button at the bottom of the **Integration database setup** window.

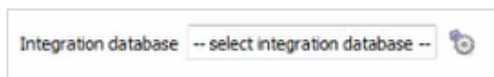



- Give the Integration database a descriptive **Database Name**.
- Allocate a **Size** to the new device database.
- Select the device **Driver (Nedap AC)** from the drop-down list.
- Click **OK** to create the database.



The newly created database will appear in the **Integration database** setup.

### 3.5.2.3 Select the Nedap Integration Database



From the General tab, **click** the gear icon .



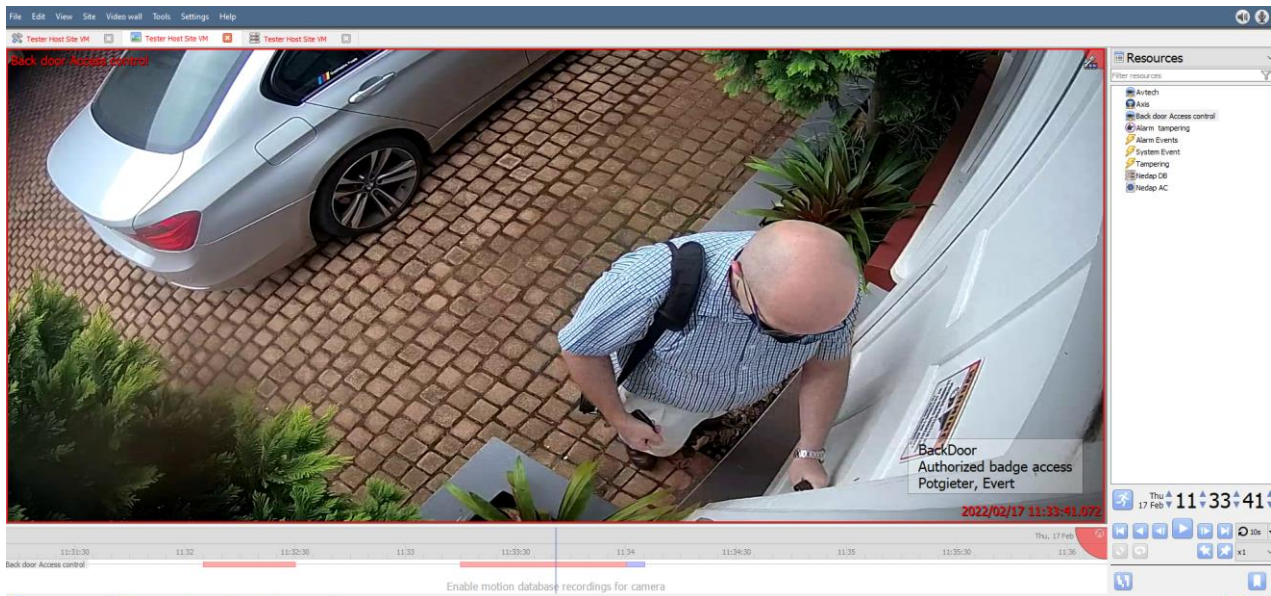
In the dialogue that appears, **select** the relevant integration database.

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

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

## 4. Camera Table Overlay Setup

Once all the relevant settings have been configured, the access control overlay can be pulled through over the appropriate camera feed.



**Note:** Cameras must have already been added to device objects, and overlays must have already been configured.

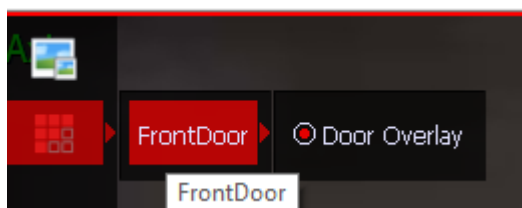
### 4.1 Video Feed Options Panel



To bring up the overlay, click the arrow to the left of the screen, to pop out the Video feed options panel.

The Video feed options panel will present a number of options specific to the settings configured for that video feed.

#### 4.1.1 Select the Overlay



Clicking this icon will bring up the overlay options for this video feed.

Select the **device**, **enable** the overlay, and it will appear over the video feed, as above.

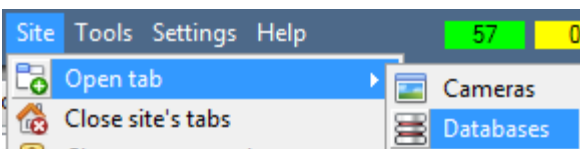
## 5. Database

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.

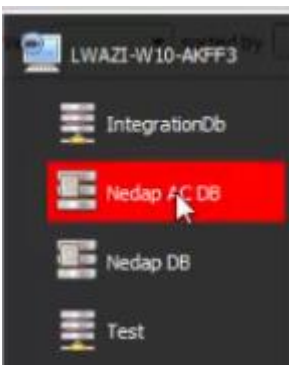
Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathesisVision by the integrated device.

### 5.1 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**.



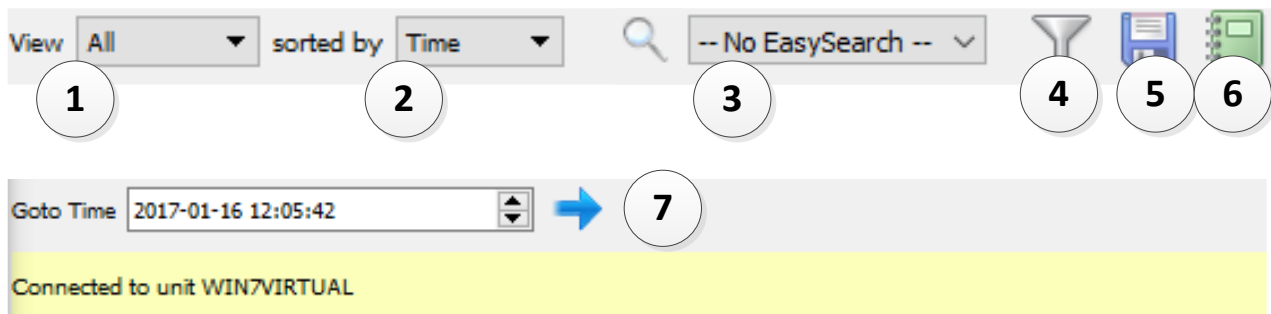
Select the **Nedap** integration database from the database panel that opens on the left-hand side.

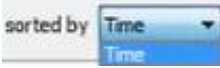
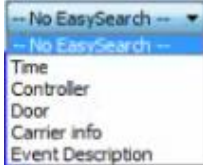





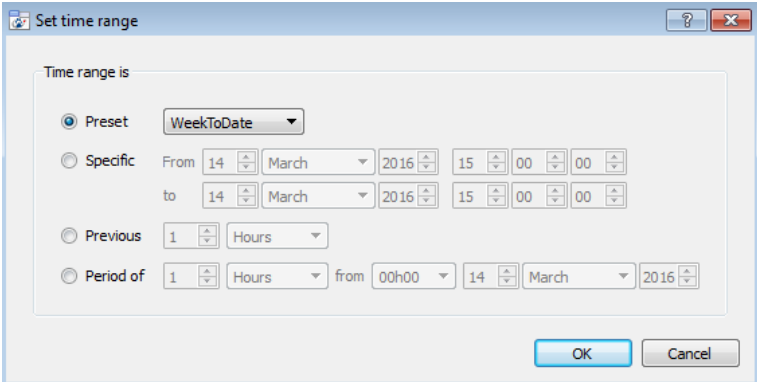
The databases are ordered under the NVRs that they are attached to.


Time	Controller	Door	Badge info	Carrier info	Event Description	Links
2022-01-25 15:45:11	controller01	FrontDoor	-	-	Access point locked	
2022-01-25 15:45:15	controller01	FrontDoor	-	-	Unlocked event, activated	
2022-01-25 15:45:15	controller01	FrontDoor	-	-	Access point unlocked	

On the left is an image of a Nedap database.

## 5.2 Database Interface



①	<b>View</b>	Change the way that the database is presented. Some integration databases have multiple view options. The Nedap database can be viewed in <b>Standard</b> presentation.
②	<b>Sorted By</b>	Sort the Events based on the following parameter: <b>Time</b> . 
③	<b>Easy Search</b>	 <p>The Easy Search option allows quick searching of the database within one of the following options: <b>Time, Controller, Door, Carrier info, and Event description</b>.</p>
④	<b>Filter</b> 	<p>Filter offers a more advanced manner of sorting information in the Integration Database table.</p> <p>Once the filters dialogue is open, the following options are available:</p> <ol style="list-style-type: none"> <li><input checked="" type="checkbox"/> <b>Enable filters</b> To enable filters, check this box.</li> <li> To add a new filter, click this icon. The filter icon  will change when filters are active </li> <li> To delete an added filter, click this icon.</li> </ol> <p>A <b>Time range</b>, within which the search will be conducted, may also be set. To set a <b>Time range</b>, click on the blue hyperlinked text which specifies time (e.g. <a href="#">in the Week to date</a> ).</p> <p>This will bring up the following dialogue box, where the time range can be defined:</p> 

		<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.</li> </ol>
5	<b>Export</b>	Generate metadatabase reports in PDF or CSV format. See below.
6	<b>Manage Reports</b>	Generate scheduled metadatabase reports. See below.
7	<b>Go to Time</b>	<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.</p>  Then click on the arrow icon.

## 5.2.1 Generate and Export Metadatabase Reports



Click the save icon to open the Export window.

Select the **Period** to export, and enter the required details.

Click **Next**.

Select the **Format** to export the report in; either CSV or PDF.

See below for the two options.

### 5.2.1.2 Export CSV

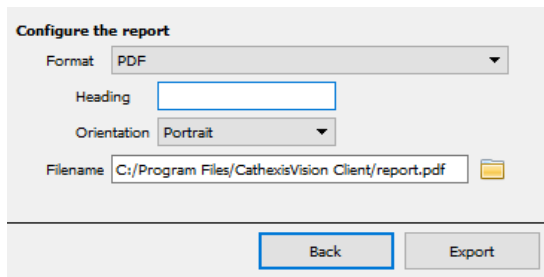
Select CSV **Format**.

Edit the **Filename** by either entering it straight into text field (replacing **report.csv**).



Or, click the folder icon to choose a new save folder and filename.

### 5.2.1.3 Export PDF



Select PDF **Format**.

Give the PDF a **Heading**.

Select either Landscape or Portrait **Orientation** of the PDF.

Edit the **Filename** by either entering it straight into text field (replacing **report.csv**).

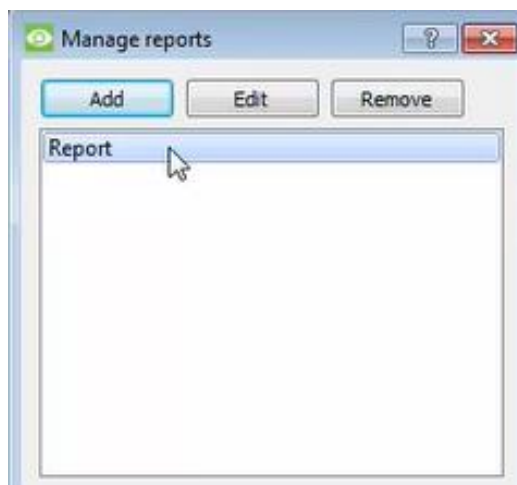


Or, click the folder icon to choose a new save folder and filename

## 5.2.2 Scheduled Metadatabase Reports



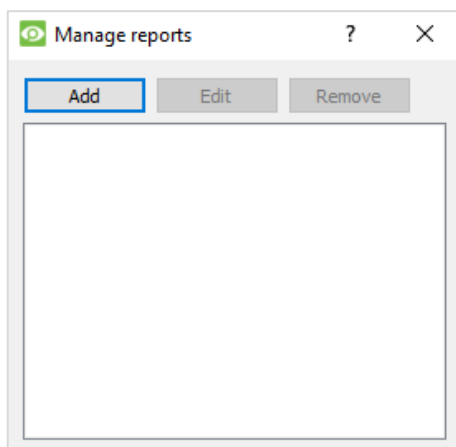
Click the report icon to open the scheduled report window.



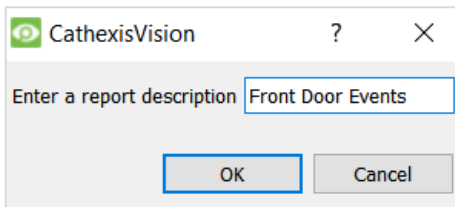
All created reports will be listed here.

- First, click **Add** to create a report.
- Then **edit** to define the reporting schedule. See below for more detail.
- To create, edit, or delete a report, select the entry and click on the corresponding button.

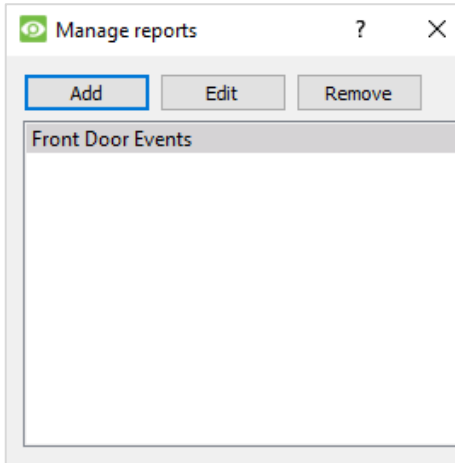
### 5.2.2.1 New Scheduled Report



- In the Manage reports window, click **Add**.

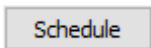


- Give the report a description.
- Click **OK** when done.

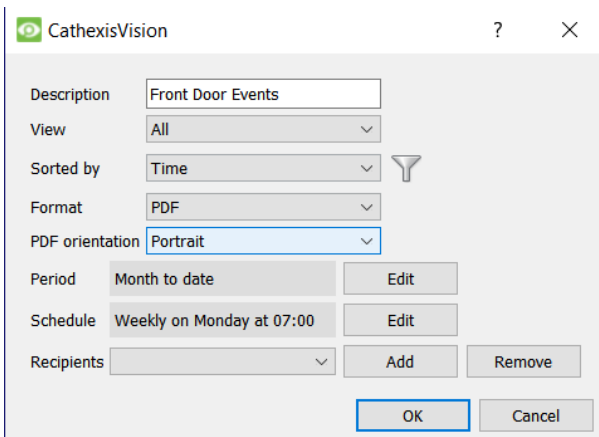


The item will appear in a list.

Once the new report is listed with the other reports, select it for editing to define the reporting schedule.



Either right-click the entry and select schedule or select the entry and click the schedule button at the bottom of the screen



Edit the **Description** if needed.

Edit **Viewing** options.

Select the **Sorted by** option.

Select the **Format**.

Select the **orientation** of the Format.

Select the **Period** to be reported on.

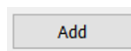
Define the **Schedule** for the report.

Select **Recipients** from the drop-down menu to whom reports will be sent.

### Add/Remove Recipients

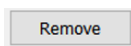
Use the icons to edit the drop-down menu.

**Add recipient**



Click **Add** and enter the email address of the recipient. Multiple recipients may be added. All will receive emails.

**Remove recipient**



Select the recipient from the dropdown menu and click **Remove**.



## 5.2.3 Metadata

Time	2022-01-26 08:05:21
Controller	controller01
Door	FrontDoor
Badge info	-
Carrier info	-
Event Description	Unlocked event, activated

On the right-hand side of the database, meta-data about the event entry is displayed.

## 5.2.4 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.

Time	Controller	Door	Badge info	Carrier info	Event Description	Links
2022-02-17 11:19:51	controller01	FrontDoor	TEST Badge 1234	-	Authorized badge access	
2022-02-17 11:19:57	controller01	FrontDoor	-	-	Unlocked event, de-activated	
2022-02-17 11:22:51	controller01	FrontDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:22:45	controller01	FrontDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:22:51	controller01	FrontDoor	-	-	Unlocked event, activated	
2022-02-17 11:22:51	controller01	FrontDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:22:57	controller01	FrontDoor	-	-	Unlocked event, de-activated	
2022-02-17 11:28:05	controller02	BackDoor	-	-	Access point normal	
2022-02-17 11:28:09	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:28:13	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:28:14	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:28:18	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:28:19	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:28:20	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:28:42	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:28:44	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:28:55	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:29:02	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:29:44	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:29:46	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:30:25	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:30:45	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:30:46	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:30:47	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:30:48	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:32:09	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:32:19	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:32:20	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:32:21	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:32:22	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:32:23	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:32:24	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	
2022-02-17 11:32:35	controller02	BackDoor	TEST Badge 1235	Jim, Jackson	Badge no access event	
2022-02-17 11:32:36	controller02	BackDoor	TEST Badge 1236	Jim, Jackson	Badge no access event	
2022-02-17 11:33:40	controller02	BackDoor	TEST Badge 1234	Potgieter, Evert	Authorized badge access	



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.

## 6. 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 Nedap 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.

### 6.1 Event Window

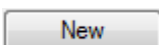
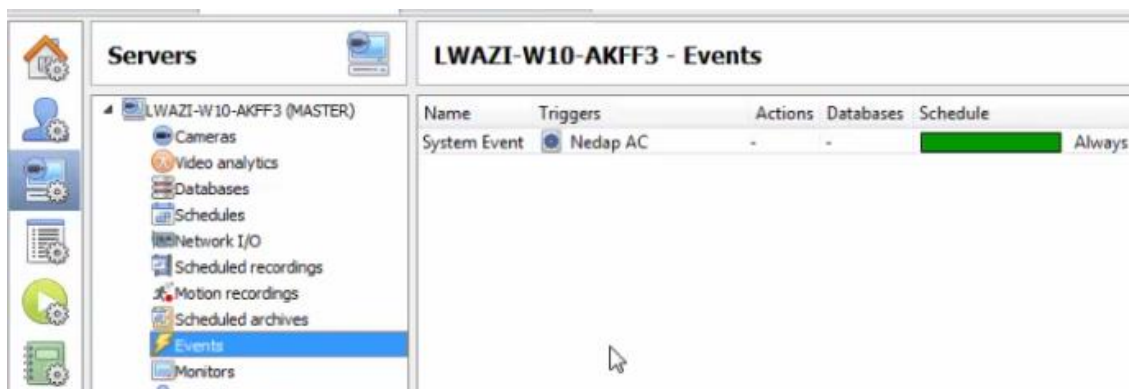
Events in CathesisVision are set up via the Event Window, which has four tabs. In the **General Tab**, an event is given a name, description, schedule and priority. In the **Triggers Tab** the trigger/s for the event is defined. In the **Actions Tab** the action/s which the event takes, is defined. In the **Resources Tab** the various site resources which can be used as part of an event are defined.

### 6.2 Creating an Event

To create an event using the Nedap device, navigate to Events by following the sequence: **Open Tab / Setup / Servers / Master Server / Events**. This is shown below.



This will allow the user to 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**.

## 6.3 General Tab

Create a new event under the General tab by filling in the fields.

Give the event a descriptive **Name**.

Modify the Description if relevant.



Set up a **Schedule** if desired by clicking the icon.

Select a **Priority**.

**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.

The following items will appear:

In the example below, the text “Door Status” will be databased, along with the state of the *door object* that triggered the event:

Description

## 6.4 Triggers Tab

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

### 6.4.1 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”.

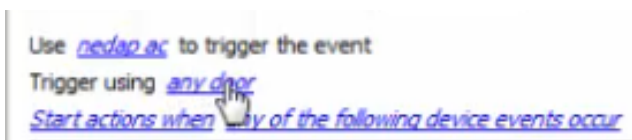
To set the the Nedap device as the trigger, **select the device name** (Nedap) from the drop-down menu.

### 6.4.2 While/When and Any/All

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.

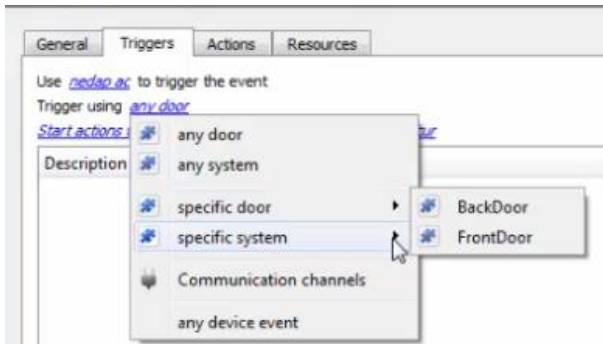
<a href="#">Start actions when</a>	<a href="#">any of the properties meet the following criteria</a>
	<a href="#">any of the following device events occur</a>
<a href="#">Perform actions while</a>	<a href="#">any</a> of the properties meet the following criteria
	<a href="#">all</a> of the properties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



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

### 6.4.3 Trigger Types (Trigger Using)

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



**Any door/system** will trigger if anything happens on any door or system.

**Specific door/system** will trigger on the specific object chosen.

**Any device event** will trigger, initially, when any event occurs on the device.

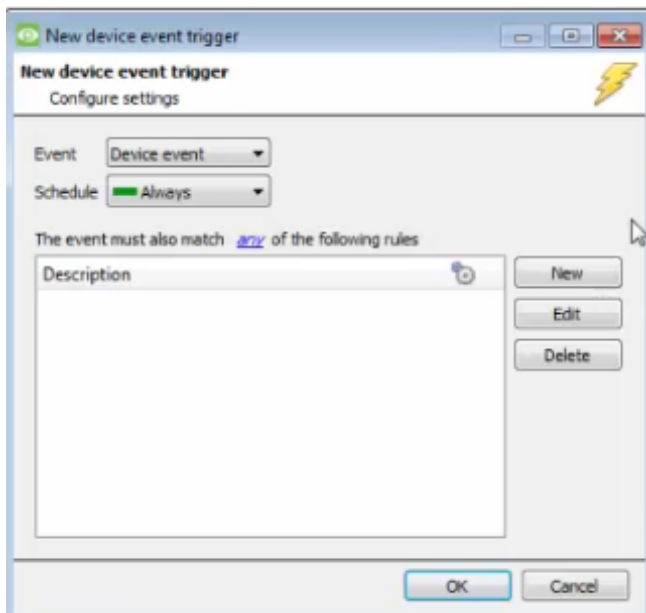
### 6.4.4 Define the Trigger (Any Device Event)

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.

#### 6.4.4.1 New Device Event Trigger



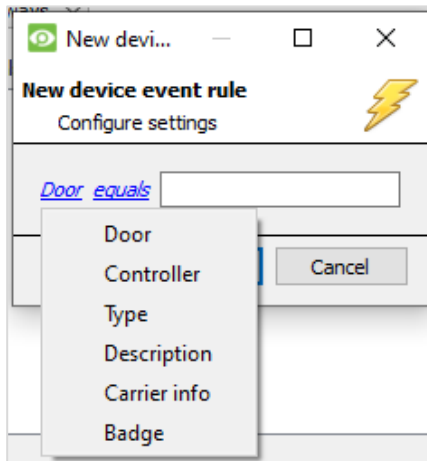
- Choose the type of device Event that will be the trigger. Choose from the drop-down menu.
- Choose a schedule.
- Choose if *any*, or *all* constraints need to be fulfilled to set off a trigger.
- To add/edit/delete a **Device event rule** (a constraint to the device event trigger) use the **New**, **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



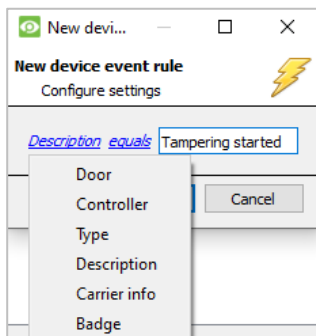
To configure a **New device event rule**, click on New in the **New device event trigger** window. This will bring up the **New device event rule** dialogue.



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.



Some event types require a **written description** where there is no drop-down menu. Fill in the description in the field.

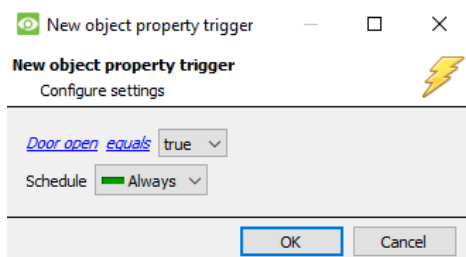
**Note:** Descriptions must be named **exactly** as they appear in the **Databases table**.

Descriptions are **case sensitive**. For example, naming the event “tampering started” will not trigger an event since it does not match the description “Tampering started”.

## 6.4.5 New Object Property Trigger

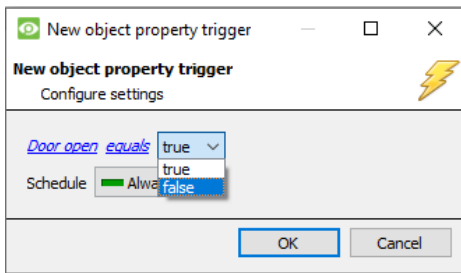
If the user has defined the trigger according to properties meeting criteria (in while/when and any/all), the **New object property trigger** dialogue box will open. In these instances, further constraints need not be set, since they are being added one at a time. This option is better if a few triggers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

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



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

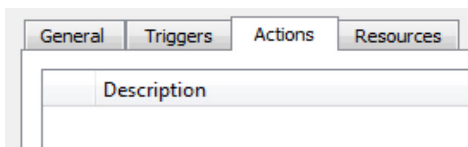
In the example alongside, if “Door open” is the selected event type, a drop-down menu will appear in the next window.



To configure the “Active” event, **select** the appropriate option from the **drop-down menu**.

“true” will trigger a door event in response to doors open.

## 6.5 Actions Tab

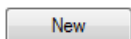


Having defined the triggers that will initiate an event, the user will need to define Actions.

Select the **Actions tab** from the **New event** window.

One of the available actions will be to *control* a Nedap device.


### 6.5.1 Adding an Action

 To add an action, click New in the Actions tab.



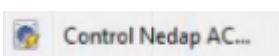
A list of **available actions** will appear. The drop-down contains all the available **action types**. The icons represent the device action **type**.

Select an option.

 This icon represents an action to control. It will state “**Control ...**” and the name of the Action device e.g.

 Control Nedap AC...

#### 6.5.1.1 Control Device



Click a Control device option to bring up the **control device** dialogue.

Under the **Device** tab, the user defines how the device will be controlled. Under the **Advanced** tab, the scheduling of the action is defined.



## Configure Command Window



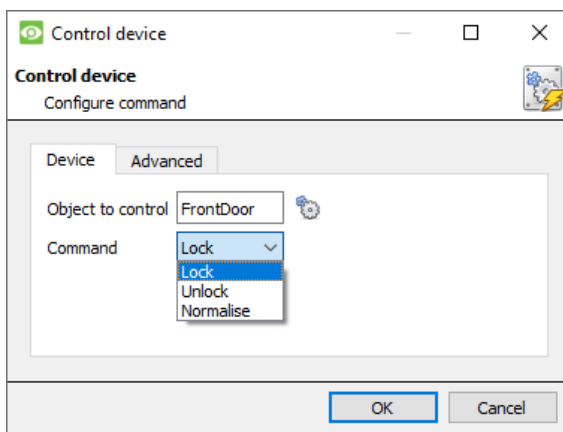
To select an **Object**, click on the settings icon.

This provides a selection of all the Objects available on the Nedap device.



Under the object type parent group, select the individual objects to control.

Click OK.



The **command** drop-down will change to represent the commands available to that Object.

Choose a command with which to control the selected object.

Click OK.



## Advanced

Device: Advanced

Perform action at the: start of the event

Repeat action every 10sec

Don't run action again until 10sec have passed

Schedule: Every day

Choose to **perform action**: either **at the start** of the event, or once the event triggers have subsided.

The two checkboxes allow the user to set the action to repeat every few seconds, and/or not run for a period after it has triggered.

**Schedule** is a standard Cathexis schedule, which may be applied to the actions.

## 6.6 Resources Tab

General | Triggers | Actions | Resources

**Cameras**

- select camera --
- select camera --
- select camera --
- select camera --
- select camera --
- select camera --
- select camera --
- select camera --

Use trigger resources

**Audio input**

-- select audio input --

**Audio output**

-- select audio output --

In the Resources tab, users can select the cameras, audio input, and audio output to be used.

The default is to select "Use trigger resources."

## 7. Maps

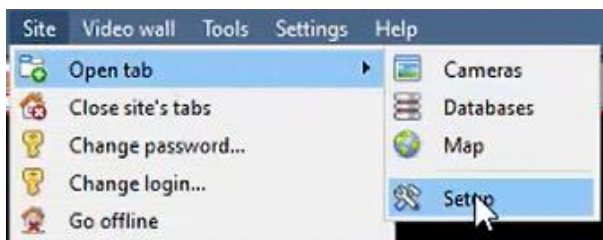
It is possible to add Nedap device to a site map, which will allow for a number of action options when access control events are triggered. These options include the animation of triggered access control events and connecting to site cameras when access control events are triggered, etc.

**Note:** This section will only deal with the specifics of the Nedap device. For more information on using the CathexisVision Map Editor and Map Tab, please consult the *Map Editor Operation Manual*.

### 7.1 Add the Nedap Device as a Resource

To configure the map, the Nedap device must be added as a resource to be added to the map.

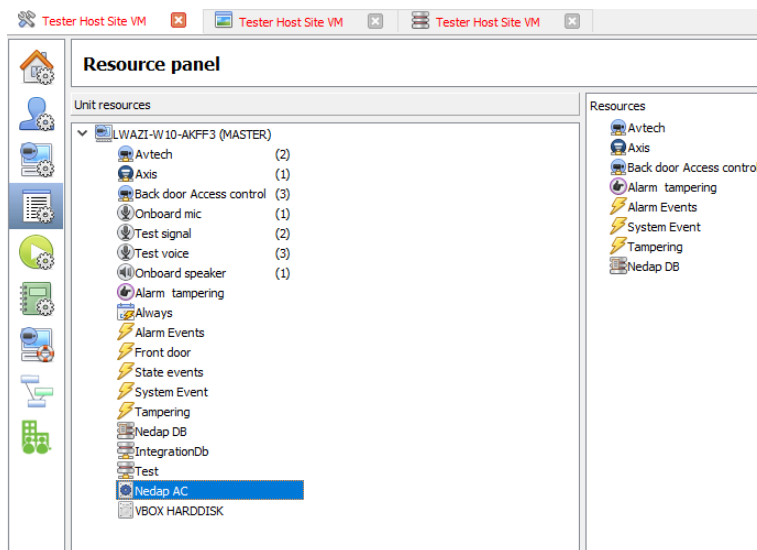
#### 7.1.1 Add the Device in the Resource Panel



Navigate to the **Resource Panel** by following:  
**Site / Open Tab / Setup / Configure resource Panel**



Click the **Configure Resources** icon.



In the site's Resource panel, a list of resources will be displayed.

Select the **Nedap** integration device. Drag and drop it under **Resources** on the right.

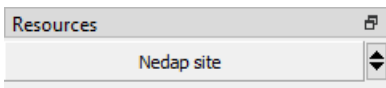
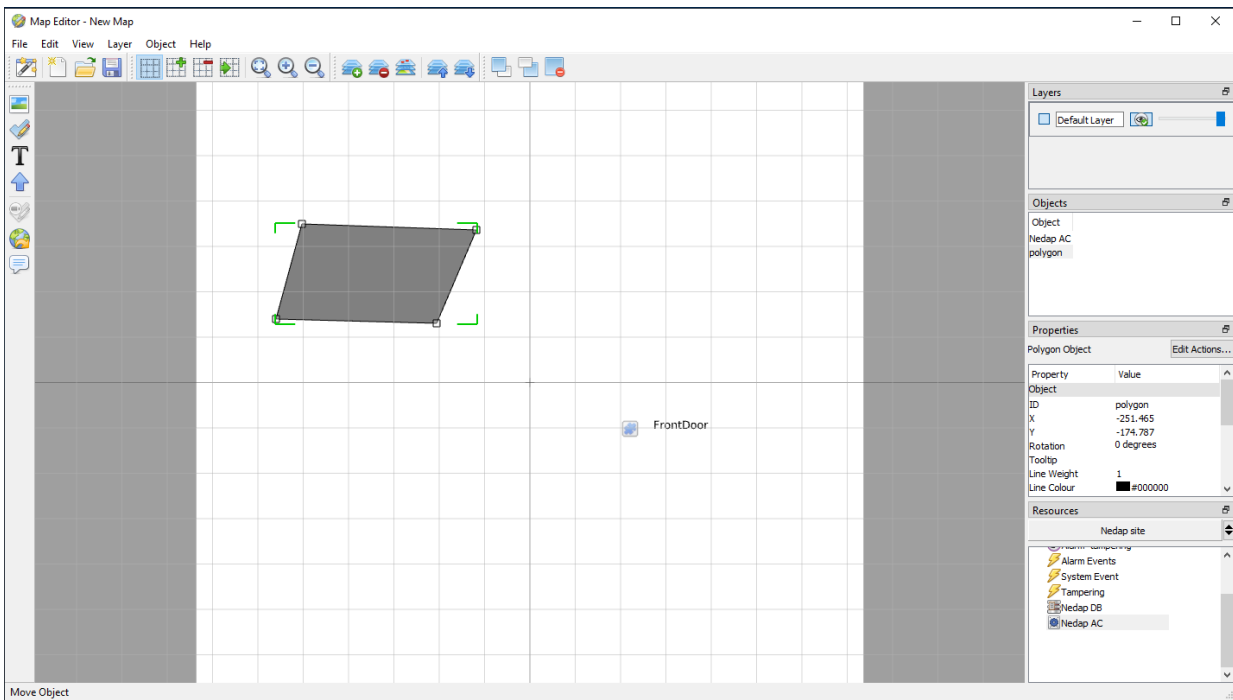
The Nedap integration device will now be listed as a Resource in the Maps editor.

### 7.2 Configure Map Editor



Open **Map Editor**.

Map Editor  
App



On the right, **select** the Nedap Site.

The Nedap integration devices will then be listed as resources underneath.

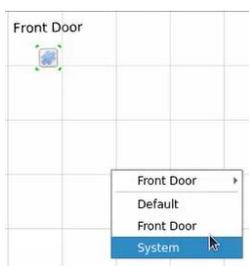
### 7.2.1 Add the Device in Map Editor

Once the Nedap device has been added as a **Resource**, it will be available to drag onto the map area from the **Site Resources** list.

### 7.2.2 Adding Device Objects

**Drag** the Nedap integration device from the Site Resources list onto the map area.

**Select** one of the associated objects as illustrated below.

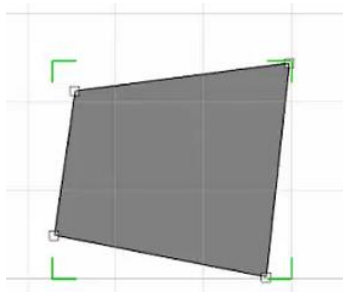


**Note:** To add multiple objects, repeatedly drag-and-drop the Nedap integration device onto the map area to bring up this option.

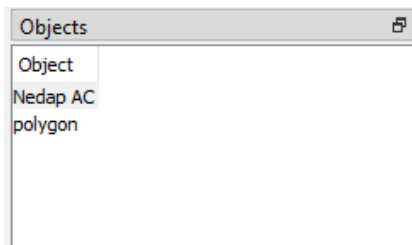
### 7.2.3 Add a Polygon



On the options bar on the left, click the **Add polygon** icon.



Draw a polygon on the map interface.



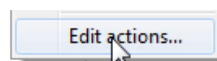
The polygon will now be listed under **Objects** on the right.

### 7.2.4 Adding and Editing Device Actions

To add or edit actions to the device objects:



**Right-click** the map object and select

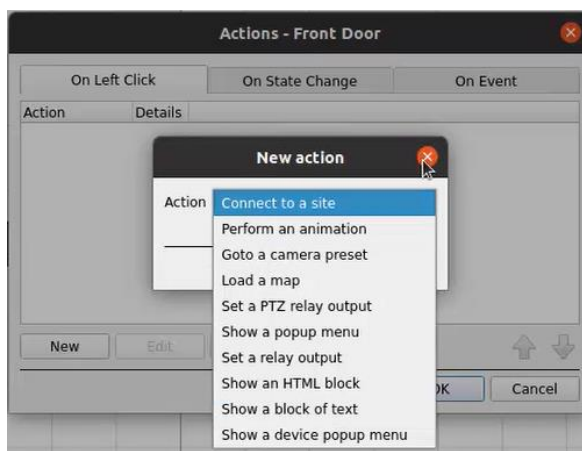


Actions may be set for **Left/Right-Clicks**, **State Changes** and **Events**.

### 7.2.4.1 On Left-Click



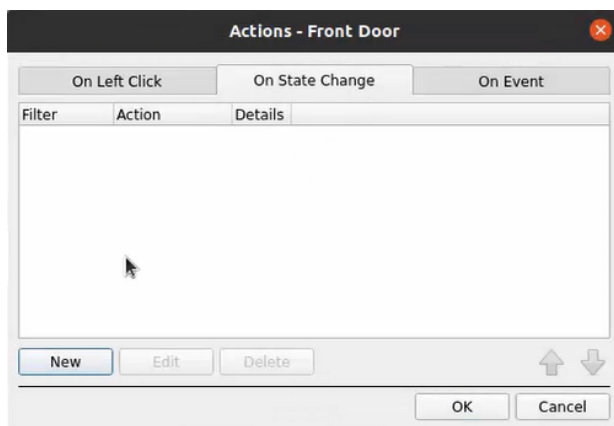
In the **On Left Click** tab in the window that appears, **click New**.



The user can choose an **action** from the drop-down menu.

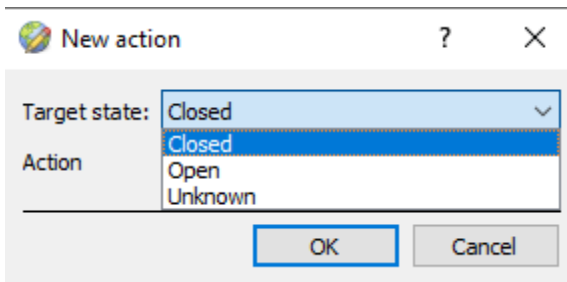
### 7.2.4.2 On State Change

The following example shows how the user can set the polygon to turn green when the object is Open, and red when closed.

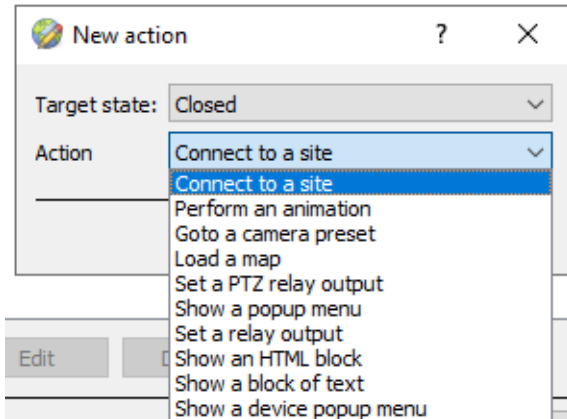


In the **On State Change** tab, select **New**.

## Target State Closed

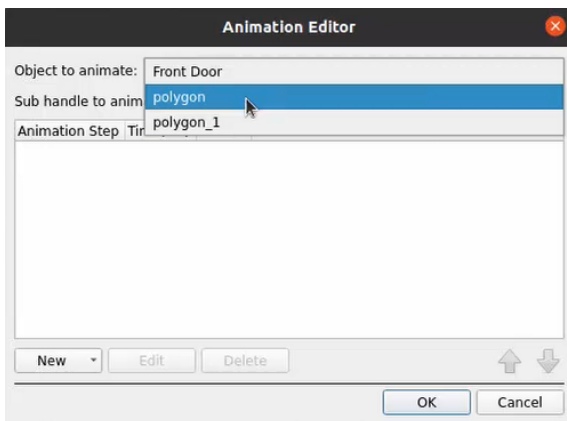


Select the target state as **Closed**.

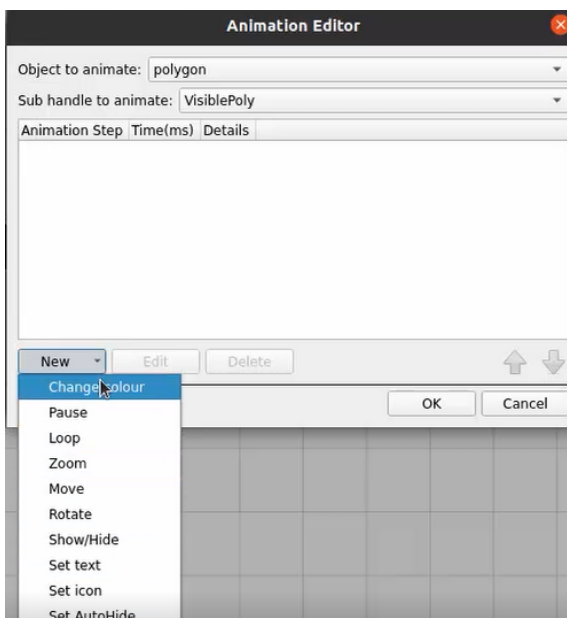


Select an **Action**. In this example, the user has selected Perform an animation.

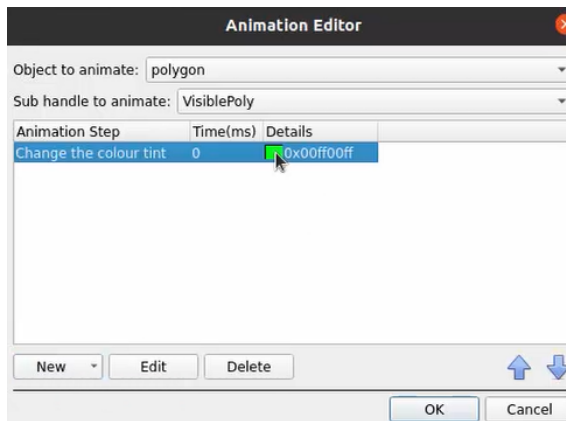
Click OK.



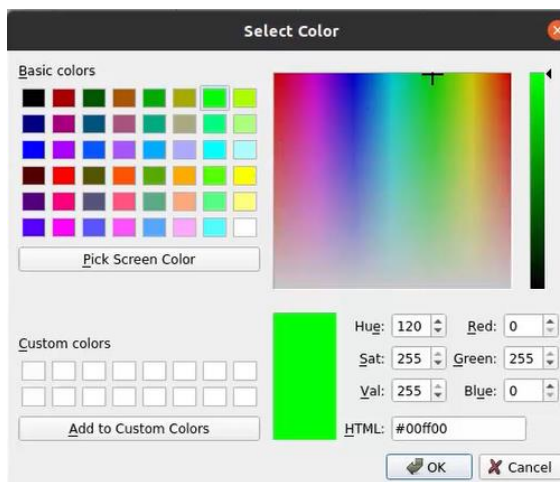
In the Animation Editor window that opens, select the polygon as the **Object to animate**.



Select **Change colour** from the drop-down list.



Double-click on the block of colour under **Details** to edit the colour. A window will appear with colour options.

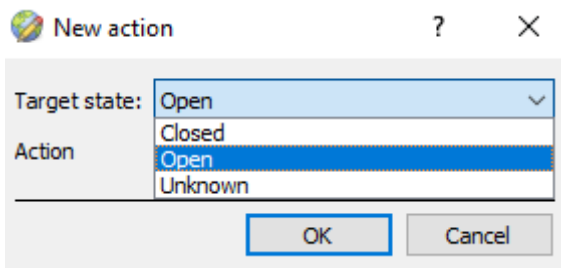


**Select the colour** which will indicate that the Target State is **Offline**. In this example, the user has chosen to keep the colour as green.

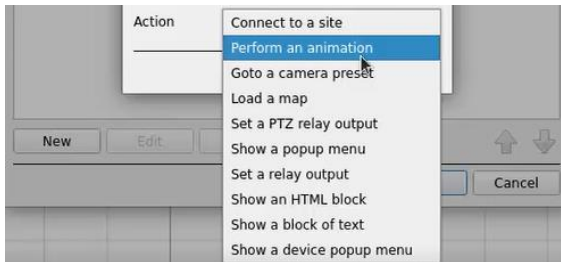
Click **OK**.

On returning to the **Animation Editor** window, click **OK**.

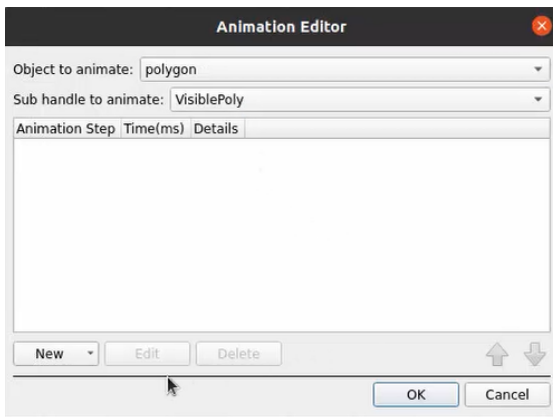
## Target State Open



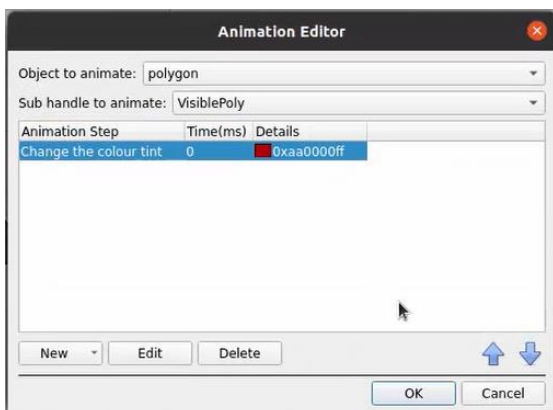
To change the settings for when the door Target State is Open, select **Open** from the drop-down list.



Select an Action from the drop-down list. In this example, the user has selected **Perform an animation**.



In the Animation Editor window that opens, select the polygon as the **Object to animate**.



Select **Change colour** from the drop-down list.

In this example, the user has chosen to change the colour to red.

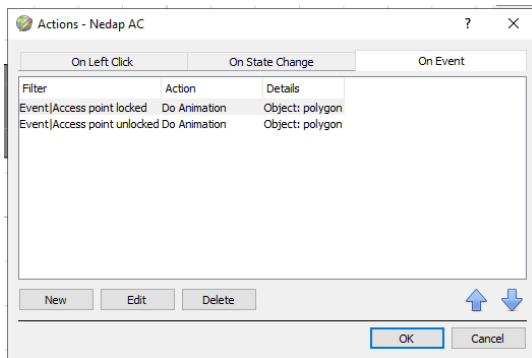
**Note:** Multiple actions may be added to the map objects.

Once finished, save the map.

**NB:** The map **must not be saved** in the Work folder of the installation directory.



### 7.2.4.3 On Event



In the **On Event** tab, select **New**.



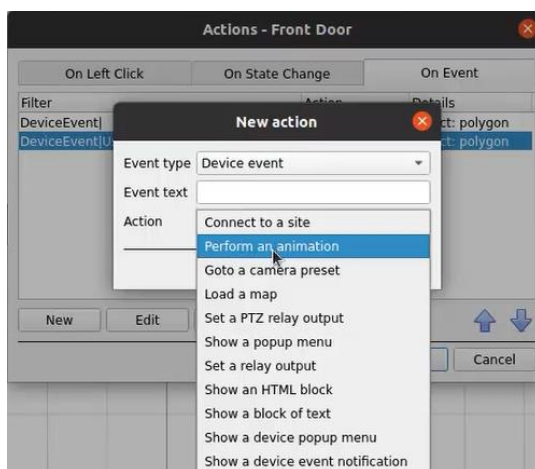
Select **Event type** from the drop-down menu.

Add **Event text**. E.g. User Allowed

Event info	Event Description	Links
	Access point unlocked	
	Access point locked	
	Access point unlocked	
	Access point normal	
	Access point locked	
	Access point unlocked	
	Access point locked	
	Access point unlocked	
	Access point locked	

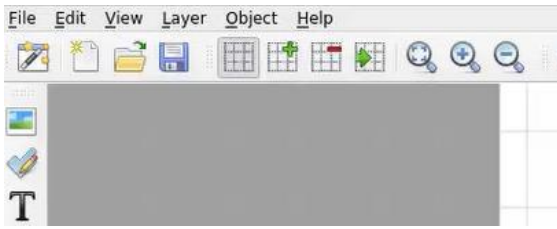
**Note:** The name given in the Event text field must be identical to the **Event Description** in the CathesisVision database table, as in the image alongside.

Descriptions are **case sensitive**. “Access Point Locked” should not be written as “Access point locked”.

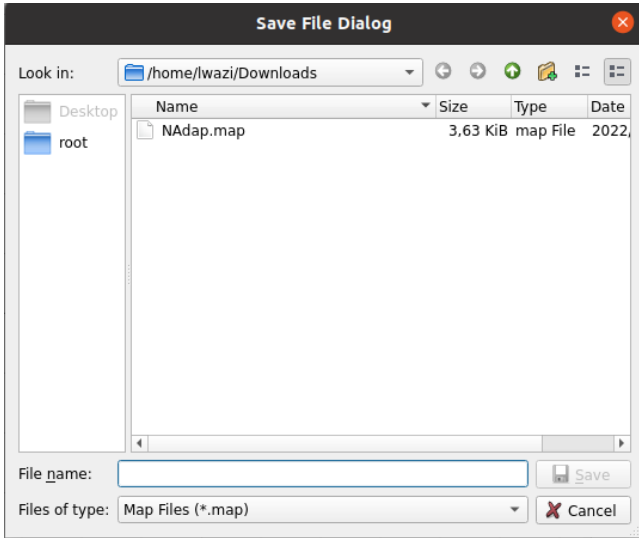


The user can choose the Event type (Any Event or Input Event) and select an action from the drop-down list.

## 7.3 Save Map



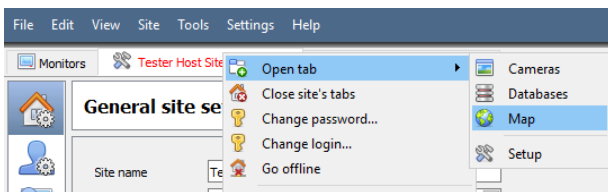
In map editor click the **Save** icon.



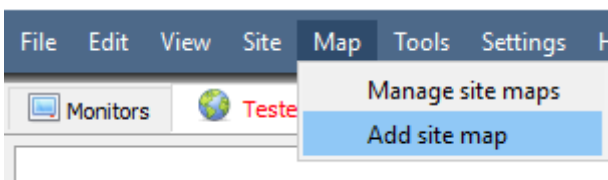
Give the map a name. Click **Save**.

## 7.4 Load Map Onto CathesisVision

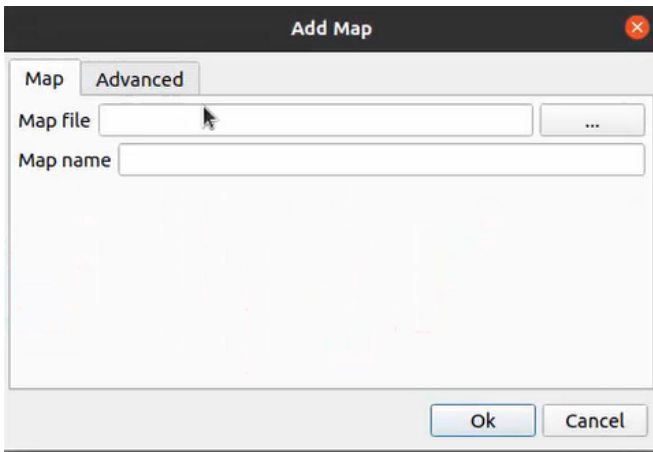
Upload the saved map to CathesisVision. Once the map is open, all objects added to the map area in the Map Editor will be visible on the map, and all actions set will be available.



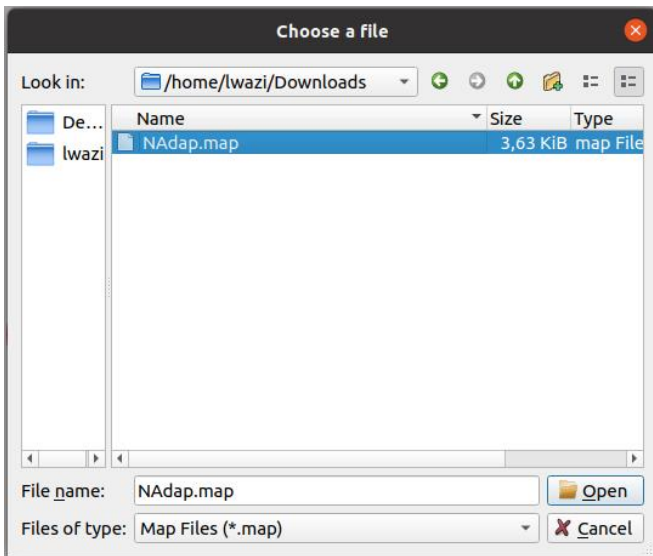
In CathesisVision, go to **Site / Open tab / Map**.



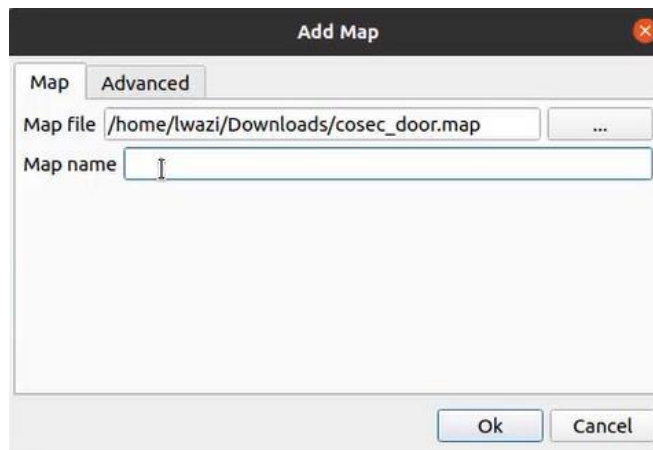
Then, in the Map tab, go to **Map / Add site map**



In the **Add Map** window that opens, click on the ellipses icon to retrieve the **Map file**.



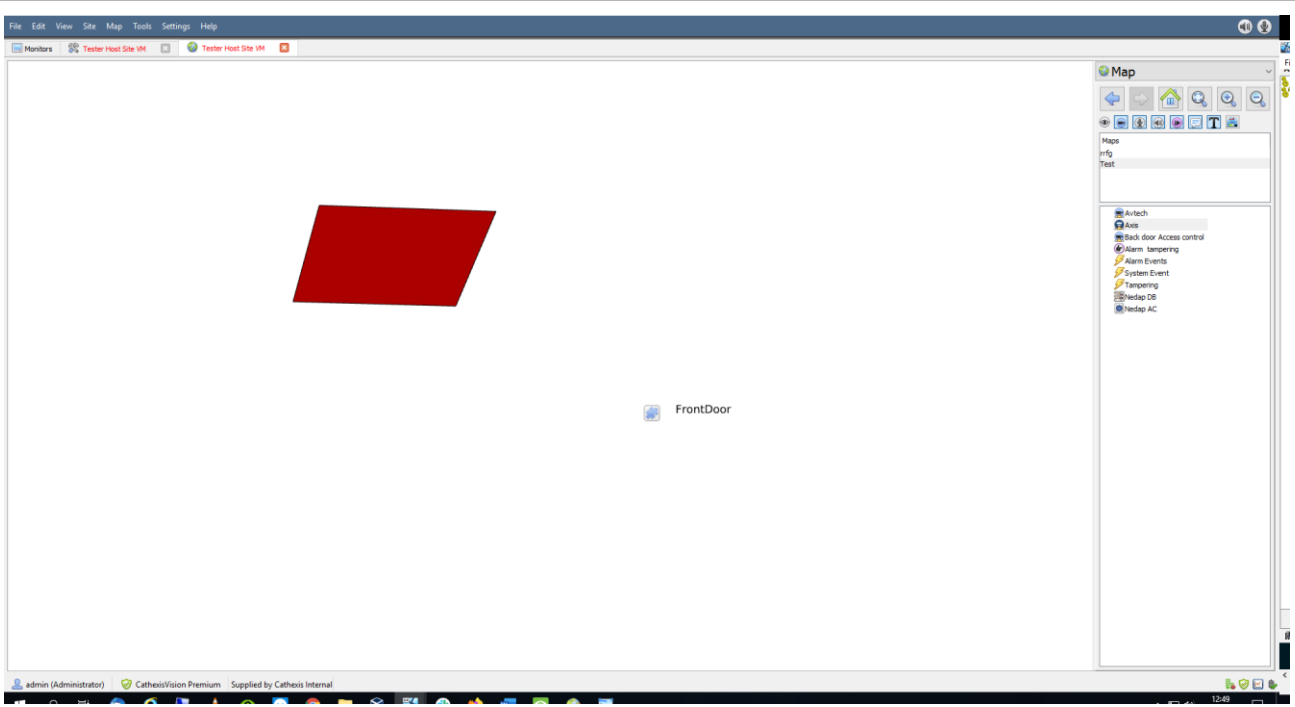
Select the integration map and then click **Open**.



Give the map a **descriptive name**.

Click **OK**.

The applied changes will now be reflected on the map tab, as shown below.



## 8. Conclusion

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

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