



# CathexisVision 2016.3 SALTO Access Control Integration

# Contents<sup>1</sup>

1	Introduction .....	3
a.	License Requirements.....	3
b.	Integration Components.....	3
2	SALTO Web Interface .....	4
a.	Server Information.....	4
b.	General System Information.....	5
3	Device Addition and Configuration .....	6
a.	Introduction.....	6
b.	Devices Section (Add a New Device) .....	6
c.	Configuration Section (Tabs) .....	7
4	Database.....	12
a.	Introduction.....	12
b.	Navigate to the Database .....	12
c.	Database Interface .....	12
5	Events.....	15
a.	Introduction.....	15
b.	Triggers .....	15
c.	Actions .....	17
6	Map .....	19
a.	Add the SALTO Device as a Resource .....	19
b.	Add the Device in Map Editor.....	19
c.	Map Tab.....	20
7	Conclusion .....	21

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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 SALTO Access Control device with CathexisVision. CathexisVision communicates with the Salto device through the SALTO software. The access control system consists of SALTO network door controllers and connected equipment such as doors and readers. The driver monitors door and reader events and properties. Functionally this integration will entail the triggering of standard CathexisVision Events, based on general and zone events.

## **Note:**

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

## a. License Requirements

<b>• License No.</b>	<b>• License Name</b>	<b>• Description</b>
<b>CSAL-1000</b>	SALTO access control door license.	This licenses all doors associated with the device. Each door requires a license.
<b>CSAL-2000</b>	SALTO access control device license.	This licenses the SALTO device itself
<b>CSAL-3000</b>	SALTO access control bundle license.	This bundle includes licenses for the SALTO device as well as for unlimited doors.

**Note:** If you do not purchase the bundle license, then the device and door licenses must be purchased together. All doors must be licensed individually.

## b. Integration Components

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

**Device** The device is CathexisVision software's interface, which handles all the interaction between CathexisVision and the integrated hardware. When you add an integration to the CathexisVision system, you add a device.

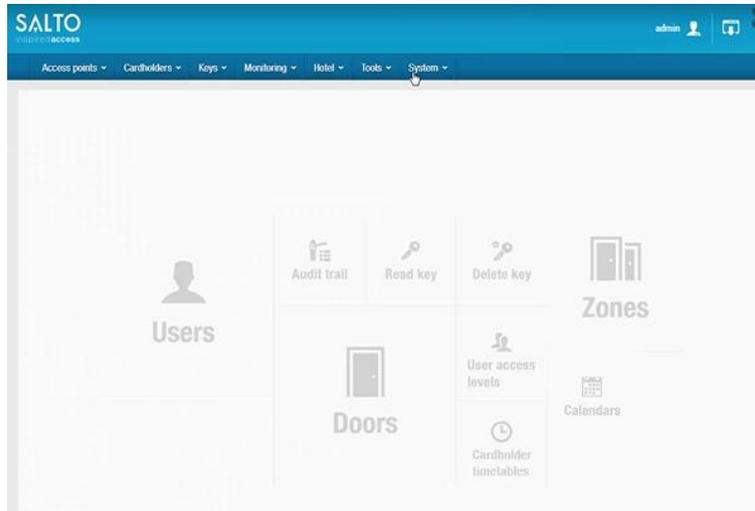
The messages received from the device are called Device Events.

**Objects** Objects are the individual pieces of hardware that comprise the integration. You may have multiple "object types" under the objects group. For example, the main controller and door nodes, of an access control system, are both objects. They are different types of object.

In the case of the SALTO device, the **device** is the integration itself; the objects are the **doors** and the **SALTO Server**.

## 2 SALTO Web Interface

Before continuing with the SALTO device setup in the CathexisVision software, you will first need to check the settings on the SALTO web interface. To do this, you should have already set up a SALTO server. Use the IP address from your SALTO server to log into the web interface.

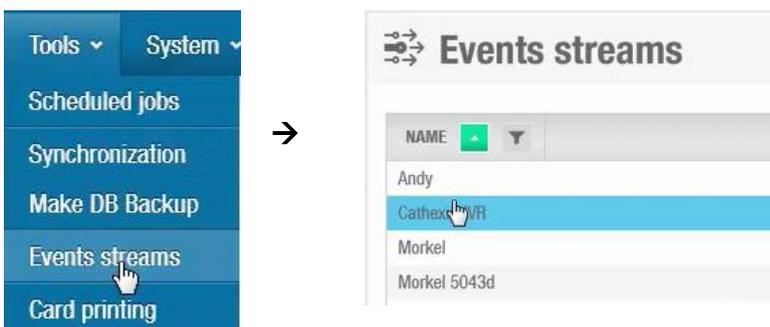


Note down the required information from the web interface, as it is required for the configuration of the SALTO device in the CathexisVision software. The below sections will guide you through obtaining the required information.

### a. Server Information

In this section, you will be taking note of the specific settings for your SALTO server. To navigate to your server, follow the below instructions:

**Tools menu → Event streams → Your Server Name**



- **Server Information**

Once the **Events stream** page has loaded, look at the right side of the page, under **Transport Layer**.

1. Take note of the **IP address (Host name)** of your SALTO server.
2. Take note of the **Port number**.

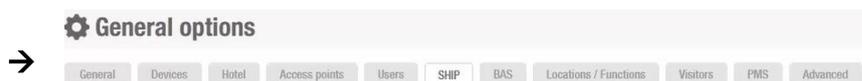
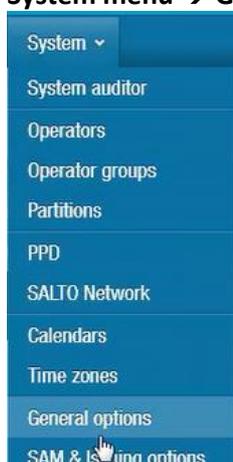
**Note:** The above IP address and port number are examples only; your information will be different.

Next you will have to check the general system options.

## b. General System Information

In this section, you will be taking note of the general system settings for your server. To navigate to general options, follow the below instructions:

**System menu → General options → SHIP Tab**



- **SHIP Tab**

Once in the SHIP tab, you will need to take note of the following:

1. Make sure the TCP/IP port is Enabled.
2. Note down the TCP/IP port number.

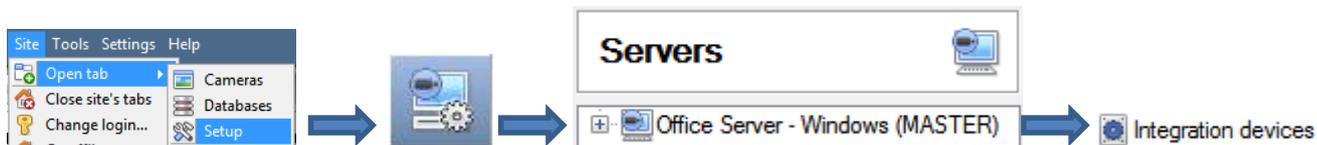
**Note:** The above IP address and port number are examples only; your information will be different.

Once you have all this information noted, please move to the CathexisVision software to install and configure your SALTO device.

## 3 Device Addition and Configuration

### a. Introduction

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:



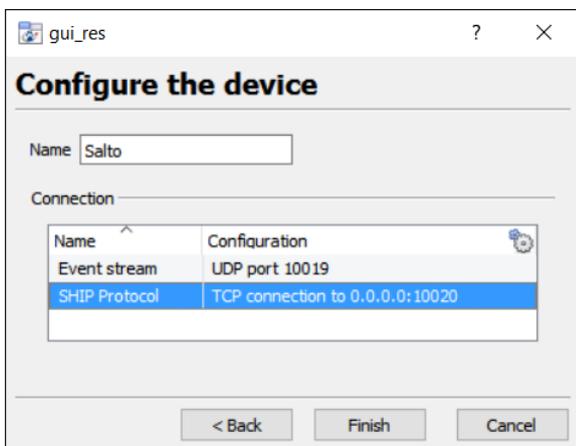
You will notice two sections in the Integration Panel:

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.

### b. 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 the **Salto Access Control** driver.

#### Add the Device

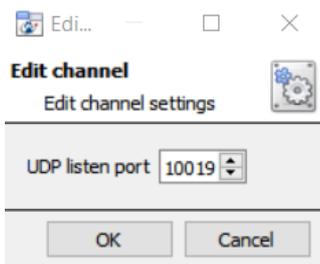


Give your device a descriptive **name**.

You will need to enter the port numbers and IP address of your SALTO server.

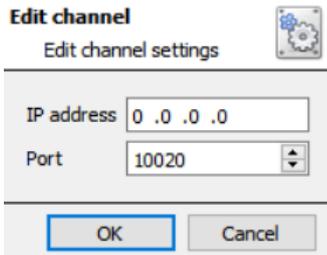
To do this, double-click **Event stream** and SHIP Protocol to bring up the dialogue windows below.

- **Event Stream**



Enter the **UDP port number** from the **Event Streams** page on the **SALTO web interface**. (See Section 2.a)

- *SHIP Protocol*



Enter the **IP address of the server on which the SALTO device is configured.**  
See Section 2.a.

Enter the **TCP/IP port number** obtained from the SHIP tab in the SALTO web interface. See Section 2.b.

Once you have configured and added the SALTO device, select it in the **Devices list** and all SALTO objects will automatically populate the **Configuration Section**.

### c. 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.**

Your SALTO objects will have been automatically populated when you configured and added the device.

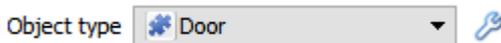
#### Object Configuration Tab

The object configuration tab is the tab where you may view all the individual objects that comprise the integration. The SALTO integration objects are **Doors** and the **SALTO Server**.

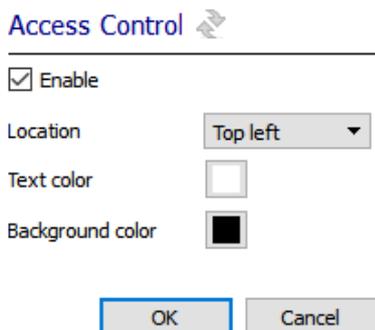
In this tab you may see the **Names, Cameras** and **Groups** assigned to each object.

- *Configure Door Object Overlays*

You may configure the Door Object overlays when Door is selected as object type.



Click the  icon to bring up the overlay options below:



Check the box to **Enable** the overlay.

Define the **Location** of the overlay.

Define the **Text color** of the overlay.

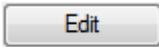
Define the **Background color** of the overlay.



Once configured, your overlay will display all relevant information over the live, review and databased video feeds.

- **Object Configuration Buttons**

In the case of the SALTO device, existing objects are detected automatically. You will not be able to manually add an object.

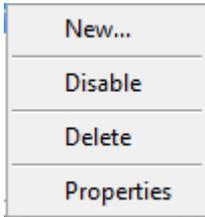


Will open up an existing object for editing.



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

- **Object Configuration Right-click Options**



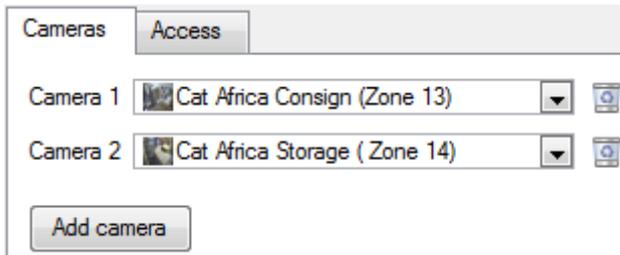
**New** does not apply to this integration, as objects are detected automatically by the system.

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

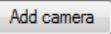
**Delete** will permanently remove this object from the list.

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

**Properties: Cameras**



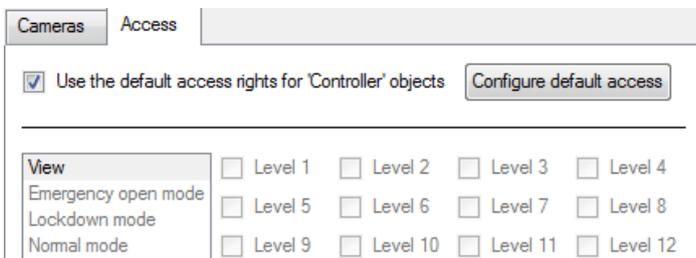
Adding a camera to an object will mean that, whenever there is an event on that object, the recording from that camera will be related to the time and date of the object event, in the Integration database.

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

To delete a camera click on .

**Note:** If you do not have **continuous recording** setup, on associated cameras, you will run the risk of zones (object) 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.

**Properties: Access**

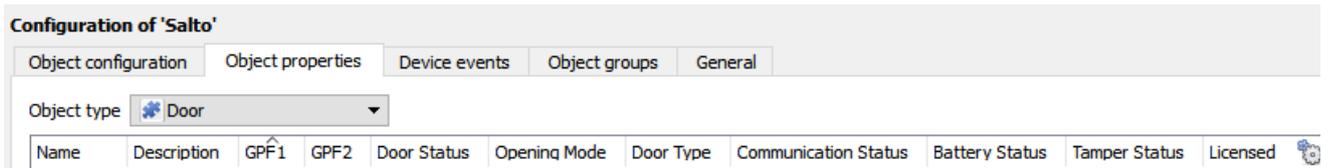


**Access** allows you to protect sensitive objects, by only allowing certain levels users access to them.

You will see a list of objects for which you may set access levels.

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

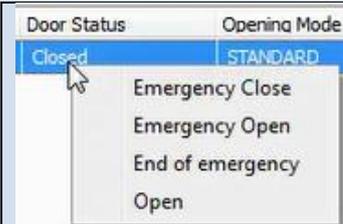
## Objects Properties Tab



The Object properties tab allows you to view the objects, sorted by type. In the case of the SALTO device you will have the options of viewing by **Door** or **Salto Server**.

Below are the definitions for each of the specific object type columns found in the Object Properties tab.

### Door Object

State	Meaning
<b>Name</b>	The name of the door object.
<b>Description</b>	Description of the door object.
<b>GPF1</b>	General Purpose Field 1.
<b>GPF2</b>	General Purpose Field 2.
<b>Door Status</b>	<p>The current status of the door. These include <b>Opened, Closed</b> and <b>Intrusion</b>. Right-click for the following options:</p>  <p>Use these options to manually change the door status.</p> <p><b>Note:</b> Manually opening the door will only open it for a few seconds.</p>
<b>Opening Mode</b>	The mode in which the door was opened.
<b>Door Type</b>	Shows the type of door: <ul style="list-style-type: none"> <li>Control Unit (IP door). Connected through the Ethernet cable.</li> <li>RF Wireless Escutcheon. Connected over the wireless network.</li> </ul>
<b>Communication Status</b>	This indicates the communication status between the SALTO software and CathexisVision.
<b>Battery Status</b>	Shows the battery status of the SALTO device.
<b>Tamper Status</b>	Indicates whether the door has been tampered or not. During tamper, the status will read as <b>Alarmed</b> .
<b>Licensed</b>	Shows whether the object is licensed or not.

**Note:** You may add and define general purpose fields in the SALTO software.

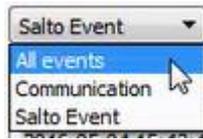
### SALTO Server Object

State	Meaning
<b>Name</b>	The name of the Server object.
<b>ProtocolID</b>	Indicates the Protocol ID; here it is SHIP.
<b>Protocol Version</b>	Indicates the Protocol version.
<b>Default Language</b>	<p>The default language will be displayed here. Default language may be changed on the SALTO software.</p> <p><b>Note:</b> This is not recommended as the changed language may not display correctly on the CathexisVision software.</p>

<b>Is Connected</b>	This shows whether the server is connected or not. A  indicates it is connected, and a  indicates that it is not.
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### Device Events Tab

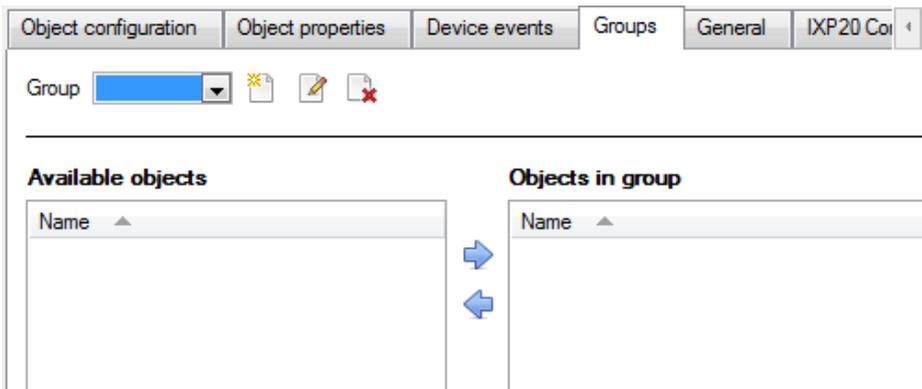
This will list real time events happening on this device. It is an excellent way for installers to see that the integration is functioning, and to monitor the live events happening on site.



You may view the following event types:

**Note:** When navigating away from this window, the device events for that session will disappear but will still be accessible in the integration metadata base. Please see **Section 3 Database** for more information on navigating to and interacting with the database.

### Groups Tab

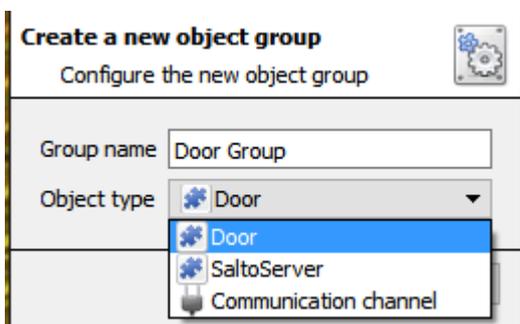


You can create groups of the same type of object.

**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 zones/partitions in that group are 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

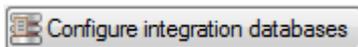
Currently the general tab deals with the integration database. Here you will be able to select a pre-created database, or you will be able to configure a new database.

- **Select an Integration database**

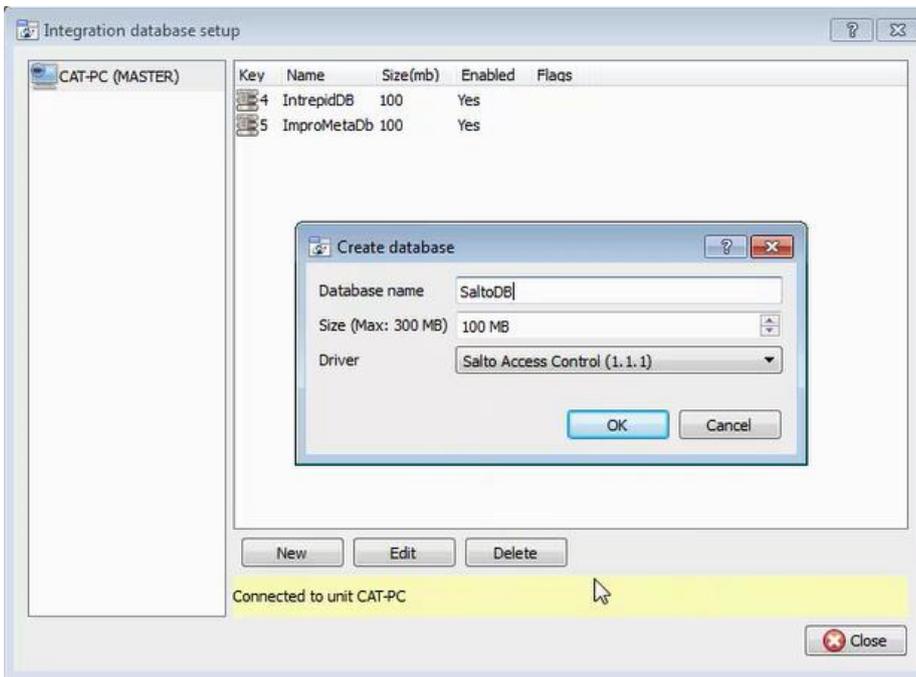
If you have already created an integration specific database, select it by clicking ⚙️. Only databases relevant to the integration you are adding should appear.

If you have not yet created a database, see below.

- **Configure a new database**



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



Give your database a **Name**.

Select the **Size** of your database. The max is 100MB.

Select the **Salto Access Control** driver.

Click **OK** when done.

You may now select your newly created database by clicking the ⚙️ and selecting it from the drop down menu.

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

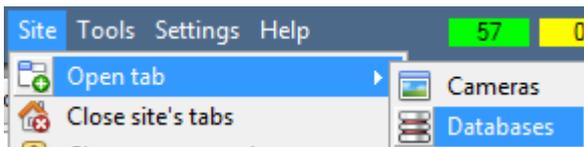
## 4 Database

### a. Introduction

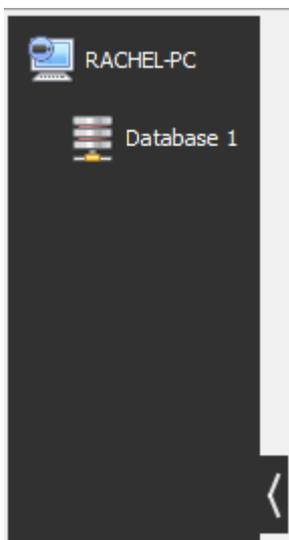
The database tab will allow you to navigate the records in each individual database. In the database tab each database is presented as a table. It has built in filters, and the ability to navigate by timestamp. If a database record has an associated recording you will also be able to launch this recording,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

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

### b. Navigate to the Database



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



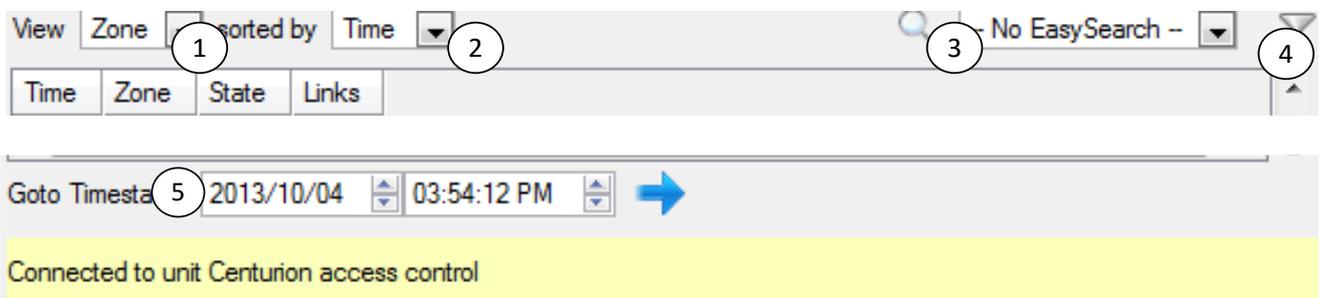
This will take you to the Database Tab.

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.

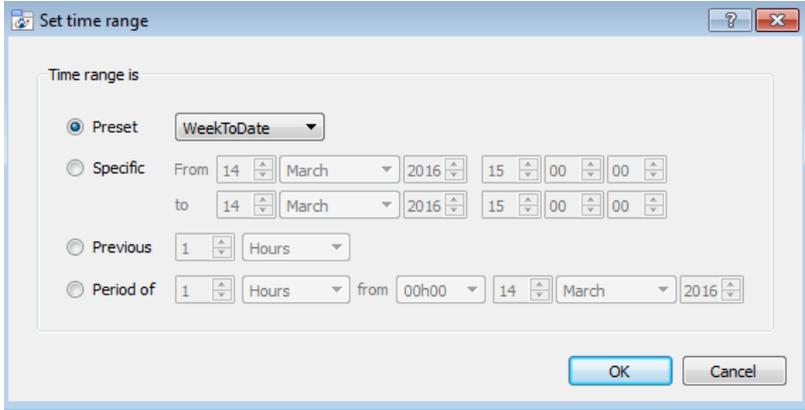


Hover over the  on the left-side of the camera image to bring up the database panel on the left.

### c. Database Interface



<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 SALTO database allows viewing by <b>All</b>, <b>SALTO</b> and <b>Communication</b> events.</p>
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② Sorted By	You may further sort the Events based on the following parameters: <b>System Time</b> or <b>Device Time</b> .
③ Easy Search	The easy search option allows you to quickly search the database within one of the following options: <b>zone, ID, partition, event</b> or <b>group</b> .
④ Filter 	<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>System time, device time, zone, ID, partition, event, or group</b>.</p> <p>You may also set a <b>Time range</b> within which the search will be conducted. 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 you may define the time range:</p>  <p>Once you have the filters dialogue open you will have the following options:</p> <ol style="list-style-type: none"> <li>1. To <b>enable</b> filters check this box: <input checked="" type="checkbox"/> Enable filters</li> <li>2. To <b>add</b> a new filter click on . The filter icon  will change to  when filters are active.</li> <li>3. To <b>delete</b> an added filter click on .</li> </ol> <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="#">Device Time</a> to change the filter from Device Time, to any of the other available options.)</li> </ol>
⑤ Go to Time	This will allow you to go to a specific point in time, down to the second. To navigate to a timestamp set the time using the time and date boxes, and then click on the  icon.

## Viewing an Entry's Associated Recording



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.

 will give you the view to the left.

 will break down the image into 4 sequential frame viewers.

# 5 Events

## a. Introduction

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

### Events

To create an event using the SALTO 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, click the SALTO device that you want to trigger the event with.

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

When triggering on a door 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.

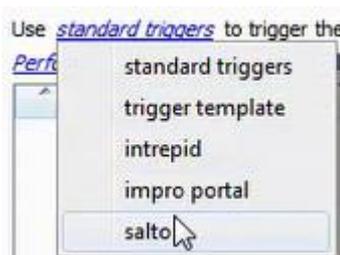


As usual, to change these settings click on the blue hyperlinks.

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

- *Trigger Types*



- Any door** will trigger using any of the doors.
- Any saltoserver** will trigger using any of the configured servers.
- Objects in group...** will trigger using any of the objects in that group.
- Specific door** will trigger using only a specific door.
- Specific saltoserver** will trigger using only that specific server.
- Any device event** will trigger when any trigger occurs on the SALTO device.

**Note:** If you created object groups, the option to trigger using specific/any group will appear here.

**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.

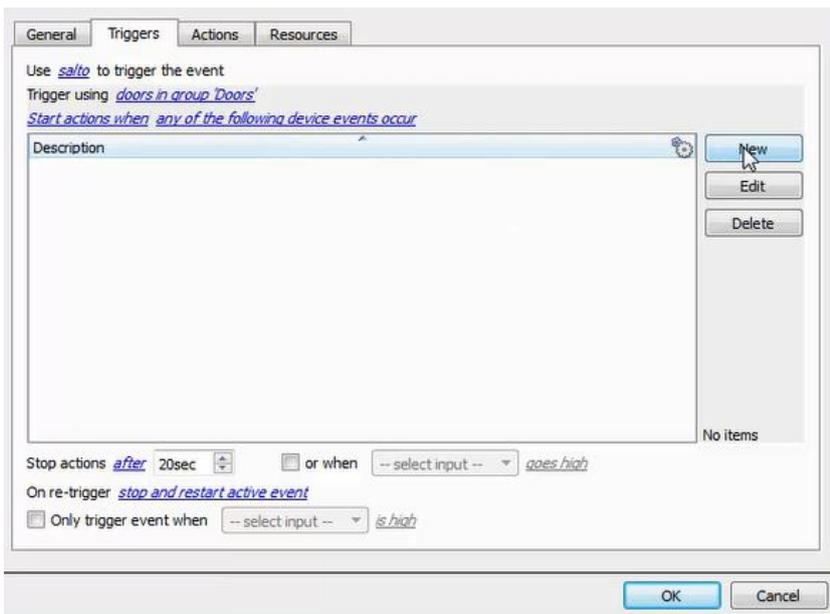
Click on the  to see a list of available descriptions.

```
Example usage: value=$input_name
```

In this example, replace 'value' with the name you would like to database the event under.

### 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:



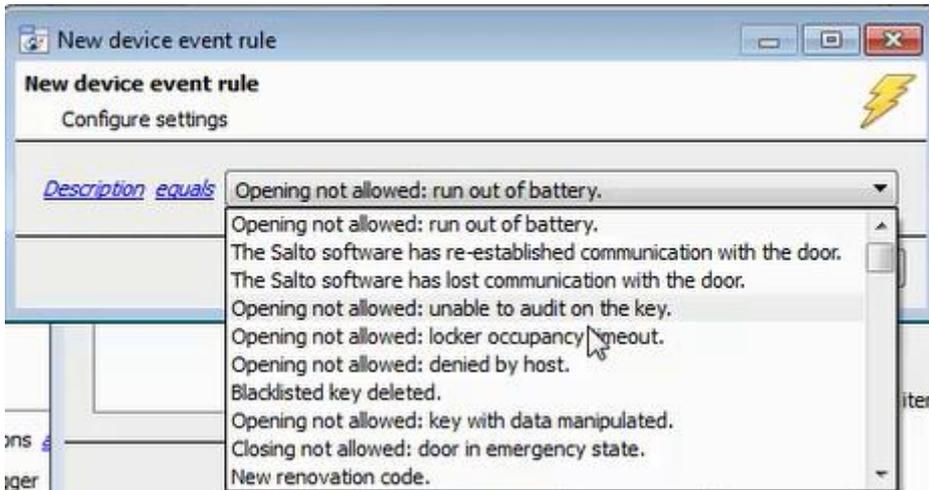
For example within the **any device event** option you may choose what type of device Event will be your trigger. Choose from the drop-down menu.

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:** If you set no constraints, every device event will trigger this. Once you set constraints only the constraints chosen will trigger the event. 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 .

- *Any Device Event*



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

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

**Note:** When all available options are known to CathexisVision you will see a drop-down menu. When these variables are not pre-defined you will need to fill them in yourself. The information pulled through to the events is information sent to CathexisVision from the SALTO device, see the SALTO 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 in the **Actions tab** of the **New Event** window.

To set an action for an event trigger, click  and select an action from the available options:

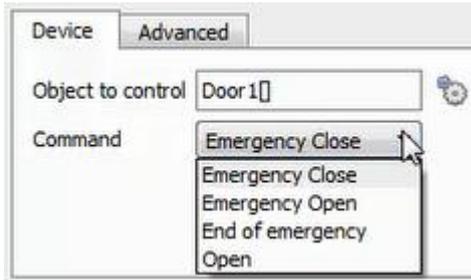


One of the available actions will be to *control* the SALTO device.

#### Control device

This will 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.

- *Device*



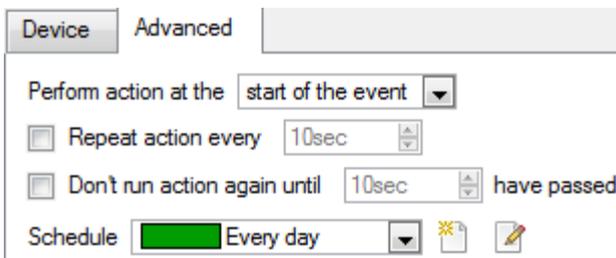
To select an **Object to control** click on the  icon. This will give you a selection of all the Objects available on the SALTO device.



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

**Note:** you may only take a global action here, and global actions may only apply to **controllers**. For example, you may not control **communication channels** as part of an event action. If you select one of these objects you will have no options in the *Command* menu.

- *Advanced*



You may choose to **perform action 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.

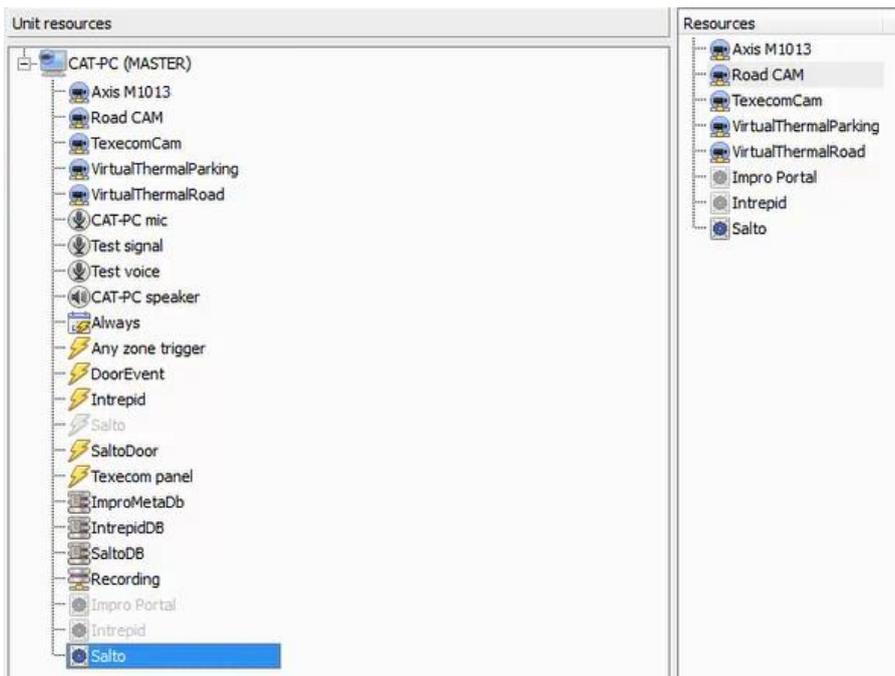
**Schedule** is a standard CathexisVision schedule, which you may apply to the actions.

## 6 Map

It is possible to add the SALTO device to a site map, which will allow for a number of action options when zones/partitions are triggered. These options include the animation of triggered zones and connecting to site cameras when zones are triggered, etc.

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

### a. Add the SALTO Device as a Resource



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

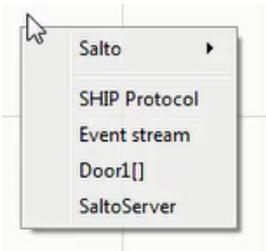
- **Add the Device in the Resource Panel**

1. Navigate to the **Resource Panel** by following **Site** → **Open Tab** → **Setup** → **Resource Panel**.
2. Drag the SALTO device from the **Unit Resources** list into the **Resources** list, on the right.

### b. Add the Device in Map Editor

Once you have added the SALTO device as a **Resource**, it will be available to drag onto the map area from the **Site Resources** list.

#### *Adding Device Objects*

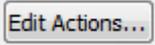
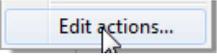


Drag the SALTO device from the Site Resources list onto the map area.

Select one of the associated objects.

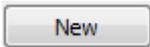
**Note:** To add multiple objects, you must repeatedly drag-and-drop the SALTO device onto the map area to bring up this option.

- **Adding Device Actions**

To add actions to the device objects, either select the object on the map and click  or right-click the map object and select .

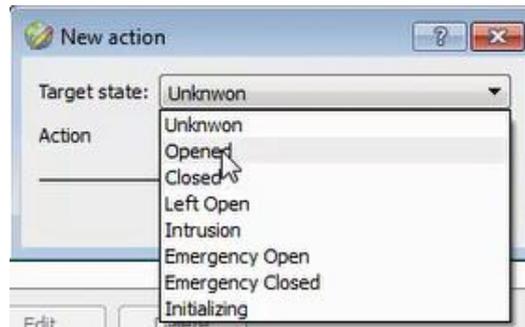
- **Action Options**

Actions may be set for **Left/Right-Clicks, State Changes** and **Events**. To create a new action, select

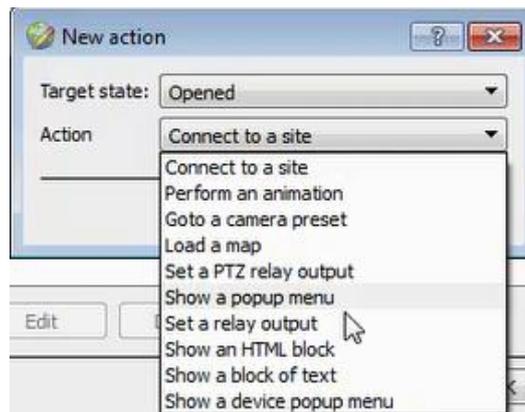


The action triggers will differ according to the object selected. Consider the following example for an action based on a door state change:

Door state change:



Action:



### c. Map Tab

You need to upload your saved map to CathexisVision. Once you have your map 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.

## 7 Conclusion

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

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