



# Woolworths Point-of-Sale Version 2 Integration App-note

6 January 2022

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# 1. Introduction

This document will detail the integration of the Woolworths V2 Point of Sale (POS) system with the CathesisVision software. CathesisVision communicates with the Woolworths V2 Point of Sale (POS) software to trigger CathesisVision events.

The Woolworths V2 Point of Sale (POS) driver sends and receives UTF-8 encoded XML messages over UDP and can be used to integrate third-party POS systems. This document will detail the configuration of both the Woolworths V2 POS device and the POS simulator.

## 1.1 Requirements

### 1.1.1 General Requirements

- Windows 7 - 64bit and later, Windows Server 2008 R2 and later.
- Ubuntu 12 and Ubuntu 16.
- CathesisVision 2020.1 and later.

**Note:**

- For information regarding the regular operation of a POS device, please consult the relevant POS manufacturer.
- The connection is via UDP, and the port number on the POS system needs to match the number entered in CathesisVision during setup. Check this UDP Port is open and not blocked by the Firewall.

### 1.1.2 CathesisVision License

License	Name	Description
<b>CWWP-1001</b>	Woolworths POS Till license	These licenses apply to the tills in a point-of-sale system. The <b>CWWP-1001</b> will license a single till, and may be added on a till-by-till basis.
<b>CWWP -2000</b>	Woolworths POS device	This license is the “base” license to integrate with the point-of-sale system. It is applied to the server to which the point-of-sale device is connected. This licence will allow for the connection of a single integration device.
<b>CWWP -3000</b>	Woolworths POS bundle	This license includes one <b>CWWP -2000</b> point-of-sale device license, and also provides support for unlimited <b>CWWP-1001</b> till licenses.

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

## 1.2 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.

### A NOTE ON CAMERA CHANNELS

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

This section indicates the Woolworths POS integration features.

## 1.3 Features and Abilities

This section indicates the Woolworths POS integration features.

- The Woolworths Point of Sale (POS) driver sends and receives UTF-8 encoded XML messages over UDP.
- CathesisVision receives event messages from the POS device.
- System and Till device event messages can be used to trigger a CathesisVision system event.
- Till objects support camera overlays.

### 1.3.1 Device Objects

Object Type	Feature
<b>General Object Features</b>	<ul style="list-style-type: none"> <li>• Relevant Till objects populate when CathesisVision receives device event messages.</li> <li>• Displays information about the associated Till.</li> <li>• Till events on the device can be used to trigger CathesisVision system and map events.</li> </ul>

		<ul style="list-style-type: none"> <li>• Supports camera overlays.</li> </ul>
Till	States	N/A. No state information for Till objects.
	Object Properties	<ul style="list-style-type: none"> <li>• ID and Name of Till.</li> <li>• Transaction ID.</li> <li>• Operator code.</li> <li>• Operator name.</li> <li>• License (yes/no).</li> </ul>
	Commands	N/A. Till cannot be commanded.
Communication Channel	General Object Features	<ul style="list-style-type: none"> <li>• Represents the UDP channel used by the integration device.</li> <li>• Channel will not go down when communication with the POS system is lost.</li> <li>• If a system event triggered on the connection state is required, use the system object.</li> </ul>
	States	N/A. No state information for communication channel.
	Object Properties	<ul style="list-style-type: none"> <li>• ID and Name of communication channel,</li> <li>• Channel status (will not change if communication lost).</li> <li>• Details.</li> <li>• Creation type.</li> <li>• Creation time.</li> <li>• Idle time (min).</li> </ul>
	Commands	N/A. Communication channel cannot be commanded.

### 1.3.2 Device Events

Event Element	Features/Abilities
General	<ul style="list-style-type: none"> <li>• Event messages generated by the device will generate device event messages in CathesisVision.</li> <li>• These device event messages can be used to trigger system events.</li> </ul>
Device Event Types	<p>The following device event messages are received from the POS device and displayed in the CathesisVision device events tab and integration metadatabase:</p> <ul style="list-style-type: none"> <li>• All events.</li> <li>• End transaction.</li> <li>• Start transaction.</li> <li>• Tender.</li> <li>• Item.</li> </ul>

<b>CathesisVision Event Actions</b>	Events generated by the device are reflected in CathesisVision, and can be used to create CathesisVision system events. The device and device objects cannot be controlled as part of the system events.
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### 1.3.3 Metadatabase

A unique metadatabase is created on the CathesisVision 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
<b>General</b>	<ul style="list-style-type: none"> <li>• All device events are sent to the integration metadatabase.</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 standard CathesisVision video review tools.</li> </ul>
<b>View Options</b>	<p>The metadatabase may be viewed by using the following options:</p> <ul style="list-style-type: none"> <li>• Transactions.</li> <li>• Items.</li> </ul>
<b>Sort Options</b>	<p>The metadatabase may be sorted by:</p> <ul style="list-style-type: none"> <li>• Time.</li> </ul> <p><b>Note:</b> The available sort options depend on the selected view.</p>
<b>Easy Search</b>	<p>The metadatabase may be searched for:</p> <ul style="list-style-type: none"> <li>• Transaction.</li> <li>• Till.</li> <li>• Cashier ID.</li> <li>• Operator Code.</li> <li>• Operator Name.</li> </ul> <p><b>Note:</b> The available sort options depend on the selected view.</p>
<b>Filter</b>	<p>The metadatabase may be filtered according to:</p> <ul style="list-style-type: none"> <li>• <b>Transaction</b> <ul style="list-style-type: none"> <li>○ Time.</li> <li>○ End Time.</li> <li>○ Transaction#.</li> <li>○ Till.</li> <li>○ Operator Code.</li> <li>○ Operator Name.</li> <li>○ Amount (Transaction).</li> </ul> </li> <li>• <b>Line Item</b> <ul style="list-style-type: none"> <li>○ Sequence number.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Event type.</li> <li>○ Description.</li> <li>○ Amount (Line item).</li> <li>○ Department name.</li> <li>○ Department code.</li> <li>○ Quantity.</li> <li>○ PLU.</li> <li>○ SKU.</li> <li>○ Unit price.</li> <li>○ Weight.</li> <li>○ Reason.</li> <li>○ Authoriser code.</li> <li>○ Authorise name.</li> </ul> <p><b>Note:</b> The available sort options depend on the selected view.</p>
<b>Export</b>	Database entries may be exported in CSV and PDF format.

### 1.3.4 Maps

The CathesisVision GUI provides for configurable site maps that feature multi-layered, hierarchical, interactive interfaces providing representation and control of a site and its resources. The table below highlights some features.

Map Element	Features/Abilities
<b>General</b>	<ul style="list-style-type: none"> <li>● Device objects can be embedded in a site map, which offers multiple action options when:                             <ul style="list-style-type: none"> <li>○ Messages are received from the device,</li> <li>○ The device triggers an event,</li> <li>○ The user manually initiates a map action.</li> </ul> </li> <li>● System and Till objects support map functionality.</li> </ul>
<b>Map Action Triggers</b>	<ul style="list-style-type: none"> <li>● All device objects may be set to trigger a map action if the user left-clicks on map.</li> <li>● System object may be set to trigger a map action if a state change message is received from the device.</li> <li>● Till object may be set to trigger a map action if a device event message generated by the device is received.</li> <li>● All device objects may be set to perform a map action if <b>any</b> event occurs on the device.</li> <li>● Device objects, which can be configured to trigger CathesisVision events, may also be set to perform a map action when specific CathesisVision events are triggered.</li> </ul>
<b>Map Actions Options</b>	When triggered (see above), objects may perform the following map actions (where applicable): <ul style="list-style-type: none"> <li>● Connect to a site.</li> <li>● Perform an animation.</li> </ul>



- Go to a camera preset.
- Load a map.
- Set a PTZ relay output.
- Show a popup menu.
- Set a relay output.
- Show an HTML block.
- Show a block of text.
- Show a device popup menu.
- Show a device event notification.

#### USEFUL LINKS

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

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

## 2. Device Addition and Configuration

This section will detail the procedure for adding the Woolworths V2 POS device to CathesisVision.

### 2.1 Woolworths V2 POS Setup

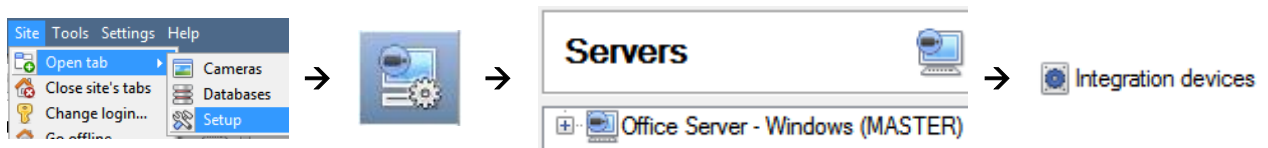
There is no specific setup on the POS system, but ensure that the UDP port numbers are the same for the POS system as well as CathesisVision.

**Note:** Ensure that the UDP port is not blocked by the firewall.

### 2.2 Add the 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 Navigate to the Integrations Panel



**Devices**

Name	Driver
Woolworths V2 Int	Woolworths POS V2

New device  
Edit device  
Delete device

1 item

---

**Configuration of 'Woolworths V2 Int'**

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

Object type: All objects

Type	ID	Name	Cameras	Object groups	License
Communication channel	__default__	Default			
Till	05	Kiosk Till 0002			<span style="color: green;">✔</span>
Till	08	Till 001	Camera 2 Topdown	Musgrave	<span style="color: green;">✔</span>
Till	10	Till 002	Top cam 12	Musgrave	<span style="color: green;">✔</span>
Till	110	Kiosk Till 0001	Camera 2 Topdown, Camera 1		<span style="color: green;">✔</span>
Till	120	Till 003	driveway2		<span style="color: green;">✔</span>

New Edit Delete

6 items


There are two sections in the Integration Panel:

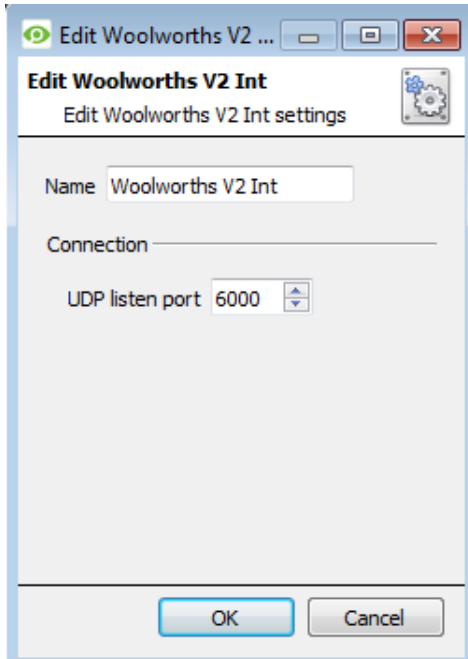
The **Devices** list will specify the integration devices that are attached to the selected server. In this section, new devices are added. This is dealt with below.

The **Configuration** section enables reviewing and editing the device selected in the **Devices** section.

The configuration section is dealt with in section 3.

### 2.2.1.1 Device Addition

1. Once in the Integration Panel, click on  , in the Devices section. This will open the addition dialogue.
2. Select **Woolworths V2 POS** driver from the list.



3. Give the device a descriptive **name**.
4. Enter the UDP listen port number. This must match the UDP port number for both CathesisVision and the POS system.
5. Click **OK** when done.

## 3. Integration 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.**

The System device object (representing the connected POS system) will populate once communication is established with the system. The Till objects will populate once device events are received.

### 3.1 Object Configuration Tab

Configuration of 'Woolworths V2 Int'

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

Object type: All objects

Type	ID	Name	Cameras	Object groups	License
Communication channel	_default_	Default			
Till	05	Kiosk Till 0002			✓
Till	08	Till 001	Camera 2 Topdown	Musgrave	✓
Till	10	Till 002	Top cam 12	Musgrave	✓
Till	110	Kiosk Till 0001	Camera 2 Topdown, Camera 1		✓
Till	120	Till 003	driveway2		✓

The object configuration tab is where all the individual objects that comprise the integration may be viewed. If necessary, objects may be added manually.

The Woolworths V2 POS has two object types: **System** and **Till**.

#### 3.1.1 Object Configuration Buttons

	Add a new object by clicking on <b>New</b> .
	Open an existing object for editing.
	<b>Delete</b> an existing object from the CathesisVision configuration.

#### 3.1.2 Right-click Options

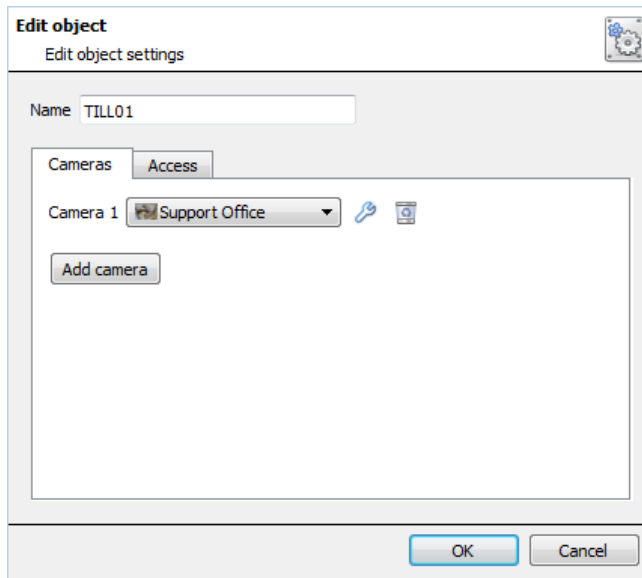
	<b>New</b> will open up the dialogue to add a new object.
	<b>Disable/Enable</b> allows objects to be manually enabled/disabled.
	<b>Prioritise license</b> allows the user to give specific objects priority, when licenses are applied. (Useful, if one currently has fewer licenses than objects.)
	<b>Delete</b> will permanently remove this object from the list.
	<b>Properties</b> will open up the object editing window.

#### 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 Cameras Tab



Adding a camera to an object means 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.

Click on **Add Camera**, and select the relevant camera from the drop-down menu.

 To Configure overlays for this object, click the settings icon (explained below).

 To delete a camera, click the trash icon.

#### Note:

1. Cameras will not be linked in the integration database.
2. Up to four cameras can be added to Till objects and will be linked in the integration database.
3. If **continuous recording** is not set up on associated cameras, device objects run the risk of triggering while the cameras are not recording. To record cameras only when an object triggers, set up **Events to trigger a recording when one of these objects is activated**.

### 3.1.3.2 Access Tab



**Access** allows for the protection of sensitive objects, by only allowing certain user levels access to them.

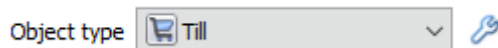
**Under View, access levels can be set.**

**Note:** If **Use default access rights** is checked, ensure that those default rights have been correctly defined. Click on **Configure default access** to do this.

### 3.1.4 Configure Overlays

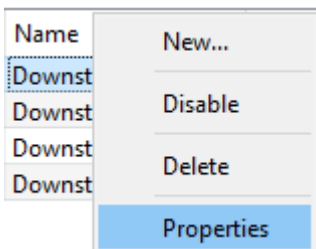
Overlays are supported for **Till objects only**. Overlays may be configured globally for all objects, or individually for selected objects. The path to follow for opening the configuration window for global vs individual overlays is different, however the overlay configuration is the same.

#### 3.1.4.1 Configure Global Overlays

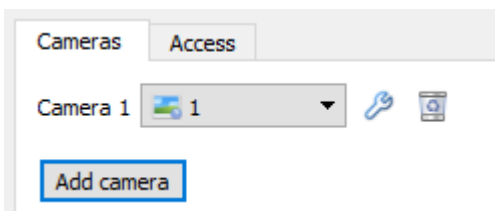


Select the Till object from the **Object type** drop-down menu and click the Default Settings icon.

#### 3.1.4.2 Configure Individual Overlays



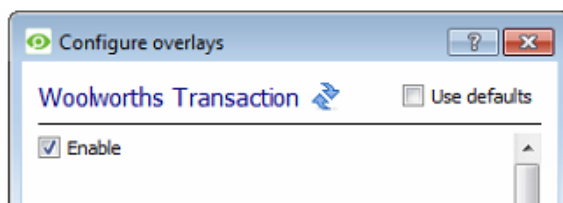
Right-click object and select **Properties** to edit the object.



Add a camera to the object, and then click the settings icon that appears next to the camera name.


**Note:** This option only appears for Till objects.

#### Global/Individual Options



**Use Defaults:** This option is only available when editing individual overlays. Check this box to use the global configurations. Uncheck to edit overlays for the specific object.

**Enable:** This option is available in global and individual overlay configuration. In both cases, check the box to enable overlay configuration.

Click  to reset values.

### Overlay Configuration for Individual and Global

Select **Palette** options from the drop-down menu.

Define the **Position** of the overlay panel, including its alignment, width, and whether the overlay should automatically resize based on the size of the viewing screen/camera panel.

Define the **Appearance** 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.

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

Click the box to bring up a colour chart.

## 3.2 Object Properties Tab

The Object properties tab allows the device object properties to be viewed and sorted by type.

### 3.2.1 Till Objects

Till objects will populate once device events are received from the relevant Tills:

**Configuration of 'Woolworths V2 Int'**

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

Object type: Till

Name	Transaction id	Operator code	Operator name	Licensed	
Kiosk Till 0002					
Till 001					
Till 002					
Kiosk Till 0001					
Till 003					

### 3.2.2 Communication Channel

The communication channel object represents the UDP channel used by the integration device.

**Configuration of 'Cathesis POS'**

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

Object type: Communication channel

Name	Channel status	Details	Creation type	Creation time	Idle time (min)
Default	up		static	2019-02-21 11:44:28+02:00	

**Note:** Due to the nature of UDP network communication, this channel will not go down when communication with the POS system has been lost. If system events triggered on connection state are required, use the System object.

### 3.3 Device Events Tab

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

All events | Filter

Event type	Time	Till	Code	Amount	Description
End transaction	2016-02-17 17:05:31	TILL01	0	1455705157	Transaction cc
Final Tender	2016-02-17 17:05:31	TILL01	1455705157	150.00	ABSA
Total	2016-02-17 17:05:31	TILL01	1455705157	148.30	
Item	2016-02-17 17:05:29	TILL01	1455705157	000020109499	CEREAL
Item	2016-02-17 17:05:26	TILL01	1455705157	000020109493	REFUSE SACK
Item	2016-02-17 17:05:22	TILL01	1455705157	000020109501	JUICE
Item	2016-02-17 17:05:22	TILL01	1455705157	000020109501	JUICE
Item	2016-02-17 17:05:22	TILL01	1455705157	000020109499	CEREAL
Item	2016-02-17 17:05:19	TILL01	1455705157	000020109497	COFFEE
Item	2016-02-17 17:05:17	TILL01	1455705157	000020109501	JUICE

Real-time device events are displayed here and can be used to check if the integration is working. Once device events are received, the relevant Till objects will also populate (Object Configuration and Object Properties tabs).

### 3.4 Groups Tab

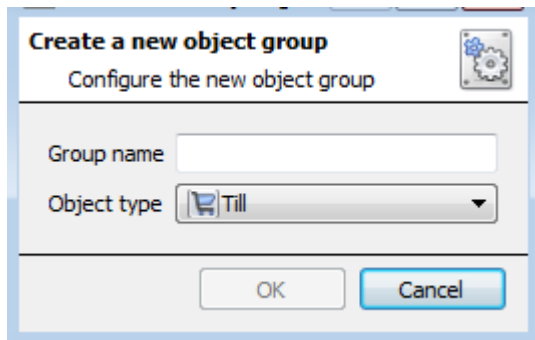
Group: Till Groups

Available objects	Objects in 'Till Groups' group
TILL01	
TILL02	
TILL03	

Groups of the same types of object may be created. This is very useful when setting up Events, because Events can be triggered by an object group. (e.g. a group will trigger, if any of the devices in that group is triggered.)



### 3.4.1 Create a Group





To create/edit a group click on  / .

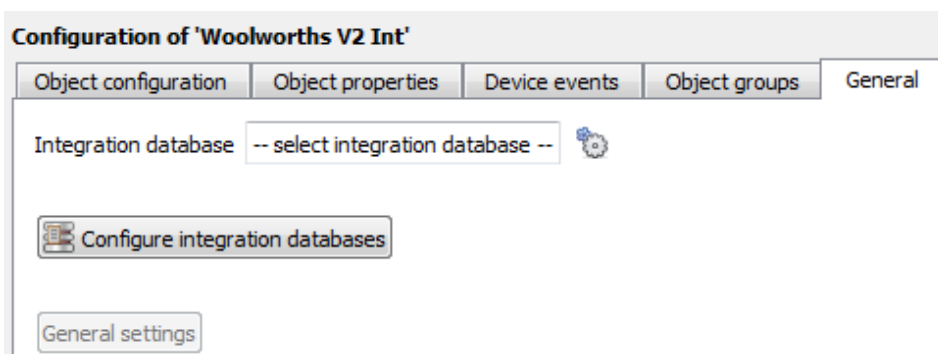
**Note:** Once a group has been created, the group's object type may not be edited.

Choose a descriptive **Group name**.

Click on the drop-down menu to select the **Object type**. Only objects of this type can be added to the group.

A list of Available Objects will then populate. To add/remove these objects, select them (multiple may be selected), and click on  / .

## 3.5 General Tab

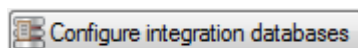


The general tab deals with the **Integration database**.

Select an existing database or create a new one.

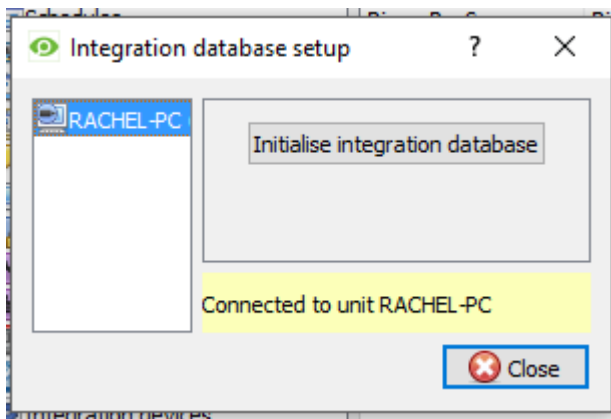
**Note:** Each integrated device needs to be attached to an Integration database. Without setting up/adding a database, the integration will not function properly within the CathexisVision system.

### 3.5.1 Configure a New Database



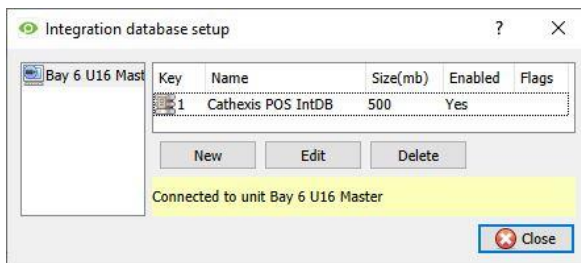
If there is no existing database for the current integration, clicking **Configure integration databases** will open the integration database setup.

### 3.5.1.1 Initialise Integration Database



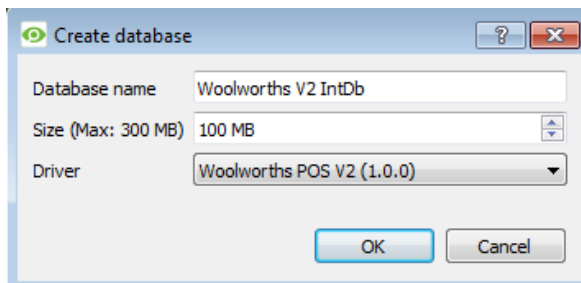
To create databases for specific integrations, the general integration database must be initialised. If not already done, initialize this by clicking **Initialise integration database**.

### 3.5.1.2 Configure Integration Database



If the general integration database has already been initialised, or after initialising (4.5.1.1), create a new integration database for the current integration.

Select the unit that the database should be added to from the list on the left, and click **New** to create a new integration database.

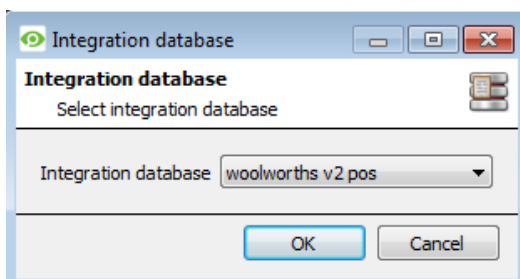


Give the database a **name**.

Set the database **Size**.

Select the **Woolworths POS V2** driver from the drop-down menu.

### 3.5.1.3 Select the Integration Database



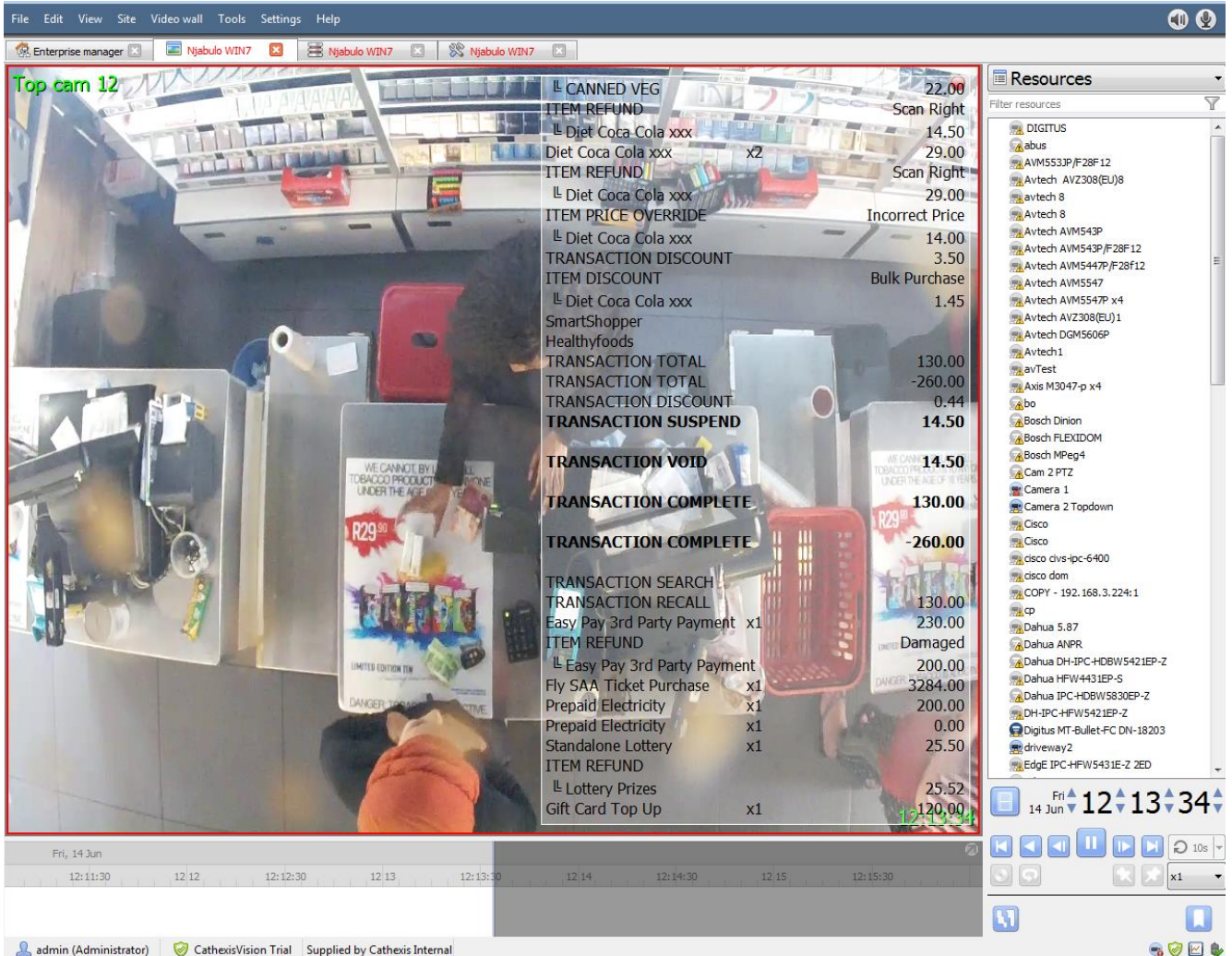
Integration database

Once a database has been created, the user may select it by clicking on the settings icon, and selecting it in the dialogue that appears.

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

## 4. Camera Tab Overlay Setup

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



**Note:** Cameras must have already been added to Till 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. This pops 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

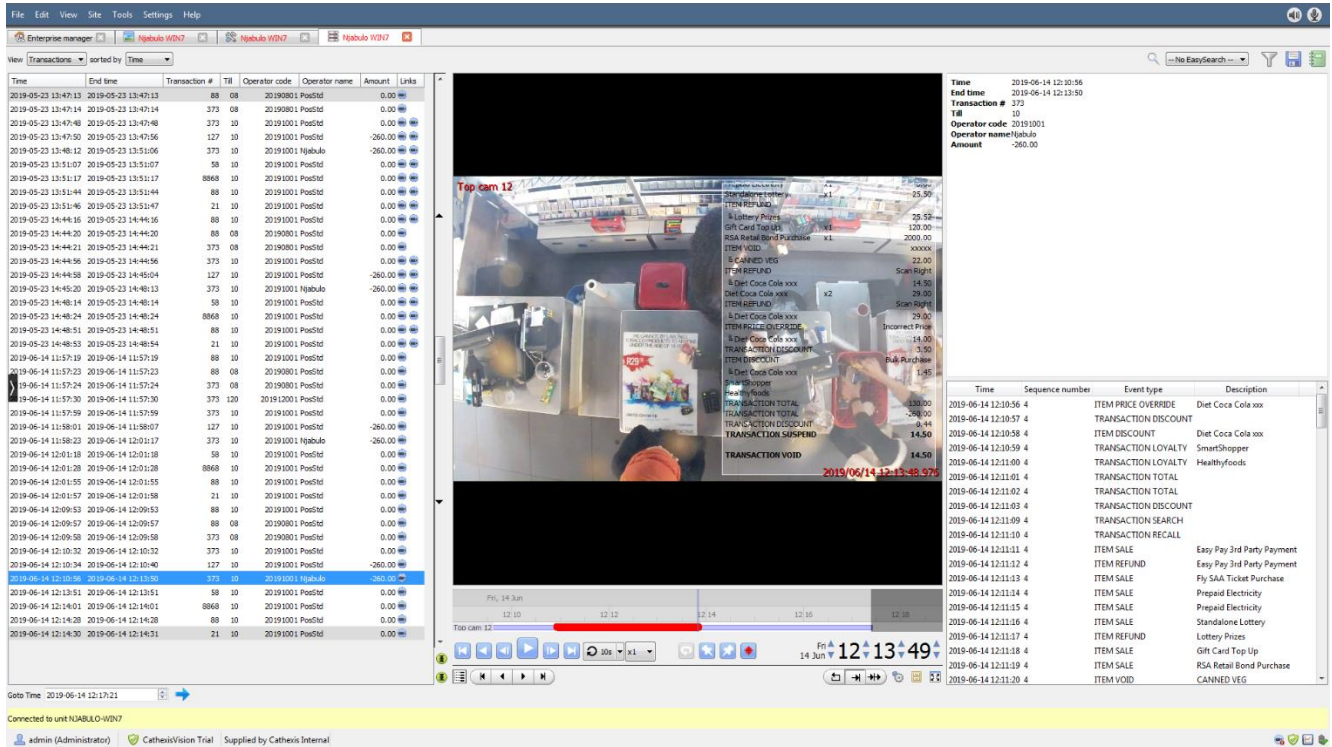


Clicking the overlay icon will bring up the overlay options for this video feed.

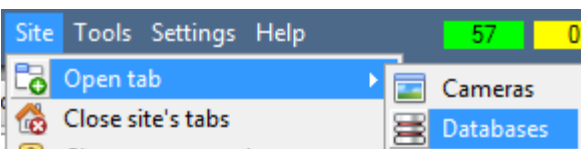
Select the overlay and it will appear over the video feed, as seen above.

# 5. Database

The database tab allows database entries to be sorted, filtered, reviewed, and exported. Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathexisVision by the integrated device.

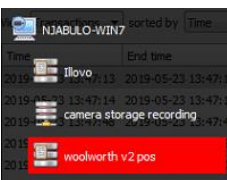


## 5.1 Navigate to the Database



To open database, follow one of two paths:

1. Site Menu / Open Tab / Databases.
2. Right-click site tab / Open Tab / Databases.

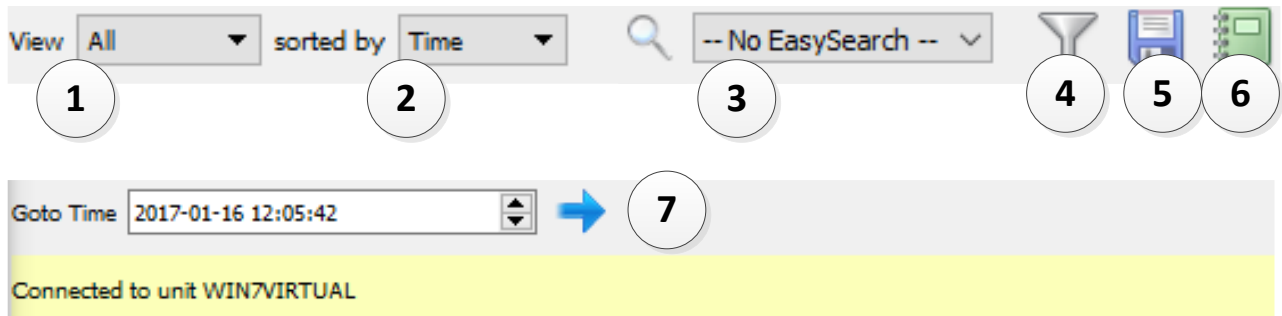


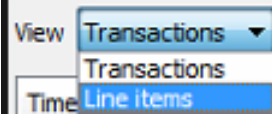
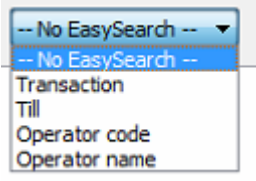





When the database tab opens, select the relevant integration database from the database panel that opens on the left-hand side. The databases are ordered under the NVRs that they are attached to.

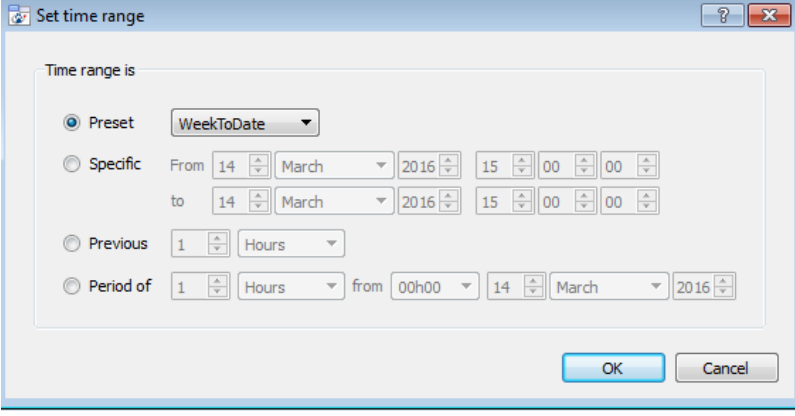

To open and close this list, click on the arrow in the centre of the list:



## 5.2 Database Interface



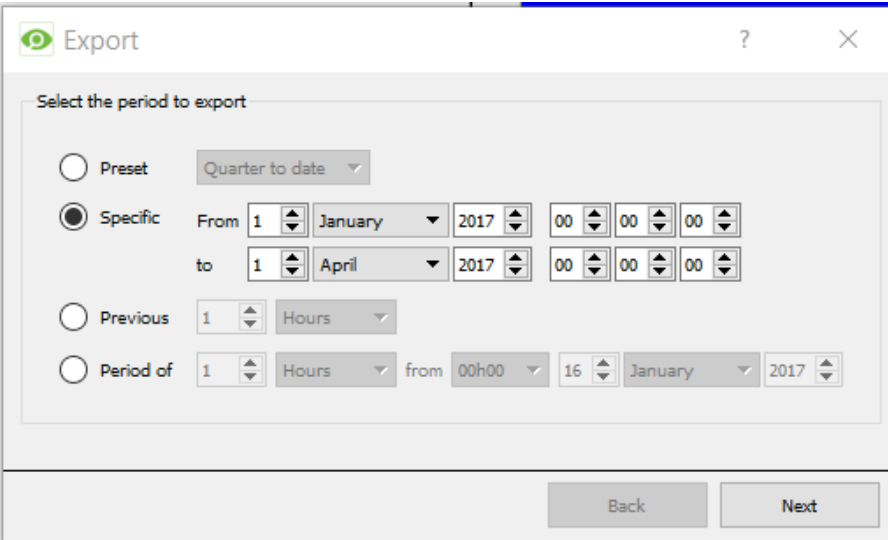
<p>① <b>View</b></p>	<p>Change the way that the database is presented. Some integration databases have multiple view options. For example, the DSC ITV2 database (Woolworths V2 POS will differ) has the following view options:</p> 
<p>② <b>Sorted By</b></p>	<p>The Events are sorted based on the following parameter: <b>Time</b>.</p>
<p>③ <b>Easy Search</b></p>	<p>The easy search option allows one to quickly search the database using the below options:</p>  <p><b>Note:</b> The search options will differ depending on the selected view.</p>
<p>④ <b>Filter</b> </p>	<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>To <b>enable</b> filters, check this box: <input checked="" type="checkbox"/> Enable filters .</li> <li>To <b>add</b> a new filter, click on  . The filter icon  will change to  when filters are active.</li> <li>To <b>delete</b> an added filter, click  .</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>
<p>⑤ <b>Export</b></p>	<p>Generate metadatabase reports in PDF or CSV format. See below.</p>
<p>⑥ <b>Manage Reports</b></p>	<p>Generate scheduled metadatabase reports. See below.</p>
<p>⑦ <b>Go to Time</b></p>	<p>This navigates to a specific point in time, down to the second. To navigate to a timestamp, set the time using the time and date boxes.   Then click on the arrow icon.</p>

## 5.2.1 Generate Metadatabase Reports

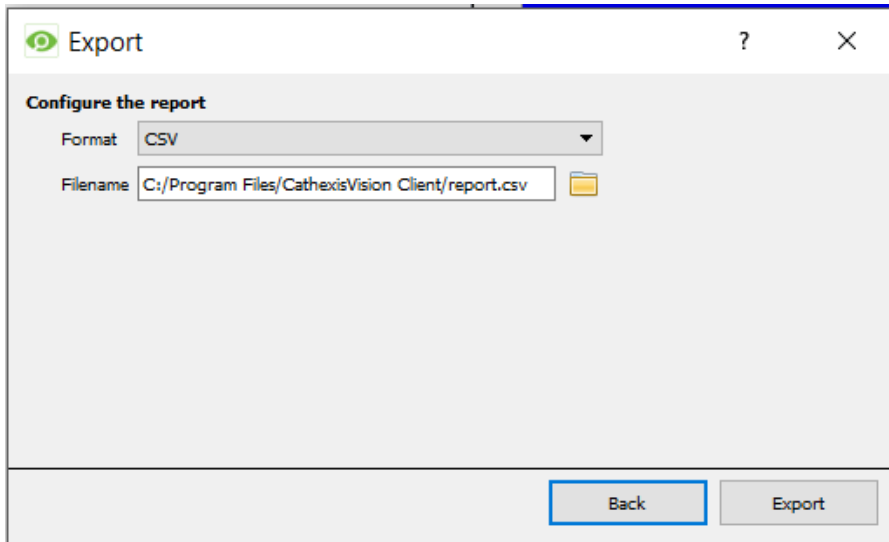


Click the save icon to open the Export window.



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

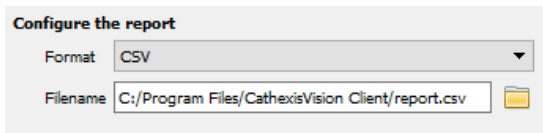
Click **Next**.



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

See below for the two options.

### 5.2.1.1 Export CSV



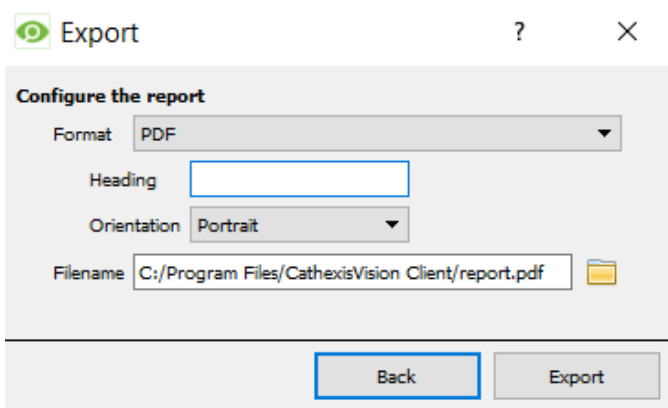
Select CSV **Format**.

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.

### 5.2.1.2 Export PDF



Select PDF **Format**.

Give the PDF a **Heading**.

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

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

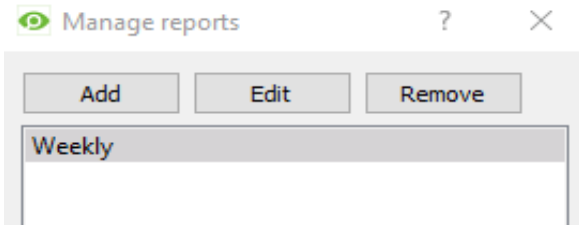


Or, click the folder icon to choose a new save folder and filename.



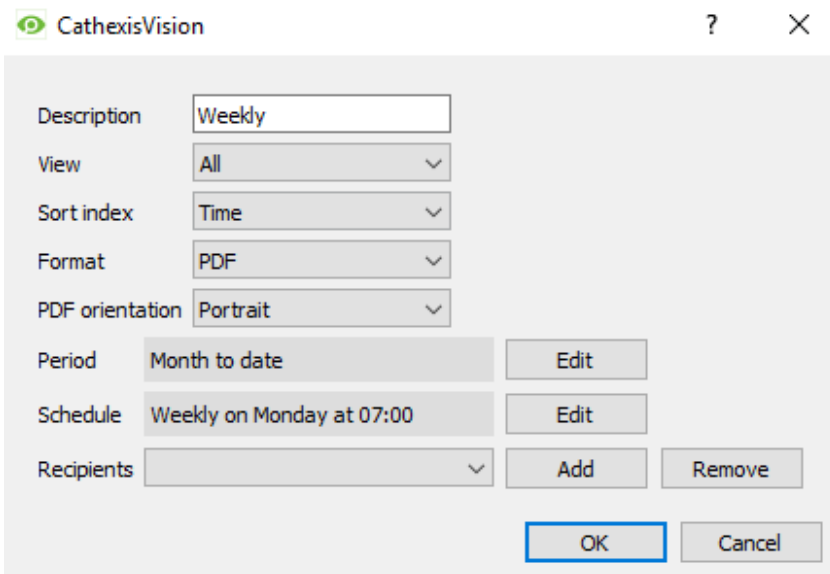
## 5.2.2 Manage Reports

Metadatabase reports may be auto-generated according to a user-defined schedule.



Click **Add** to add a new report. Once added, reports will populate the list.

Double-click the selected report (or select and click **Edit**) to configure the parameters of the scheduled report. See below.



Give the report a descriptive **name**.

Select the default presentation of the database entries by selecting desired options for **View** and **Sort Index**.

Select the **format** (PDF/CSV) of the report, as well as the **orientation** of the report (if PDF selected).

Select the **period** to report, and the **Schedule** according to which reports will be auto-generated.

Add report recipients by clicking **Add** and entering the relevant email address. Multiple recipients may be added. To remove a recipient, select the entry from the drop-down menu and click **Remove**.

### 5.2.3 Metadata

<b>Time</b>	2019-05-23 13:47:14		
<b>End time</b>	2019-05-23 13:47:14		
<b>Transaction #</b>	373		
<b>Till</b>	08		
<b>Operator code</b>	20190801		
<b>Operator name</b>	PosStd		
<b>Amount</b>	0.00		

Time	Sequence number	Event type	Descriptio
2019-05-23 13:47:14	4	REMOVE CASH DRAWER	YES
2019-05-23 13:47:15	4	REMOVE CASH DRAWER	CANCEL
2019-05-23 13:47:16	4	SECURE	
2019-05-23 13:47:17	4	SECURE AUTO	
2019-05-23 13:47:18	4	SECURE UNLOCK	
2019-05-23 13:47:19	4	SECURE OVERRIDE	
2019-05-23 13:47:20	4	AUTHORISATION SUCCESSFUL	DeptSale
2019-05-23 13:47:21	4	AUTHORISATION FAILED	DeptSale
2019-05-23 13:47:22	4	ITEM SALE	Diet Coca Cola xxx
2019-05-23 13:47:23	4	ITEM SALE	Diet Coca Cola xxx
2019-05-23 13:47:24	4	ITEM UNKNOWN	CANNED & DRIED
2019-05-23 13:47:25	4	ITEM SALE	Vodago R55
2019-05-23 13:47:26	4	ITEM SALE	Ukash R500
2019-05-23 13:47:27	4	ITEM SALE	Lotto
2019-05-23 13:47:28	4	ITEM SALE	LottoPlus
2019-05-23 13:47:29	4	ITEM SALE	PowerBall

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

### 5.3.4 Viewing an Entry's Associated Recording

The screenshot displays the Cathexis software interface. On the left, a table lists transactions with columns for Time, End time, Transaction #, Operator code, Operator name, and Amount. A camera icon in the 'Links' column indicates a video recording is available for that entry. The main area shows a video recording of a retail transaction from 'Top cam 12'. The video shows a cashier at a counter with a customer. A receipt is visible, listing items like Diet Coca Cola and Canned Veg. On the right, a detailed transaction log shows the sequence of events, including item sales, refunds, and discounts.

Time	End time	Transaction #	Operator code	Operator name	Amount	Links	
2019-05-23 13:47:13	2019-05-23 13:47:13	88	2019001	PostStd	0.00		
2019-05-23 13:47:14	2019-05-23 13:47:14	373	08	2019001	PostStd	0.00	
2019-05-23 13:47:48	2019-05-23 13:47:48	373	10	20191001	PostStd	0.00	
2019-05-23 13:47:50	2019-05-23 13:47:56	127	10	20191001	PostStd	-260.00	
2019-05-23 13:48:12	2019-05-23 13:51:06	373	10	20191001	Ngabulo	-260.00	
2019-05-23 13:51:07	2019-05-23 13:51:07	58	10	20191001	PostStd	0.00	
2019-05-23 13:51:17	2019-05-23 13:51:17	8868	10	20191001	PostStd	0.00	
2019-05-23 13:51:44	2019-05-23 13:51:44	88	10	20191001	PostStd	0.00	
2019-05-23 13:51:46	2019-05-23 13:51:47	21	10	20191001	PostStd	0.00	
2019-05-23 14:44:16	2019-05-23 14:44:16	88	10	20191001	PostStd	0.00	
2019-05-23 14:44:20	2019-05-23 14:44:20	88	08	2019001	PostStd	0.00	
2019-05-23 14:44:21	2019-05-23 14:44:21	373	08	2019001	PostStd	0.00	
2019-05-23 14:44:56	2019-05-23 14:44:56	373	10	20191001	PostStd	0.00	
2019-05-23 14:44:58	2019-05-23 14:45:04	127	10	20191001	PostStd	-260.00	
2019-05-23 14:45:20	2019-05-23 14:46:13	373	10	20191001	Ngabulo	-260.00	
2019-05-23 14:46:14	2019-05-23 14:46:14	58	10	20191001	PostStd	0.00	
2019-05-23 14:46:24	2019-05-23 14:46:24	8868	10	20191001	PostStd	0.00	
2019-05-23 14:48:51	2019-05-23 14:48:51	88	10	20191001	PostStd	0.00	
2019-05-23 14:48:53	2019-05-23 14:48:54	21	10	20191001	PostStd	0.00	
2019-06-14 11:57:19	2019-06-14 11:57:19	88	10	20191001	PostStd	0.00	
2019-06-14 11:57:23	2019-06-14 11:57:23	88	08	2019001	PostStd	0.00	
2019-06-14 11:57:24	2019-06-14 11:57:24	373	08	2019001	PostStd	0.00	
2019-06-14 11:57:30	2019-06-14 11:57:30	373	100	20191001	PostStd	0.00	
2019-06-14 11:57:59	2019-06-14 11:57:59	373	10	20191001	PostStd	0.00	
2019-06-14 11:58:01	2019-06-14 11:58:07	127	10	20191001	PostStd	-260.00	
2019-06-14 11:58:23	2019-06-14 12:01:17	373	10	20191001	Ngabulo	-260.00	
2019-06-14 12:01:18	2019-06-14 12:01:18	58	10	20191001	PostStd	0.00	
2019-06-14 12:01:28	2019-06-14 12:01:28	8868	10	20191001	PostStd	0.00	
2019-06-14 12:01:55	2019-06-14 12:01:55	88	10	20191001	PostStd	0.00	
2019-06-14 12:01:57	2019-06-14 12:01:58	21	10	20191001	PostStd	0.00	
2019-06-14 12:09:53	2019-06-14 12:09:53	88	10	20191001	PostStd	0.00	
2019-06-14 12:09:57	2019-06-14 12:09:57	88	08	2019001	PostStd	0.00	
2019-06-14 12:09:58	2019-06-14 12:09:58	373	08	2019001	PostStd	0.00	
2019-06-14 12:10:32	2019-06-14 12:10:32	373	10	20191001	PostStd	0.00	
2019-06-14 12:10:34	2019-06-14 12:10:40	127	10	20191001	PostStd	-260.00	
2019-06-14 12:10:58	2019-06-14 12:13:36	373	10	20191001	Ngabulo	-260.00	
2019-06-14 12:13:51	2019-06-14 12:13:51	58	10	20191001	PostStd	0.00	
2019-06-14 12:14:01	2019-06-14 12:14:01	8868	10	20191001	PostStd	0.00	
2019-06-14 12:14:28	2019-06-14 12:14:28	88	10	20191001	PostStd	0.00	
2019-06-14 12:14:30	2019-06-14 12:14:31	21	10	20191001	PostStd	0.00	

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.

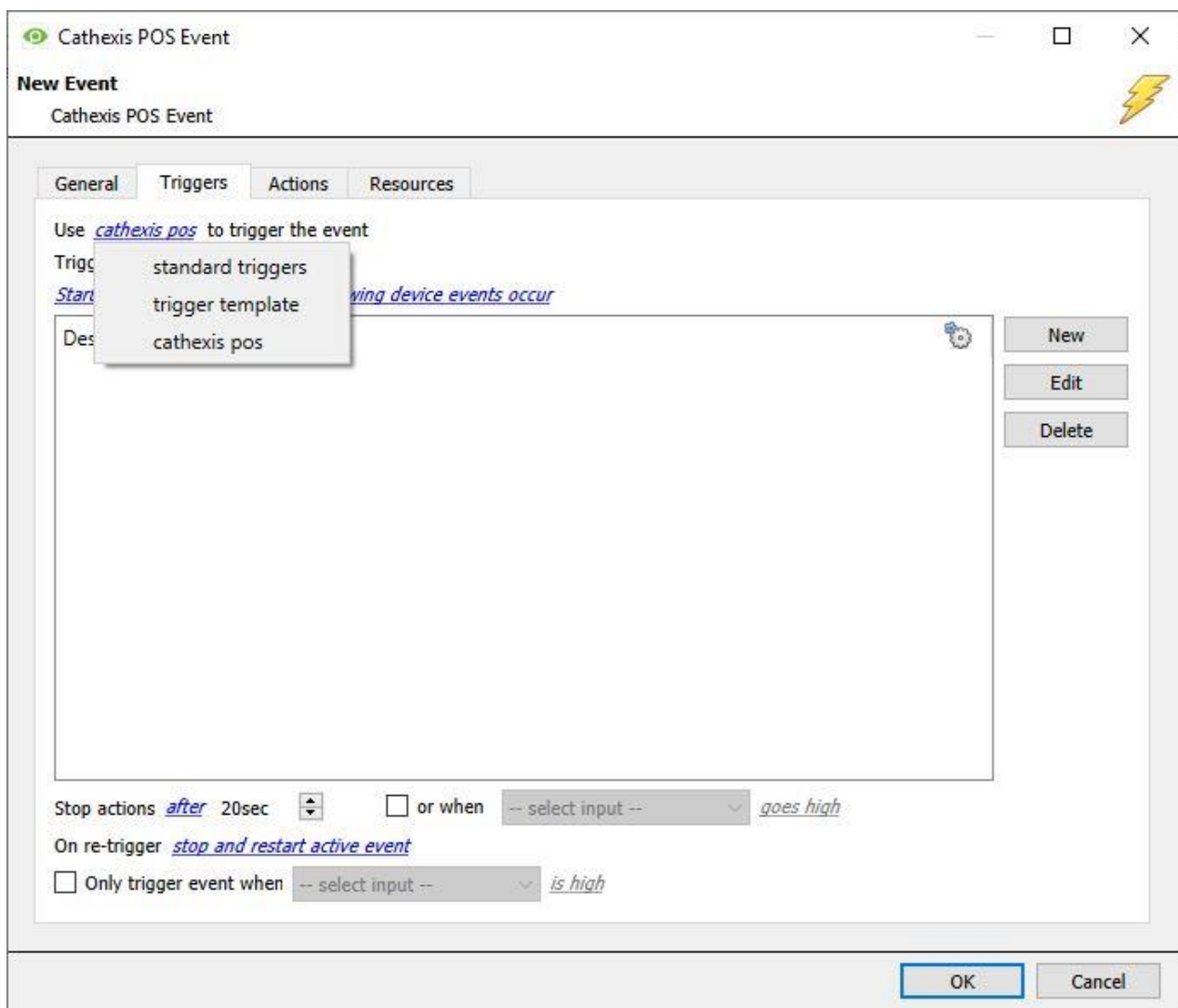
## 6. Events

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 aspects of events specific to the Woolworths V2 POS integration. 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 provides the user with 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.

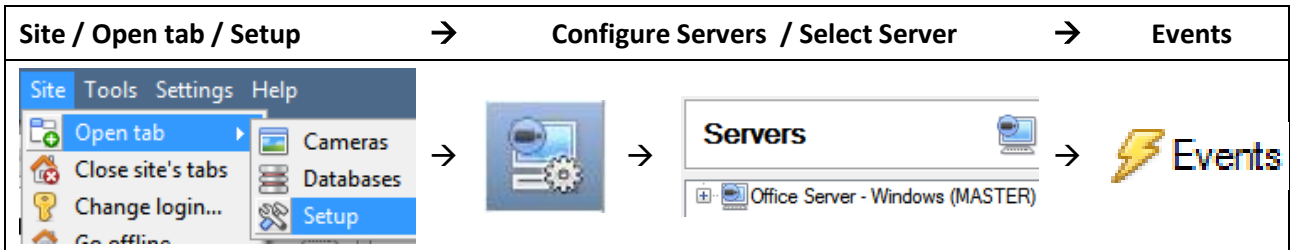
### 6.1 Event Window

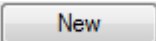
Events in CathesisVision are set up via the Event Window. This has 4 tabs. In the **General Tab** an event is given a name, description, schedule, and priority. In the **Triggers Tab**, the trigger/s for the event is/are defined. In the **Actions Tab**, the action/s which the event takes are defined. 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 Woolworths V2 POS device, open the Events panel in Configure Servers:

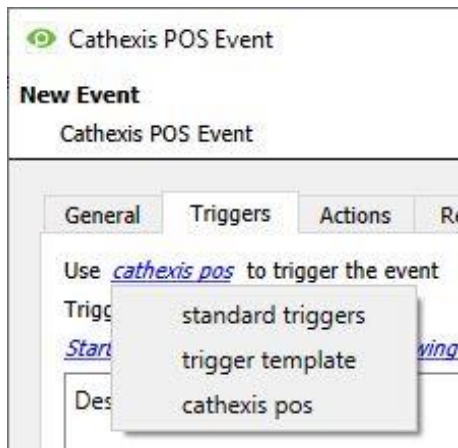


 Once in Events management, click on New. This will open up the New Event window.

## 6.3 Triggers

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

### 6.3.1 Set the Device as the Trigger

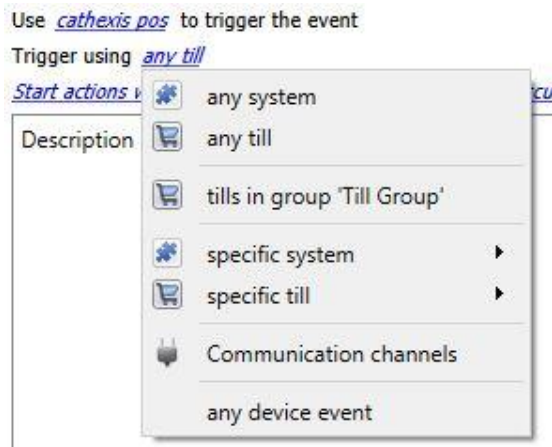


If creating a new event, the trigger type will default to:  
Use [standard triggers](#).

To define which device should trigger the event, click on the hyperlink after “use”.

Select the relevant device name from the drop-down menu.

### 6.3.2 Trigger Types



**Any system** will trigger when any of the system objects send the selected trigger.

**Any Till** will trigger when any of these objects sends the selected trigger.

**Tills in group 'Till Group'...** If a Group is set up, it will appear here in this list.

**Specific system/Till...** will trigger an event from the specific object selected.

**Communication channels** will trigger only on the Communication channels.

**Any device event** will trigger on any event that occurs on the device. Within the "any device event" setup, the user may set "device event rules", which will constrain which device events will trigger the event.

**Note for group triggers:** For this 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 the question mark icon to see a list of available descriptions.

### 6.3.3 While/When and Any/All

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

Use [cathesis pos](#) to trigger the event

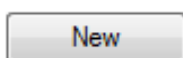
Trigger using [any till](#)

[Start actions when any of the following device events occur](#)

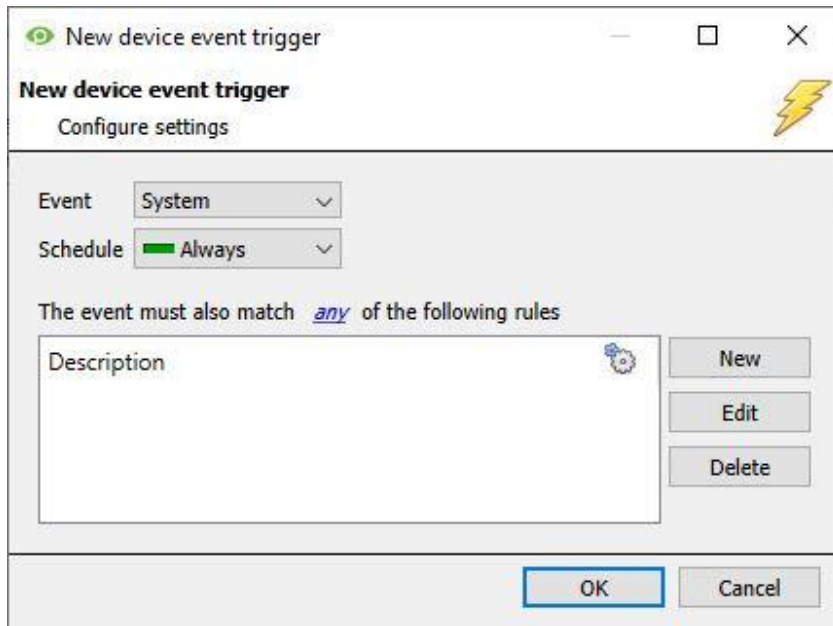
To change these settings, click on the blue hyperlinks.

### 6.3.4 Define the Trigger

After selecting a master trigger type, add a trigger to the event.



Click New in the Triggers tab. This will bring up the dialogue box below:

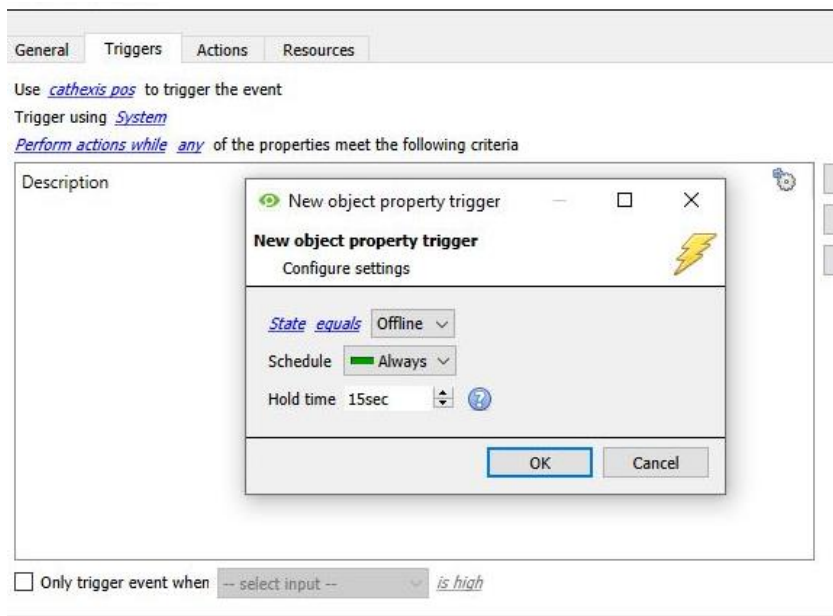


For example, within the [any device event](#) option, the user may choose what type of device Event will be the trigger. Choose an event type from the drop-down menu.

**Note:** Multiple constraints may be set (**Device Event Triggers**). If no constraint is defined, every single device event will trigger this event.

To add/edit/delete a **Trigger** (a constraint) use the **New**, **Edit**, and **Delete** buttons on the right-hand side.

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

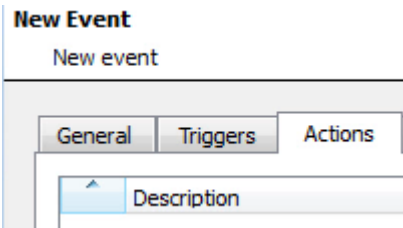


To change the constraint, click on the first hyperlink. This will bring up the full list of available rules.

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

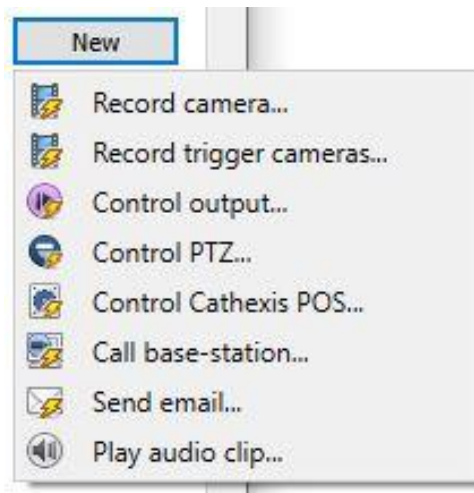
**Note:** When all available options are known to CathexisVision, there will be a drop-down menu. When these variables are not pre-defined, it is necessary to fill them in. The information pulled through to the events is information sent to CathexisVision from the Woolworths V2 POS device, see the POS settings for the strings needed here.

## 6.4 Actions



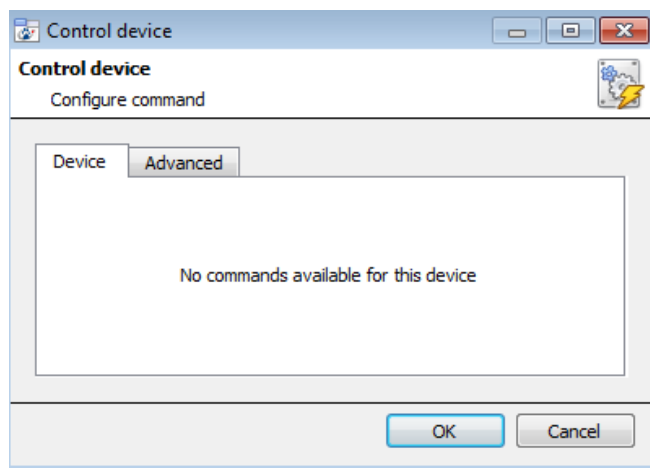
Once the triggers that are going to initiate the event have been defined, define some actions.

### 6.4.1 New Action



To create a new Event Action, click on New.

**Note:** With many integrations, there will be the option to control the integrated device, as one of the actions. This is not the case in regard to the Woolworths V2 POS device. Although the option is presented in the menu, this device is **not possible** to control as a system action:





## 7. Maps

It is possible to add the Woolworths V2 POS device to a site map, which will allow for a number of action options when objects are triggered. The following objects, and associated messages, may be used to trigger map actions.

<b>System Object</b>	<ul style="list-style-type: none"> <li>• Online/Offline state changes.</li> <li>• CathesisVision system event triggers.</li> </ul>
<b>Till Object</b>	<ul style="list-style-type: none"> <li>• CathesisVision system event triggers.</li> </ul>

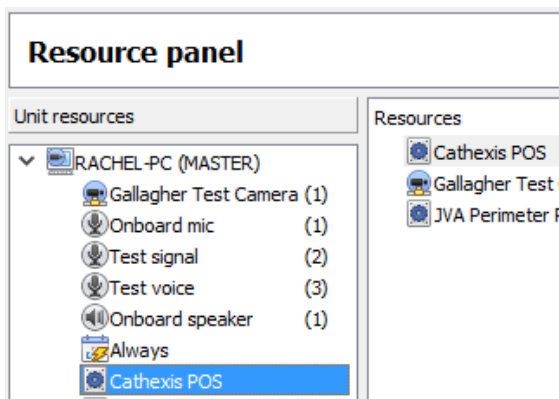
**Note:** This section will only deal with the specifics of adding the Woolworths V2 POS device to the map and configuring supported map events. For more information on using the CathesisVision Map Editor and Map Tab, please consult the dedicated and detailed **Map Editor Operation Manual**.

### 7.1 Add the Device as a Resource

If this has not already been done, the device must be added as a resource to be added to the map.

#### 7.1.1 Resources Panel

Setup tab / Resources Panel

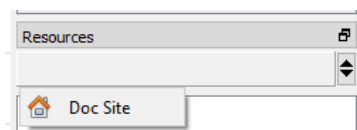


1. Navigate to the **Resource Panel** by following **Site / Open Tab / Setup / Resource Panel**.
2. Drag the Woolworths V2 POS device from the **Unit Resources** list into the **Resources** list, on the right.

### 7.2 Add the Device to the Map

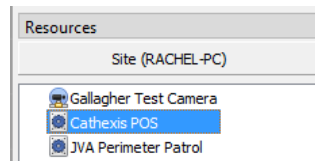
Once the Woolworths V2 POS device has been added as a **Resource**, it will be available to drag onto the map area from the **Site Resources** list.

#### 7.2.1 Connect to Site

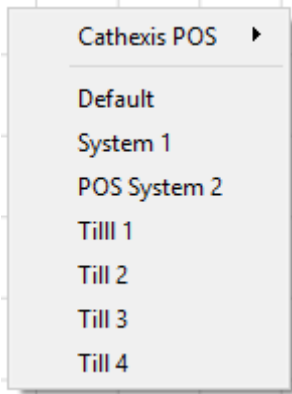


At the bottom right-hand of the Map Editor screen, click the drop-down menu to select the site to connect to.

Once connected to site, all the resources available will populate the panel below.



### 7.2.2 Adding Device Objects

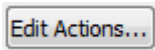


Drag the Woolworths V2 POS device from the Site Resources list onto the map area. All of the device objects will appear in a list. Select an object.

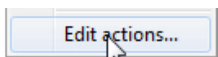
**Note:** To add multiple objects, repeatedly drag-and-drop the device onto the map area and select the desired objects individually.

**Note:** Communication objects do not support Map functionality. Only system and Till objects function on maps.

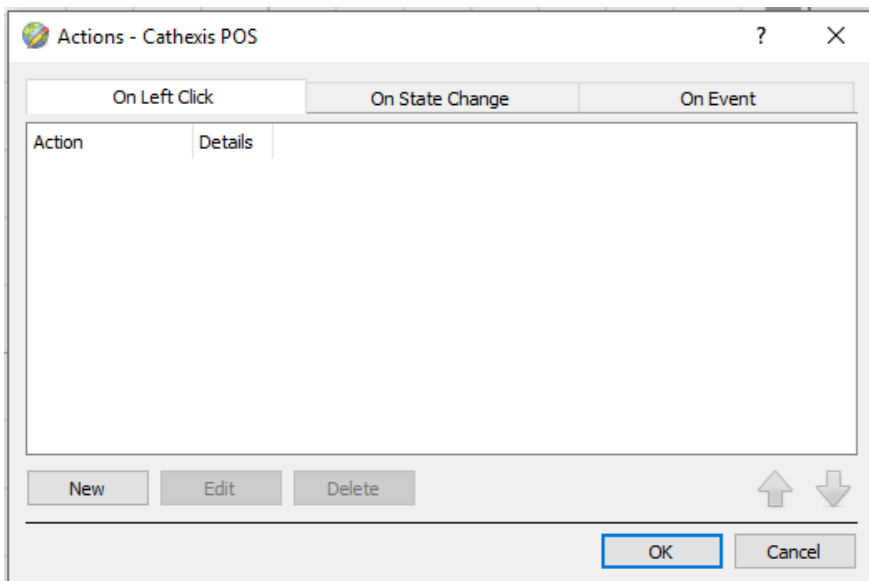
### 7.3 Adding Device Actions



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

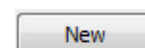


Or right-click the map object and select.



Actions may be set for **Left-Clicks, State Changes, and Events**. See descriptions below.

Once configured, the list of actions will populate the white space in the relevant tabs.




To create a new action, select New.

### 7.3.1 Map Object Device Action Tabs

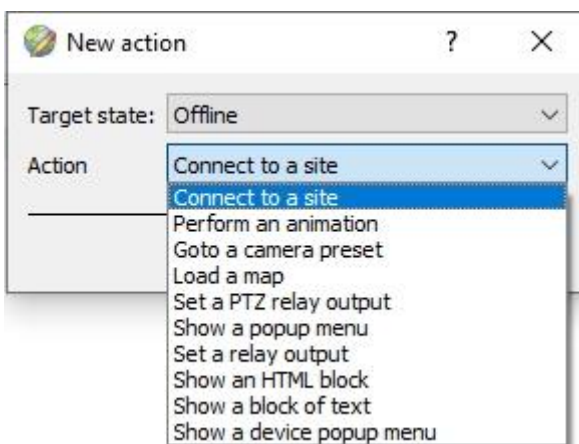
Map actions may be set to trigger on **Left-Clicks, State Changes, and Events**. The table below illustrates the triggers that may be used to generate a map action.

Tab	Map Action Trigger Detail
<b>On Left Click</b>	Left-clicking on the object in the map will trigger an associated map action. See below for actions.
<b>On State Change</b>	When the state of the selected object changes, the map action will occur. State change options will differ according to selected object. <b>Note:</b> State change only supported for <b>System objects</b> .
<b>On Event</b>	When a CathexisVision system event occurs, that trigger can be used to trigger a map action. System event triggers supported for System objects ( <b>any event</b> ) and Till objects ( <b>start/end transaction, tender, Till, total, item, and any event</b> ).

### 7.3.2 Action Options

 Click New in the relevant tab of the action window.

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



Action options are the same for all tabs, except for the event tab, which has the added option to **Show a Device Event Notification**.

Click **OK** in the Action window once all required actions have been set for the various map objects.

Once finished, save the map.

**Important note:** The map **must not be saved** in the default folder or Work folder of the installation directory. Instead, create a new directory when saving; e.g. **C:\Maps**.

## 7.4 Map Tab

The saved map needs to be uploaded to CathexisVision. 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. The Woolworths V2 POS Simulator is included with the CathexisVision software, and is intended to assist third-party POS developers with API implementation.

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