



# Dynamass Integration

## App-note

21 December 2021

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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 details the integration of the Dynamass Weighbridge with CathesisVision software.

The Dynamass Weighbridge driver sends and receives messages through the Event directory.

**Note:**

1. For information regarding the regular operation of a Dynamass device, please consult the relevant Dynamass manufacturer documentation.
2. The files Dynamass generates need to be directed to the Event directory set/created.

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

## 1.1 Requirements

### 1.1.1 Software

- Windows 7, 64-bit and later, Windows Server 2008 R2 and later.
- Ubuntu 12 and Ubuntu 16.
- Linux supported.
- CathesisVision 2019.3 and later.

### 1.1.2 Licenses

The Dynamass Weighbridge integration license requirements are as follows:

License	Name	Description
<b>CDYN-2000</b>	Dynamass Weighbridge Device	This license is the “base” license to integrate with a weighbridge system. It is applied to the server to which the weighbridge is connected
<b>CDYN-1001</b>	Dynamass Weighbridge Device	These licenses apply to the weighbridges. The CDYN-1001 will license a weighbridge, and may be added on a weighbridge-by-weighbridge basis.
<b>CDYN-3000</b>	Dynamass Weighbridge Bundle	This license includes the CDYN-2000 Dynamass weighbridge device license, and also provides support for unlimited CDYN-1001 weighbridge licenses.

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

### 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.

## 1.2 Integration Components and Features

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

**Device** 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.

**Objects** 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.

## 1.3 Features and Abilities

### 1.3.1 General Device Features

- Messages are communicated from the files generated on the user’s weighbridge and placed into the event directory of the integration.
- The Event, or Position, device event messages are used to trigger Cathesis system events.
- Position objects support camera overlays.

### 1.3.2 Device Objects

Object Type	Feature
General	<ul style="list-style-type: none"> <li>• Relevant Position properties populate when CathesisVision receives device event messages.</li> <li>• Displays information about the associated Position.</li> <li>• Position events on the device can be used to trigger CathesisVision system events.</li> <li>• Supports camera overlays.</li> </ul>
Position	States N/A No state information for Position objects.

	<b>Object Properties</b>	<ul style="list-style-type: none"> <li>• ID and Name of Position.</li> <li>• Cameras.</li> <li>• Object Groups.</li> </ul>
	<b>Commands</b>	N/A Position cannot be commanded.
<b>Weighbridge</b>	<b>General Object Features</b>	<ul style="list-style-type: none"> <li>• Displays information about the associated Weighbridge.</li> <li>• Position events on the device can be used to trigger CathesisVision system events.</li> <li>• Supports camera overlays.</li> </ul>
	<b>States</b>	N/A No state information for Weighbridge.
	<b>Object Properties</b>	<ul style="list-style-type: none"> <li>• ID and Name.</li> <li>• Cameras.</li> <li>• Object Groups.</li> <li>• License.</li> </ul>
	<b>Commands</b>	N/A Communication channel cannot be commanded.

### 1.3.3 Device Events

<b>Event Element</b>	<b>Features/Abilities</b>
<b>General</b>	<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>
<b>Event</b>	<p>The following device event messages are received from the Dynamass device and displayed in the CathesisVision device events tab and integration metadatabase:</p> <ul style="list-style-type: none"> <li>• Time.</li> <li>• Weighbridge.</li> <li>• Direction.</li> <li>• Total loco mass.</li> <li>• Total Wagon mass.</li> <li>• Total train mass.</li> <li>• Load cell 1 status.</li> <li>• Load cell 2 status.</li> <li>• Load cell 3 status.</li> <li>• Load cell 4 status.</li> <li>• Tag reader 1 status.</li> <li>• Tag reader 2 status.</li> </ul>
<b>Position</b>	<ul style="list-style-type: none"> <li>• Time.</li> <li>• Weighbridge.</li> <li>• Position.</li> <li>• Smartpass 1.</li> <li>• Smartpass 2.</li> <li>• Speed.</li> </ul>

	<ul style="list-style-type: none"> <li>• Mass-Vehicle.</li> <li>• Mass-Leading Bogie.</li> <li>• Mass-Trailing Bogie</li> <li>• Mass-Left Side.</li> <li>• Mass-Right Side.</li> </ul>
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### 1.3.4 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 usual CathesisVision video review tools.</li> </ul>
<b>View Options</b>	<ul style="list-style-type: none"> <li>• Event.</li> <li>• Position.</li> </ul>
<b>Sort Options</b>	<ul style="list-style-type: none"> <li>• Time.</li> </ul>
<b>Easy Search</b>	<ul style="list-style-type: none"> <li>• Weighbridge</li> <li>• Position</li> </ul>
<b>Filter</b>	<ul style="list-style-type: none"> <li>• Start Time.</li> <li>• End Time.</li> <li>• Line Item</li> </ul>
<b>Export</b>	Database entries may be exported in CSV and PDF format.

#### 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 Dynamass device to CathesisVision.

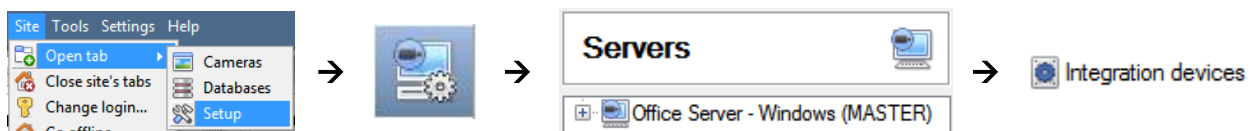
### 2.1 Dynamass Specific Setup

A file is generated on the Dynamass weighbridge and is directed to the Event directory set up at the start of the integration. This information is used for data in CathesisVision software.

### 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



**CAMTASIA-PC - Integration devices**

**Devices**

Name	Driver
Dynamass	Dynamass Weighbridge

1 item

**Configuration of 'Dynamass'**

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

Object type: All objects

Type	ID	Name	Cameras	Object groups	License
Communication channel	_default_	Default			
Position	Bridge1_1	Bridge1_1			
Position	Bridge1_2	Bridge1_2			
Position	Bridge1_3	Bridge1_3			
Position	Bridge1_4	Bridge1_4			
Position	Bridge1_5	Bridge1_5			
Position	Bridge1_6	Bridge1_6			
Weighbridge	Bridge1	Bridge1			

8 items

There are two sections in the Integration Panel:

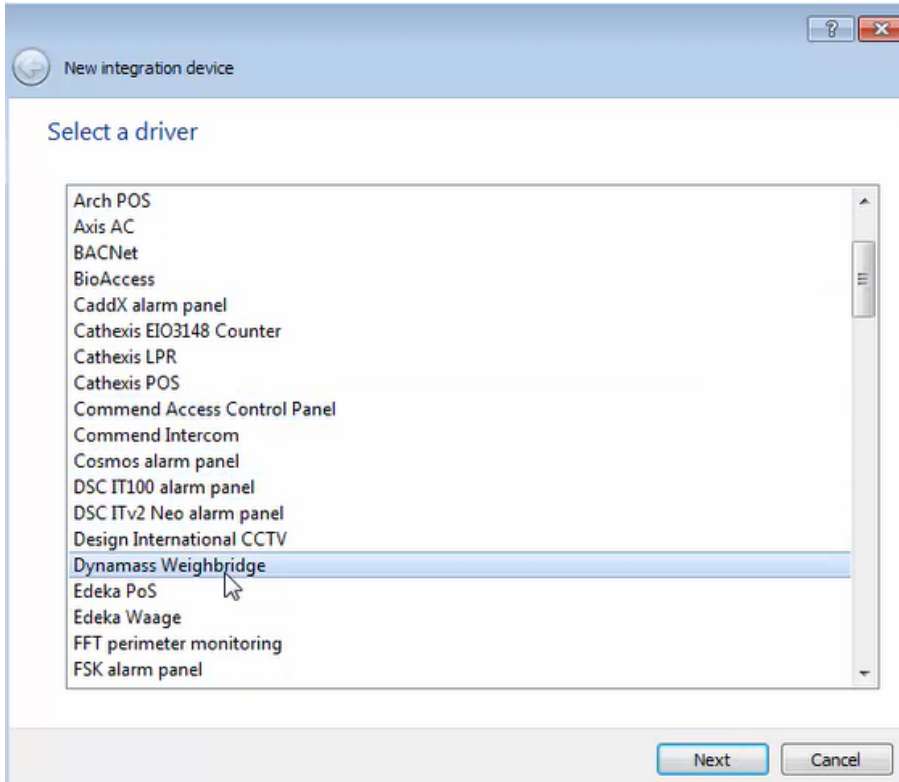
The **Devices** list will specify the integration devices that are attached to the selected server. In this section, new devices are added. This is dealt with below.

The **Configuration** section enables reviewing and editing the device selected in the **Devices** section. The configuration section is dealt with in section 3.

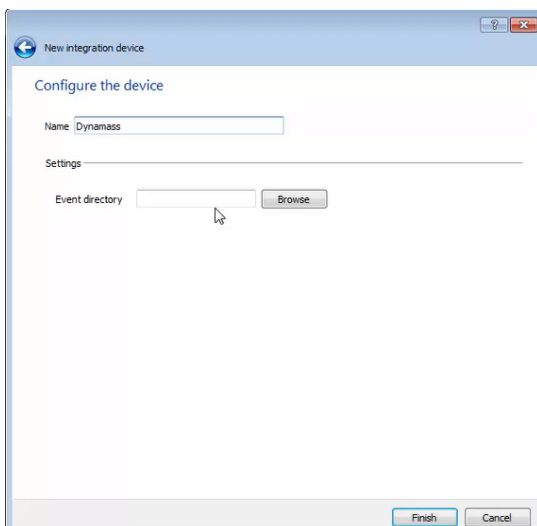


### 2.2.1.1 Device Addition

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



3. Give the device a descriptive name.



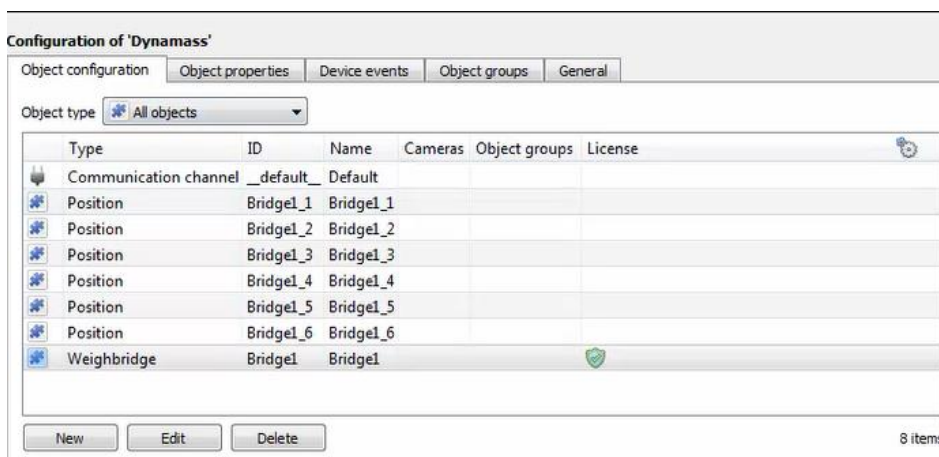
4. Click Finish to complete.

## 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 Dynamass system) will populate once communication is established with the system. The Weighbridge and Position objects will populate once device events are received.

### 3.1 Object Configuration Tab



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

Dynamass has two object types: **Weighbridge** and **Position**.

#### 3.1.1 Object Configuration Buttons and Right-Click Options

##### 3.1.1.1 Object Configuration Buttons

	Add a new object by clicking on <b>New</b> .
	Click <b>Edit</b> to change an existing object.
	Click <b>Delete</b> to remove an existing object from the CathesisVision configuration.

##### 3.1.1.2 Object Configuration Right-click Options

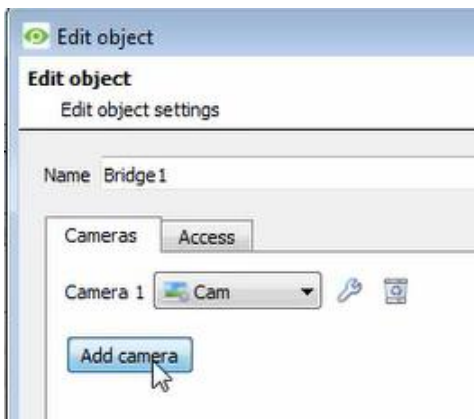
	<b>New</b> will open up the dialogue to add a new object.
	<b>Disable/Enable</b> allows objects to be manually enabled/disabled.
	<b>Prioritise license</b> allows the user to give specific objects priority, when licenses are applied. (Useful if there are fewer licenses than objects.)
	<b>Delete</b> will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

### 3.1.2 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**.

#### 3.1.2.1 Cameras Tab



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.

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

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

 To delete a camera, click the trash icon.

**Note:**

1. Up to four cameras can be added to Weighbridge and Position objects and will be linked in the integration database.
2. 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** that trigger a recording when one of these objects is activated.

#### 3.1.2.2 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.

### 3.1.3 Configure Overlays

Overlays are supported for Weighbridge and Position objects. Overlays may be configured by default for all objects, or individually for selected objects. The path to follow for opening the configuration window for default vs individual overlays is different, however the overlay configuration is the same.

#### 3.1.3.1 Configure Default Overlays

**CAMTASIA-PC - Integration devices**

**Devices**

Name	Driver
Dynamass	Dynamass Weighbridge

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**Configuration of 'Dynamass'**

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

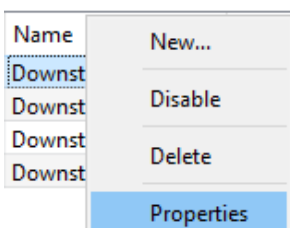
Object type: All objects

Type	ID	Name	Cameras	Object groups	License
Communication channel	__default__	Default			
Position	Bridge1_1	Bridge1_1		1	
Position	Bridge1_2	Bridge1_2 Cam		1	
Position	Bridge1_3	Bridge1_3			
Position	Bridge1_4	Bridge1_4			
Position	Bridge1_5	Bridge1_5			
Position	Bridge1_6	Bridge1_6			
Weighbridge	Bridge1	Bridge1	dahua cam		

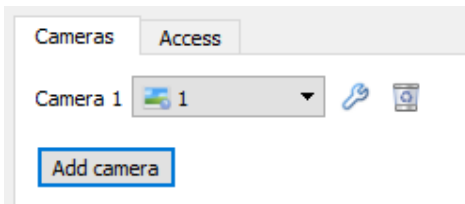
Select the Weighbridge object from the **Object type** drop-down menu.


Click the Default Settings icon.

#### 3.1.3.2 Configure Individual Overlays

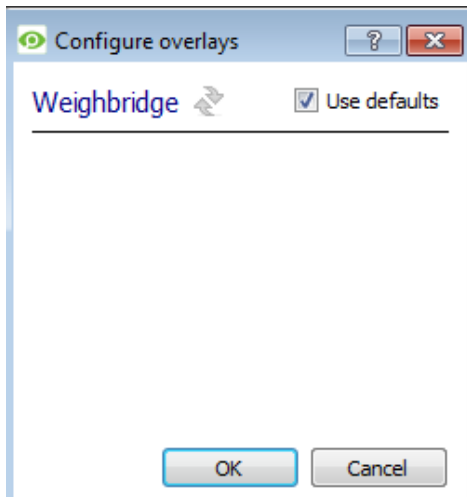


Right-click object and select **Properties** to edit the object.




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

### Default/Individual Options

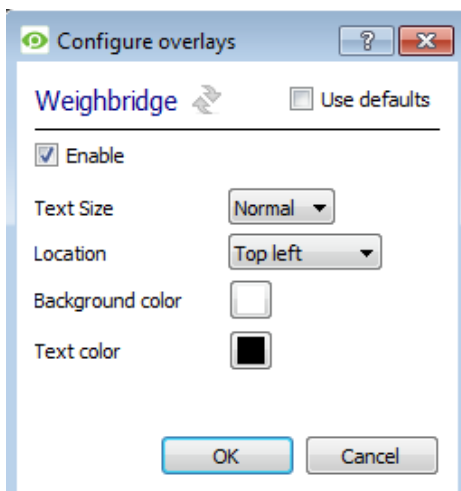


**Use Defaults:** This option is only available when editing individual overlays. Check this box to use the default configurations. Uncheck to edit overlays for the specific object.

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

Click  to reset values.

### Overlay Configuration for Individual and Default



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 a custom **Text colour**.

## 3.2 Object Properties Tab

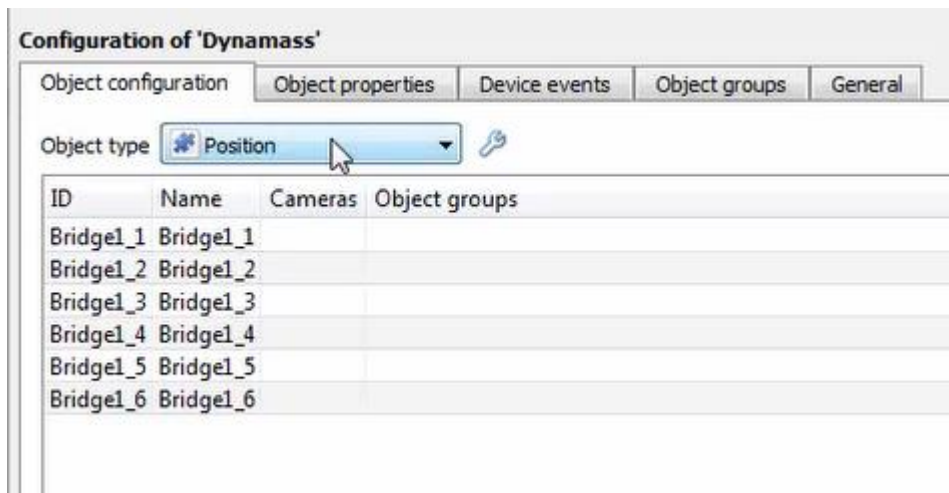
The Object properties tab allows the device object properties to be viewed and sorted by type.

### 3.2.1 System Objects

This system does not check for heartbeats and does not check if it is online/offline. It reads the information that is directed into the Evert directory.

### 3.2.2 Position Objects

Position objects will populate once device events are received from the relevant Positions.



### 3.2.3 Weighbridge

This object links the cameras viewing the physical weighbridge to events and overlays.



### 3.3 Device Events Tab

Configuration of 'Dynamass'

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

Position Filter

Time	Weighbridge	Position	Smartpass 1	Smartpass 2	Speed	Mass - Vehicle	Mass-Leading Bogie	Mass-Trailing Bogie	Mass-Left Side	Mass-Right Side
2008-10-13 17:38:00	Bridge1	1			6.1	28620.000 kg	13940.000 kg	14670.000 kg	13580.000 kg	15040.000 kg
2008-10-13 17:38:00	Bridge1	2			7.3	71210.000 kg	34910.000 kg	36300.000 kg	35010.000 kg	36200.000 kg
2008-10-13 17:38:00	Bridge1	3		40136.2	9.1	77400.000 kg	39480.000 kg	37920.000 kg	37490.000 kg	39910.000 kg
2008-10-13 17:38:00	Bridge1	4		43828.1	9.6	71570.000 kg	36170.000 kg	35410.000 kg	35700.000 kg	35870.000 kg
2008-10-13 17:38:00	Bridge1	5		34950.2	10.1	74120.000 kg	36930.000 kg	37190.000 kg	36960.000 kg	37160.000 kg
2008-10-13 17:38:00	Bridge1	6		44328.2	9.9	73820.000 kg	36130.000 kg	37720.000 kg	37000.000 kg	36830.000 kg

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

### 3.4 Object Groups Tab

Configuration of 'Dynamass'

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

Group Filter

Available objects	Objects in '1' group
Name	Name
Bridge1_1	
Bridge1_2	
Bridge1_3	
Bridge1_4	
Bridge1_5	
Bridge1_6	

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 / .

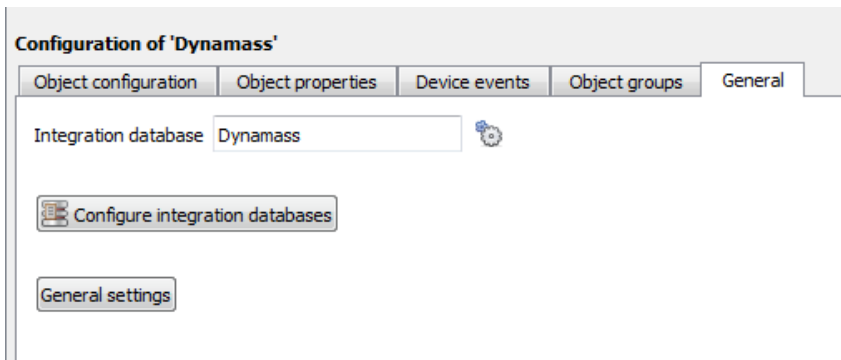
**Note:** Once a group has been created, the group's object type may not be edited.

Give the group 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 to the group select them (multiple may be selected), and click on / .

## 3.5 General Tab

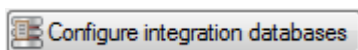


Currently the general tab deals with the **Integration database**.

Select an existing database or create a new one.

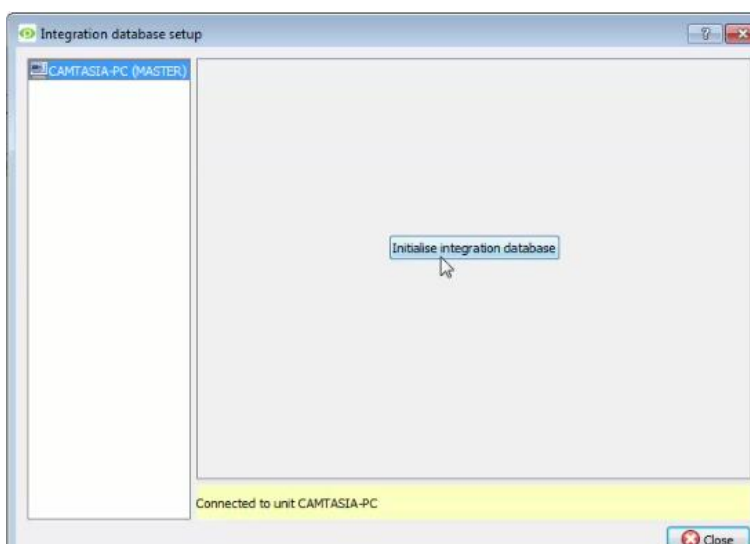
**Important Note:** Each integrated device needs to be attached to an Integration database. Without setting up/adding a database, the integration will not function properly within the CathesisVision system.

### 3.5.1 Configure a New Database



If there is no existing database for the current integration, clicking on this button will open the integration database setup.

#### 3.5.1.1 Initialise Integration Database

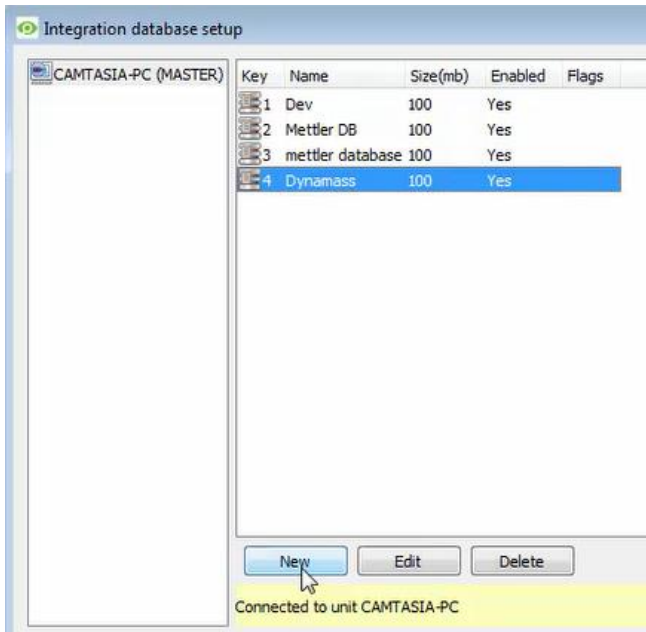


To create databases for specific integrations, the general integration databases must be initialised. If not already done, initialise by clicking the button.

**Note:** Once the size of the database has been set, the initial size cannot be increased.



### 3.5.1.2 Configure Integration Database



If the general integration database has already been initialised, or after initialising (3.5.1.1), create a new integration database for the current integration.

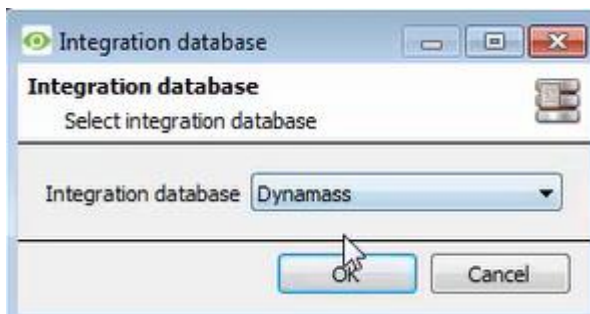
Select the unit that the database should be added to from the list on the left, and click **New** to create a new integration database.

Give the database a **name**.

Set the database **Size**.

Select the **Dynamass** driver from the drop-down menu.

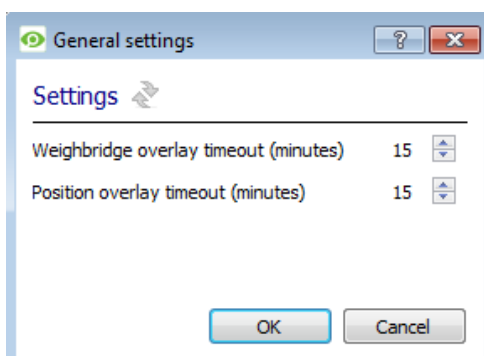
### 3.5.1.3 Select the Integration Database



Integration database -- select integration database --

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

### Adjust General Settings

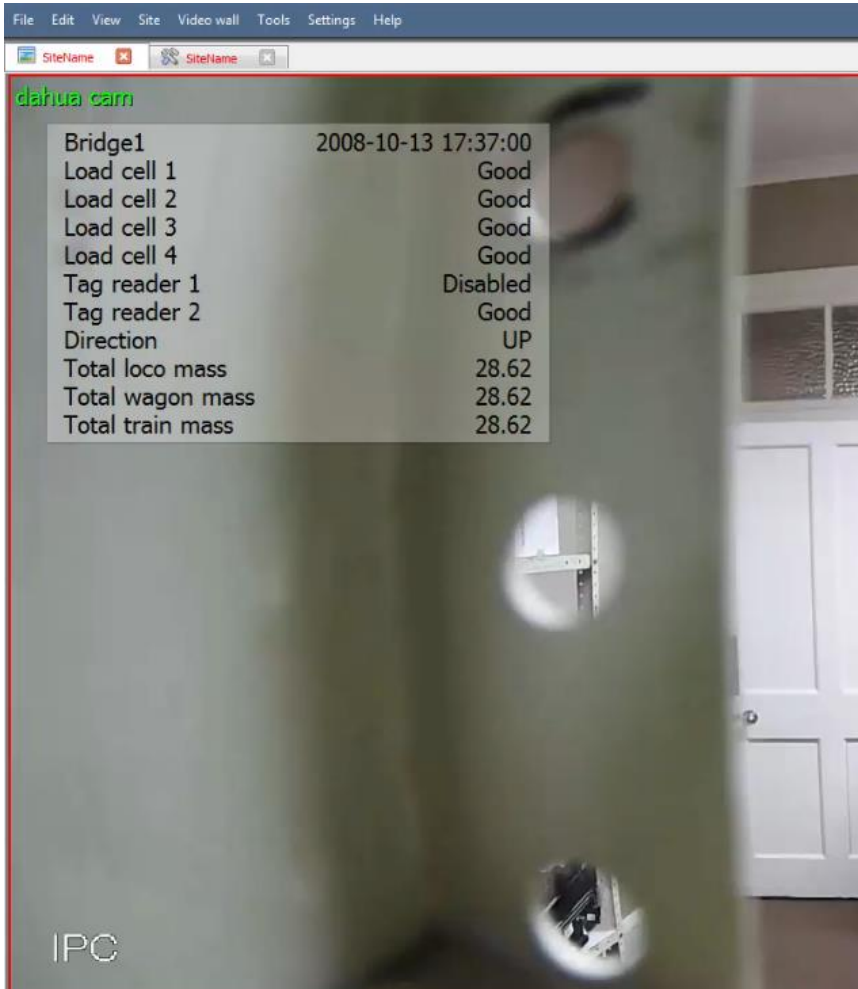


Adjust Weighbridge Overlay timeout as desired.

Adjust overlay timeout as desired.

## 4. Camera Tab Overlay Setup

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



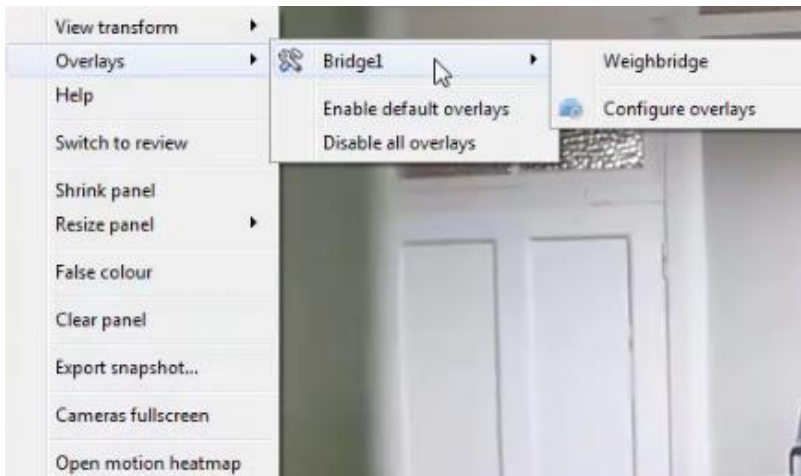
### 4.1 Video Feed Options Panel



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.

Right-clicking will also bring up overlay options.

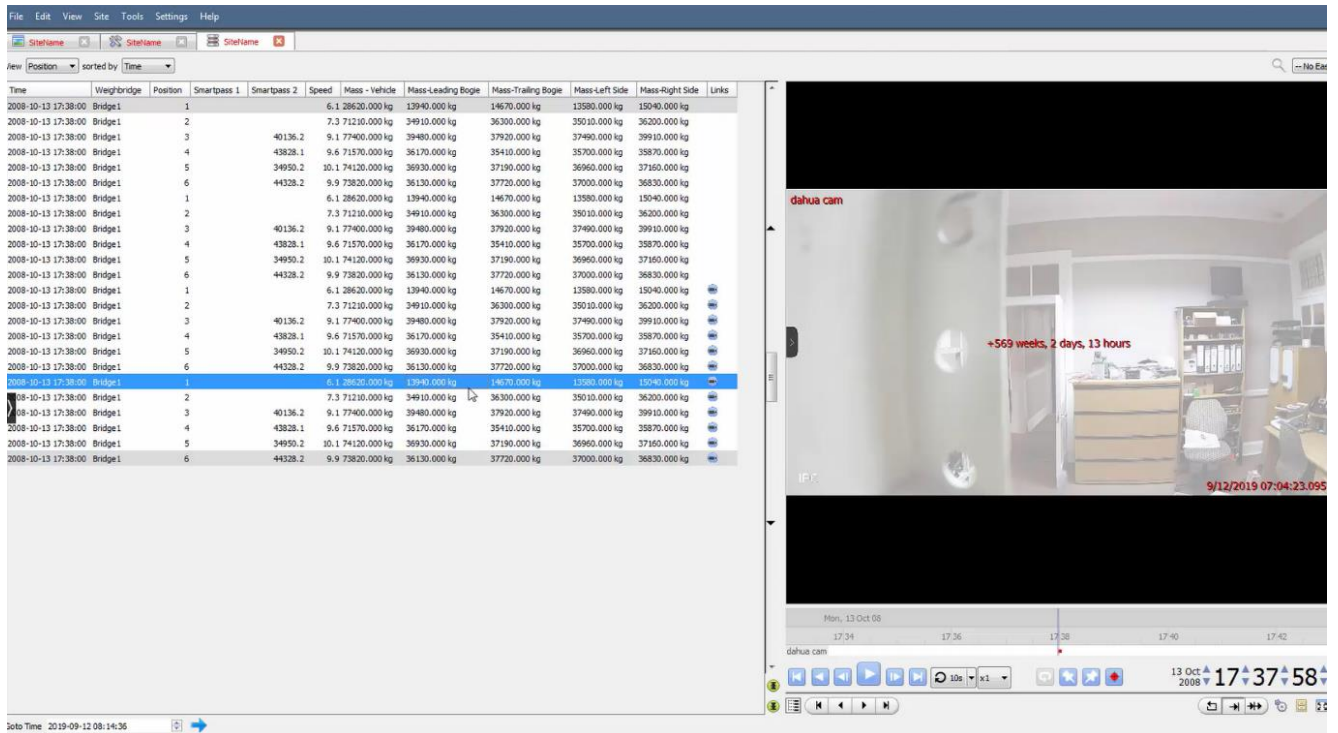
### 4.1.1 Select the Overlay



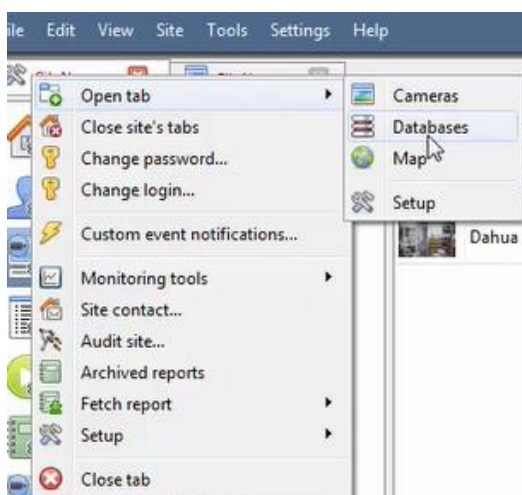
Through the right-click option, one can select the overlay and it will appear over the video feed, as above.

# 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:

**Site Menu / Open Tab / Databases.**

**Right-click site tab / Open Tab / Databases.**

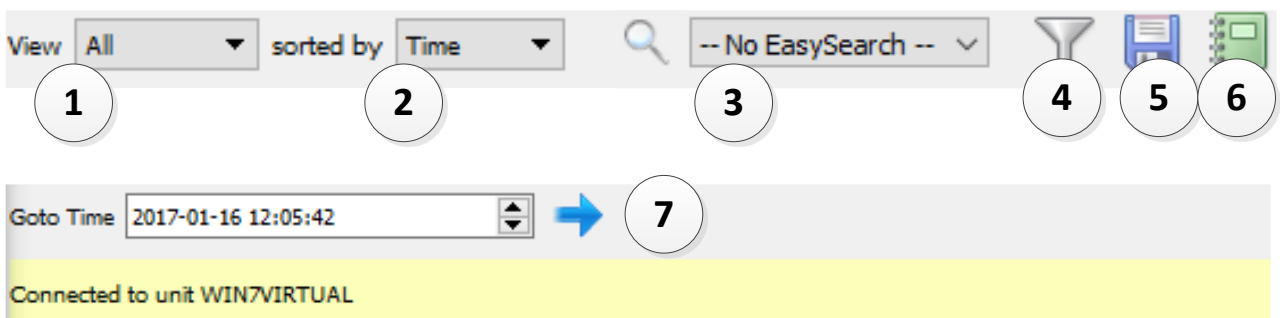









When the database tab opens, select the relevant integration database from the database panel that opens on the left-hand side. The databases are ordered under the NVRs that they are attached to.

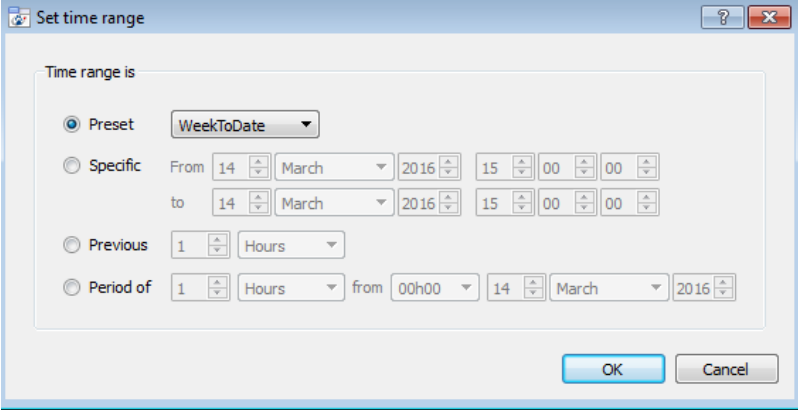

To open and close this list, click on the arrow in the centre of the list:



## 5.2 Database Interface



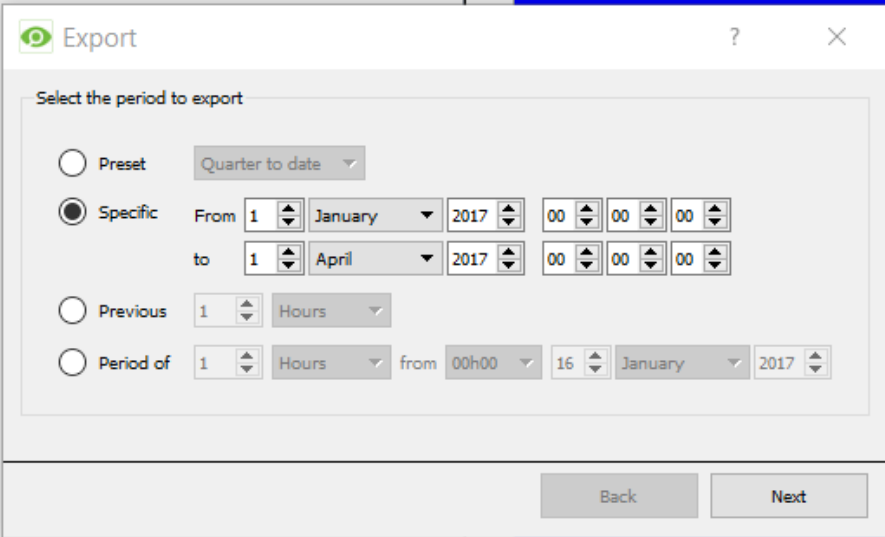
<p>① <b>View</b></p>	<p>Change the way that the database is presented. Some integration databases have multiple view options. Here is the view option for the Dynamass integration:</p> 
<p>② <b>Sorted By</b></p>	<p>The Events are sorted based on the following parameter: <b>Time</b>.</p>
<p>③ <b>Easy Search</b></p>	<p>The easy search option allows one to quickly search the database using the below options:</p> 
<p>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 on .</li> </ol> <p>A <b>Time range</b>, within which the search will be conducted, may also be set.</p>

	<p>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.</p> <p> Then click the arrow icon.</p>

### 5.2.1 Generate Metadatabase Reports

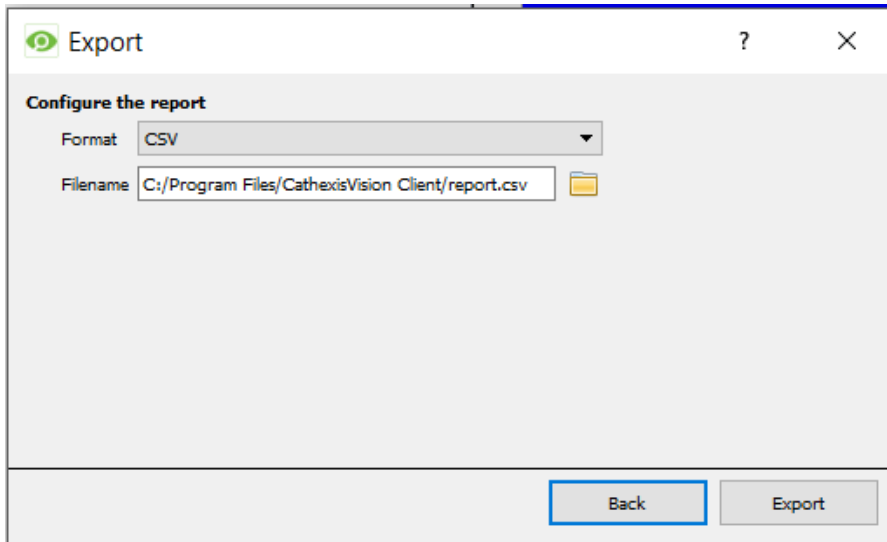


Click the save icon to open the Export window.



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

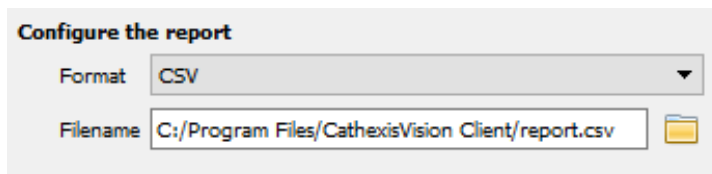
Click **Next**.



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

See below for the two options.

### 5.2.1.1 Export CSV



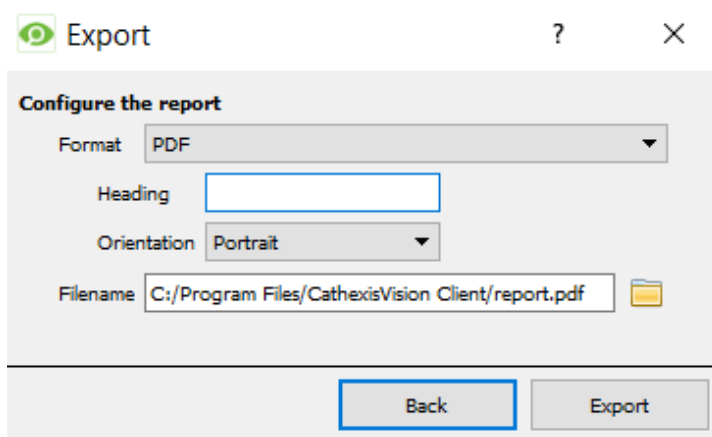
Select CSV **Format**.

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** of the PDF.

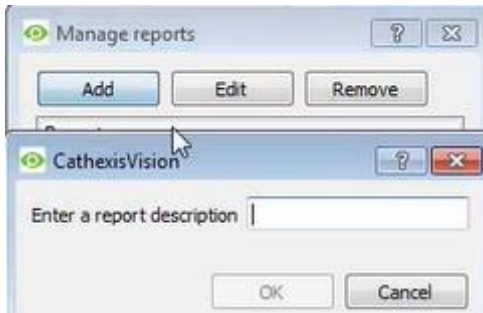
Edit the **Filename** by either entering it straight into text field (replacing **report.pdf**)



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

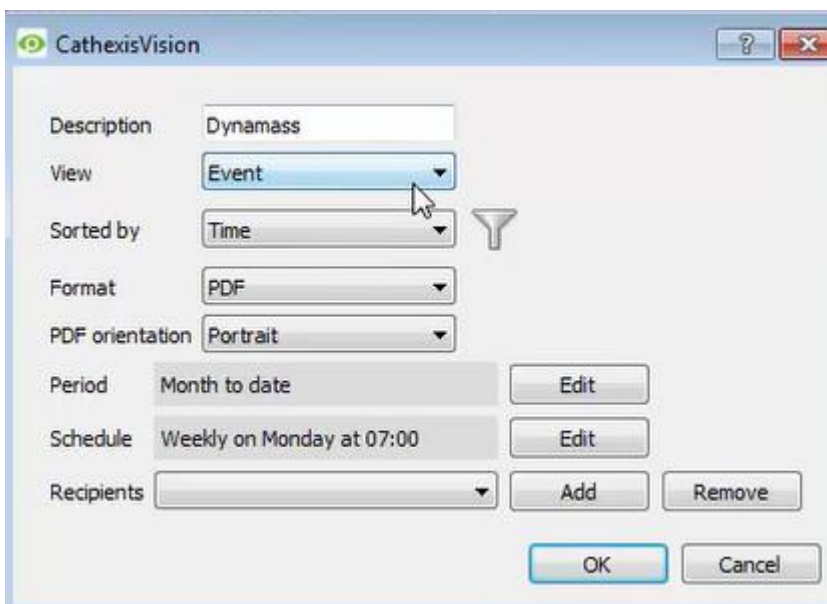
## 5.2.2 Manage Reports

Metadata 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

search --

Time 2008-10-13 17:37:00

Weighbridge Bridge 1

Direction UP

Total loco mass 28620.000 kg

Total wagon mass 368 130.000 kg

Total train mass 396740.000 kg

Load cell 1 status Good

Load cell 2 status Good

Load cell 3 status Good

Load cell 4 status Good

Tag reader 1 status Disabled

Tag reader 2 status Good

Weighbridge	Position	Smart
Bridgel	1	
Bridgel	2	
Bridgel	3	
Bridgel	4	
Bridgel	5	
Bridgel	6	

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

### 5.2.4 Viewing an Entry's Associated Recording

The screenshot shows a software interface with a database table on the left and a video player on the right. The table lists weighbridge events with columns for Time, Weighbridge, Position, Smart, Smartpass 1, Smartpass 2, Speed, Mass - Vehicle, Mass-leading Bogie, Mass-Trailing Bogie, Mass-Left Side, and Mass-Right Side. A camera icon in the 'Links' column of the first row is highlighted. The video player on the right shows a live feed from a 'dahua cam' of an office interior. A red overlay on the video indicates '+569 weeks, 2 days, 13 hours' and a timestamp '9/12/2019 07:04:23.095'. The video player includes standard playback controls and a status bar at the bottom showing '13 Oct 2008 17:37:58'.

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.

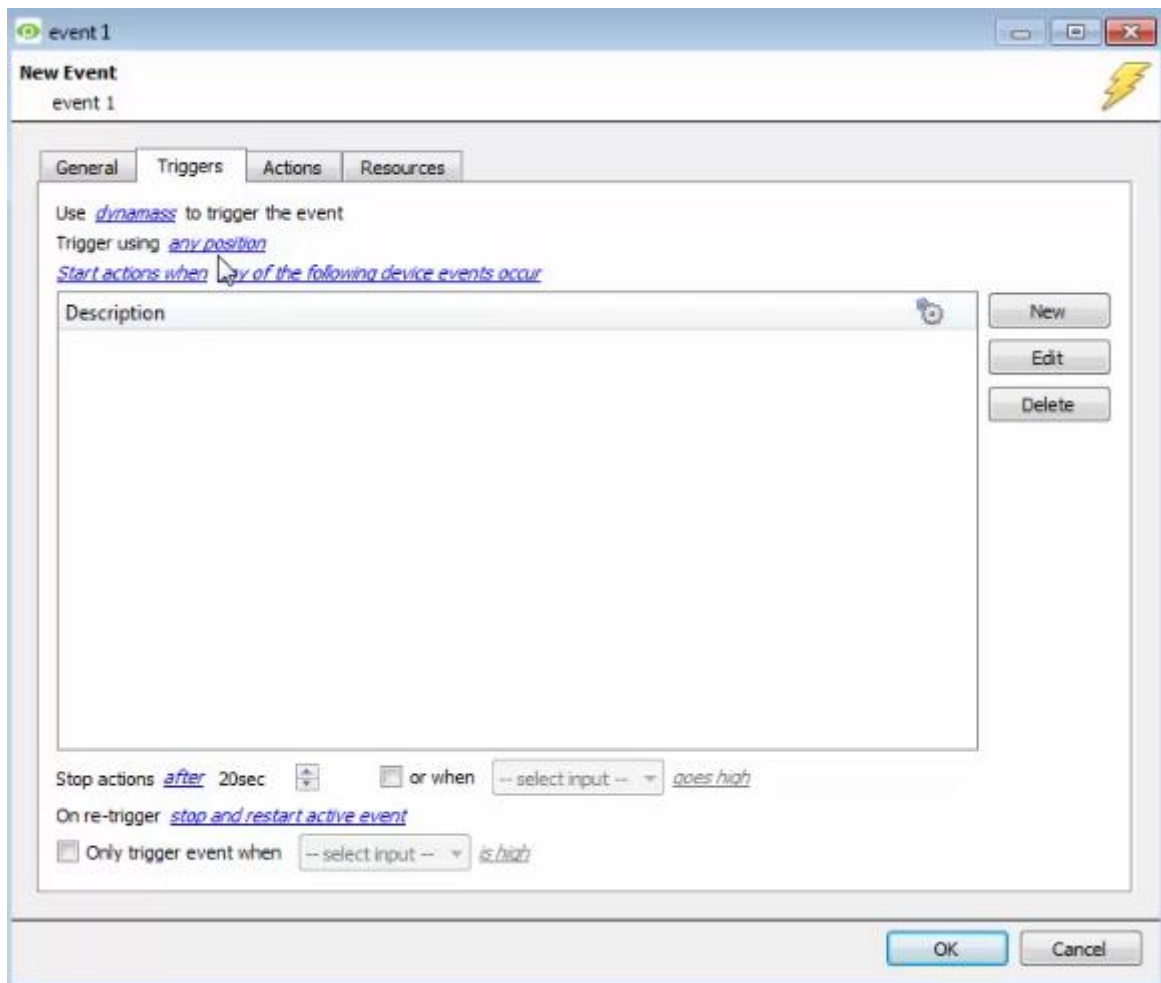
## 6. Events

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 Dynamass 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 setup via the Event Window. This has 4 tabs. In the **General Tab**, an event is given a name, description, schedule, and priority. In the **Triggers Tab**, the trigger/s for the event 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 Dynamass Weighbridge device, open the Events panel in Configure Servers:

Site / Open tab / Setup / Configure servers / Servers / Events



 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 sends the selected trigger.

**Any position/weighbridge** will trigger when any of these objects sends the selected trigger.

**Positions in group “1”:** Group is set up; it will appear in this list.

**Specific position/weighbridge** 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, 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 on the question mark icon to see a list of available descriptions.

### 6.3.3 While/When and Any/All

When triggering on 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.

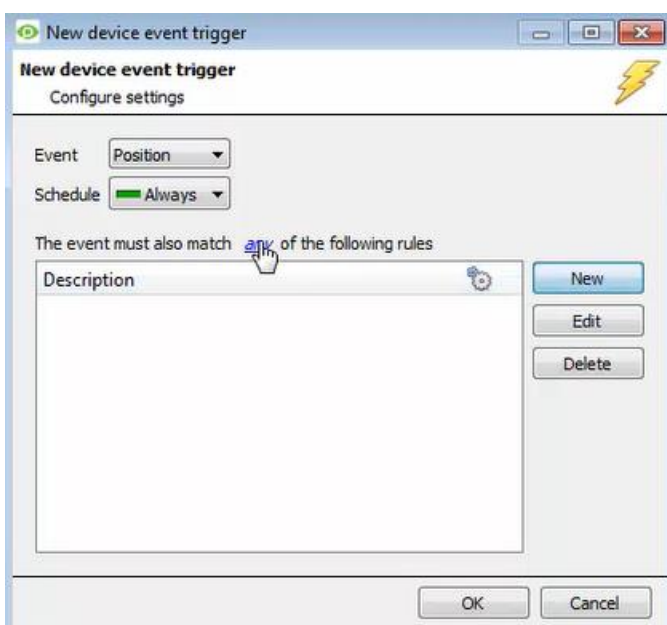
Use [dynamass](#) to trigger the event  
 Trigger using [any position](#)  
 Start actions when [any of the following device events](#)

To change these settings, click on the blue hyperlinks.

### 6.3.4 Define the Trigger

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

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



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

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.

**Note:** Multiple constraints (**Device Event Triggers**) may be set. If a constraint is not defined, every single device event will trigger this 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 display the rules options.

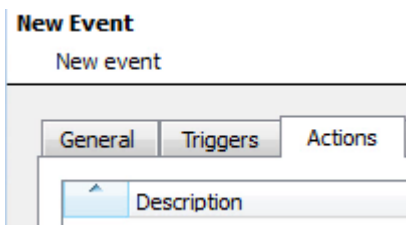
**Note:** When all available options are known to CathesisVision, there will be a drop-down menu. When these variables are not pre-defined, fill them in. The information pulled through to the events is information sent to CathesisVision from the Dynamass device, see the Dynamass settings for the strings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

### 6.3.4.1 Event Example

Use dynamass to trigger the event  
 Trigger using any weighbridge  
 Start actions when any of the following device events occur

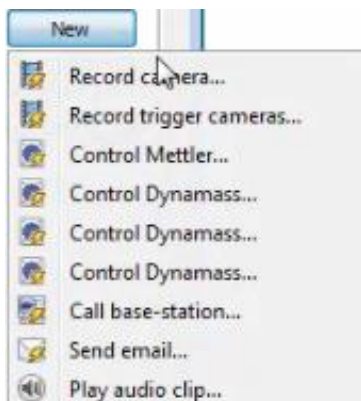
In this example, an event is configured which will trigger when the state of the Dynamass system equals 'any weighbridge'.

## 6.4 Actions



Once the triggers that are going to initiate the event are 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 with the Dynamass device. The option is presented in the menu, but it is not advisable to control the Dynamass device as a system action.

## 7. 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).