



# Multitone i-Message Integration App-note

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# 1. Introduction

This app-note details the integration of the Multitone i-Message with CathesisVision. Functionally, this integration entails the triggering of standard CathesisVision Events, based on input from the Multitone i-Message. **Note:** the *CathesisVision Setup Manual* has general information on integration, creating an integration database, as well as a general introduction to the Integration Panel.

## 1.1 Requirements

### 1.1.1 Software

- CathesisVision 2021.2 and later.
- Windows 10: 64-bit and later; Windows Server 2016 and later.
- Minimum of 4GB of RAM required.

### 1.1.2 Licensing

License Name	Description
CMIM-1001	Multitone i-Message location
CMIM-2000	Multitone i-Message device
CMIM-3000	Multitone i-Message bundle

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

#### A NOTE ON CAMERA CHANNELS

The CathesisVision software packages have **limits on camera channels**. A multi-head 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

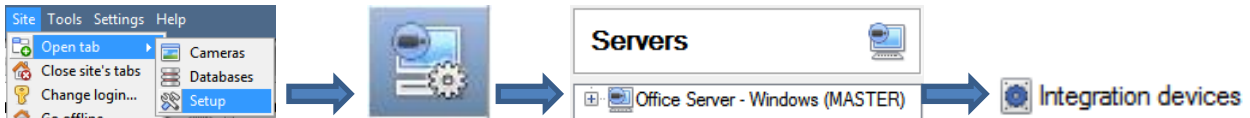
All CathesisVision integrations have two component levels: **Device** and **Object**.

**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.

## 2. Device Addition and Configuration


This section details the procedure for setting up CathesisVision and Multitone i-Message to communicate with each other. 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:



There are two sections in the Integration Panel:

1. The **devices** list will list the integration devices that are attached to the integration database.
2. The **Configuration** section enables the user to edit or review the device selected in the **devices** section.

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

1. In the Integration Panel, in the devices section, right-click. Select . This will open the addition window.
2. Select the **Multitone i-Message** driver. Click **Next**.

#### 2.1.1 Add the Device

Give the device a descriptive **name**.

Enter the IP address of the unit that is running the i-Message and will be sending data to CathesisVision.

Enter the **Port** number through which the data will be sent.

Once the Multitone i-Message device has been added and configured, select it in the **Devices list** and all Multitone i-Message objects will automatically populate the **Configuration Section**.

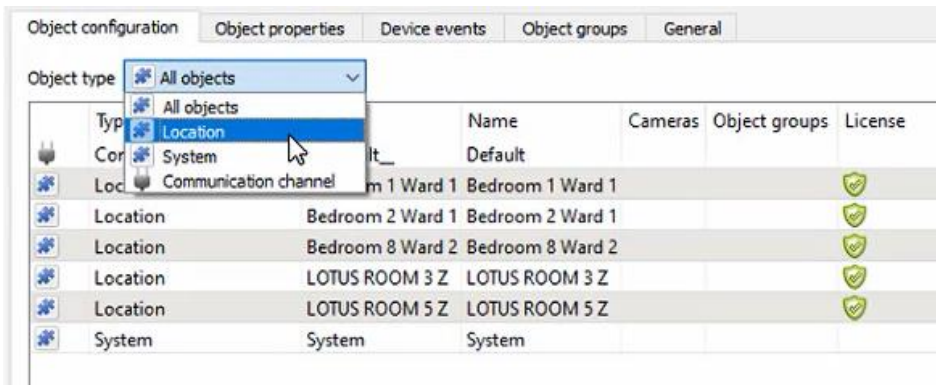
## 2.2 Configuration Section (Tabs)

The configuration section is divided up into several tabs: **Object configuration**, **Object properties**, **Device events**, **Object Groups**, and **General**. The Multitone i-Message objects will have been automatically populated when the device was added and configured.


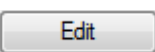
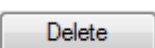
### 2.2.1 Object Configuration Tab

The object configuration tab is the tab where the individual objects that comprise the integration may be viewed. The Multitone i-Message integration objects are **Location**, **System** and **Communication channel**.

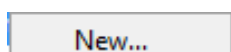
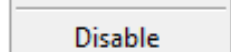

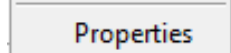
In this tab, the **IDs**, **Names**, **Cameras**, and **Groups** assigned to each object are visible.



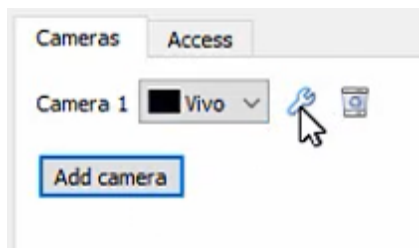
#### 2.2.1.1 Object Configuration Buttons

-  Click to add a new object.
-  Click to open up an existing object for editing.
-  Click to delete an existing object from the CathesisVision configuration.

#### 2.2.1.2 Object Configuration Right-click Options

-  **New** allows a new object to be added.
-  **Disable/Enable** allows individual nodes to be enabled or disabled.
-  **Delete** will permanently remove this object from the list.
-  **Properties** will open up the object properties. The object may be edited from here. (Specifically, this is where cameras and user access levels are assigned.)

### Properties: Cameras

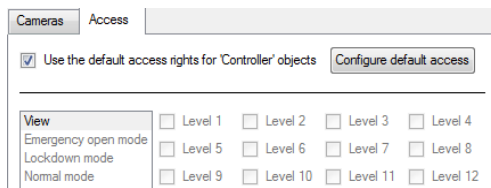


Adding a camera to an object means that whenever there is an event on that object, the recording from that camera will be related to the time and date of the object event, in the Integration database.

To add a camera, click on **Add Camera**. Select the relevant camera from the drop-down menu.

To delete a camera, click on .

### Properties: Access



**Access** allows sensitive objects to be protected by only allowing certain levels users access to them.

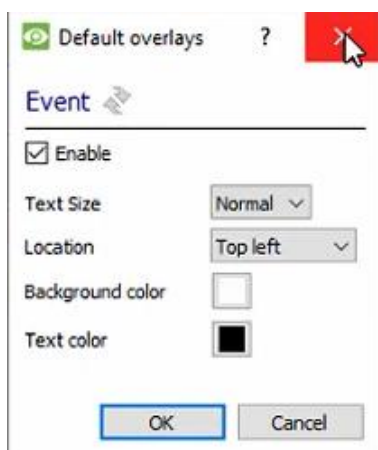
A list of objects for which access levels may be set, is visible.

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

#### 2.2.1.3 Configure overlays

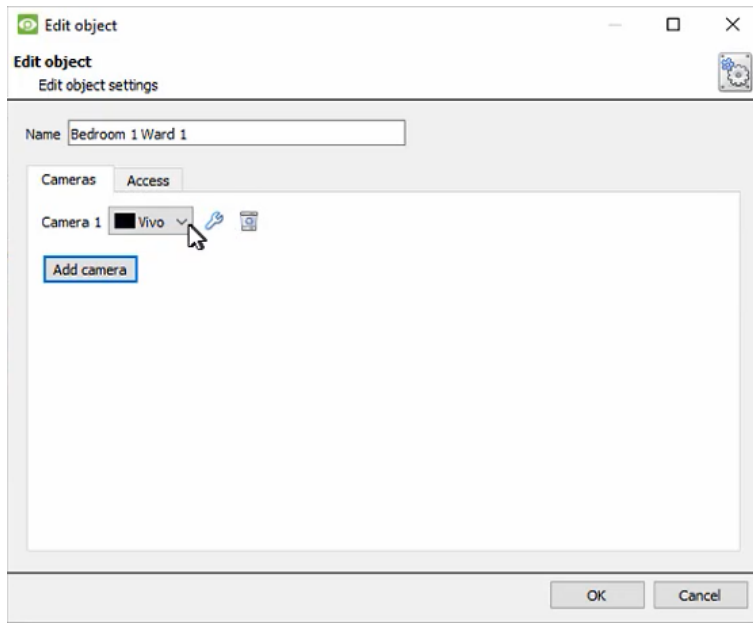


Click on the spanner icon to the right of the Object type, to open the **Default overlays** window.



Configure the overlays as desired.

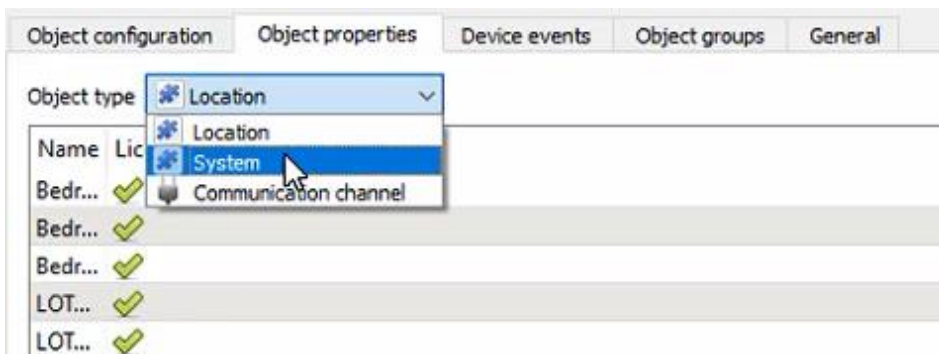
Alternatively, click on an object from the list. Select **Edit**.



In the **Edit object** window, overlays can be edited.

## 2.2.2 Objects Properties Tab

The Object Properties tab is where all object properties may be viewed. Objects are sorted by type. The types of objects for this integration are **Location**, **System**, and **Communication channel**.



Below are the explanations for the object types.

**Location** Shows the object name and licensing status.

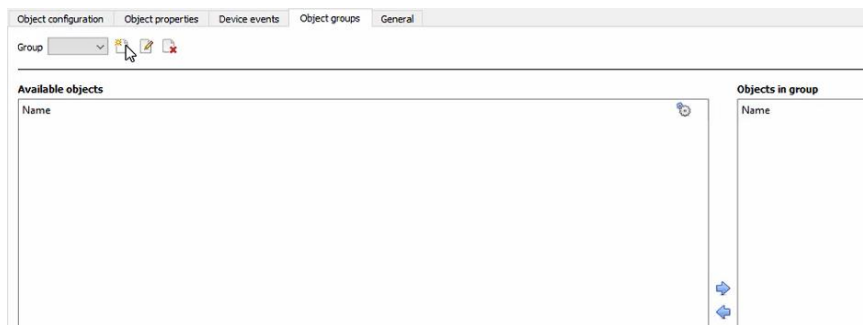
**System** This will indicate whether or not the system is online.

## 2.2.3 Device Events Tab

This will list real-time events happening on this device. This helps installers to see that the integration is functioning, and to monitor the live events happening on site:




Time	Type	Location	User
2021-04-20 20:40:26	Attack	LOTUS ROOM 3 Z	
2021-04-20 20:40:27	Call	LOTUS ROOM 5 Z	
2021-04-20 20:40:28	Assist	Bedroom 8 Ward 2	Pager 10
2021-04-20 20:40:29	Emergency	Bedroom 2 Ward 1	Pager 16
2021-04-20 20:40:30	Wander	Bedroom 1 Ward 1	Pager 1

## 2.2.4 Object Groups Tab

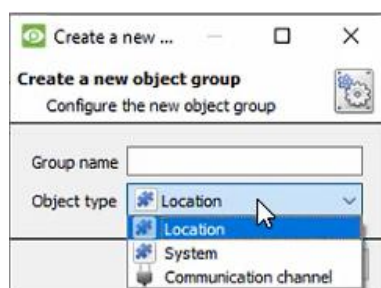


Groups of the same type of object may be created. This is useful when setting up events, because events can be triggered by an object group.

### 2.2.4.1 Create a Group

-  To create a group, click on this icon.
-  To edit a group, click on this icon.
-  To delete a group, click on this icon.

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

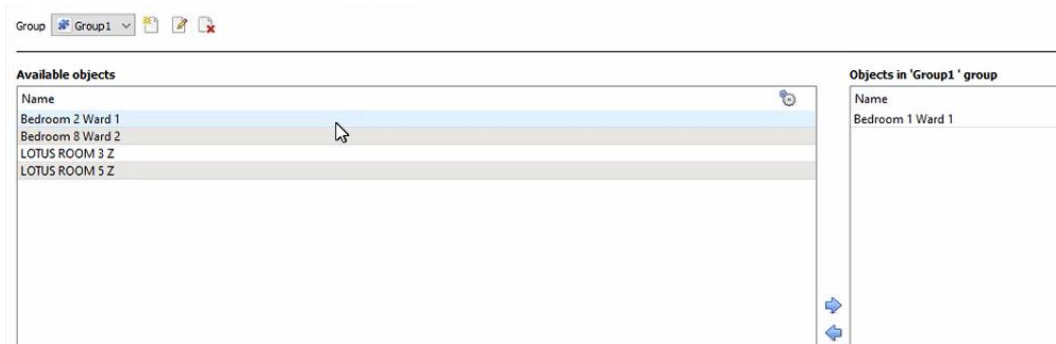


When creating a group, select what object type to include in the group. Once the group is created the available objects panel will fill up with all available objects of that type. From this list, choose which objects to use in the Group.

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

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

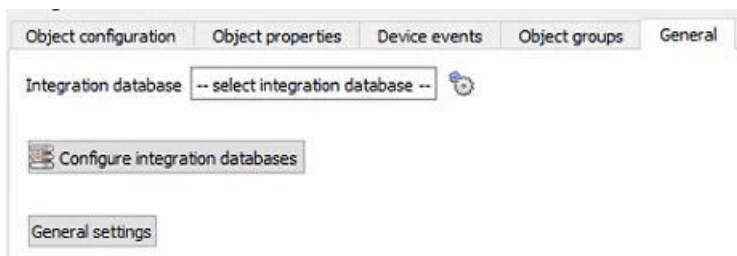




There a list of available objects. It is possible to select multiple objects at a time.

- ➡ To add these objects to the group, select them and click on the arrow.
- ⬅ To remove these objects from the group, select them and click on the arrow.

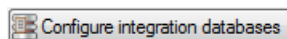
## 2.2.5 General tab



The general tab deals with the integration database. The user can select an existing database, or configure a new database for the integration.

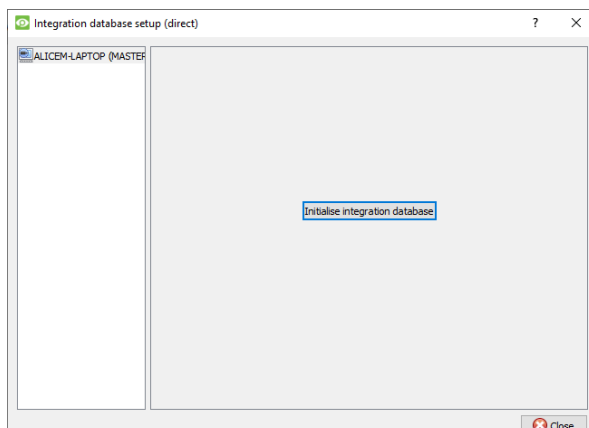
**Note:** Each integrated device needs to be attached to an Integration database. Without setting up/adding a database here, the integration will not function properly within the CathesisVision system.

### 2.2.5.1 Configure a new database



If a database is not yet created, clicking on this button will navigate to the integration database setup.

### Initialise the integration database



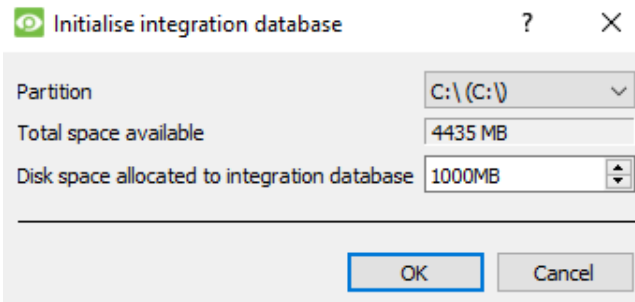
The first time an integration database is added, initialise this feature on the unit.

This will add a broad database, within which all of the integrated device's databases will be added.

From the list on the left, select the unit to which to add the database.

Initialise integration database

Click on **Initialise integration database**.



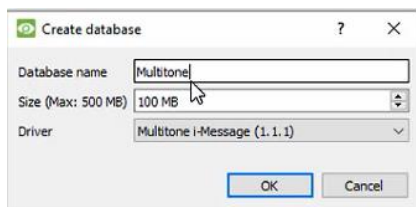
Choose which partition the database will be formed on, and select how much space it will take up.

### Add a new devices database

After initialisation, add the database for the integration being worked with.

New

Click on the **New** button, at the bottom of the **Create database** window.



Give the Integration database a descriptive **Database Name**.

Allocate a **Size** to the new device database.

Choose the **i-Message (1.1.1) Driver**. Click on OK to create the database.

### 2.2.5.2 Select the integration database

Integration database

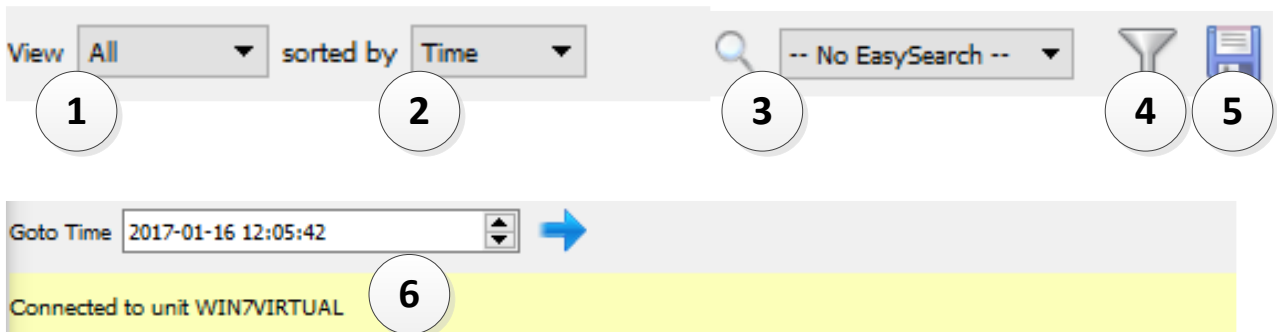
Once a database has been created, the user may select it by clicking on the **gear icon**. In the dialogue that appears, select the database.

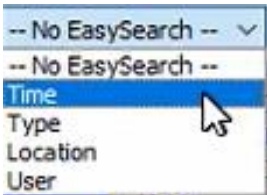





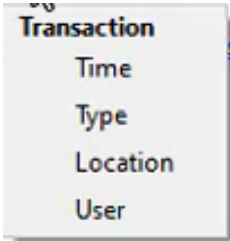
Only databases relevant to the integration being added should appear.

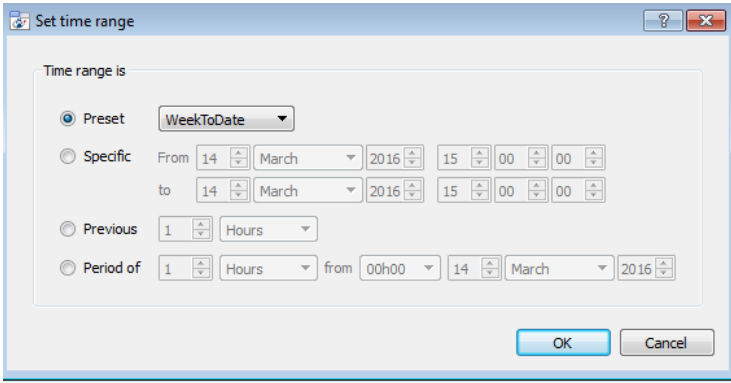

**Note:** The information on setting up an integration database may be found in the **Integration Devices General Settings** section of the *CathesisVision Setup Manual*.



### 3.2 Database Interface



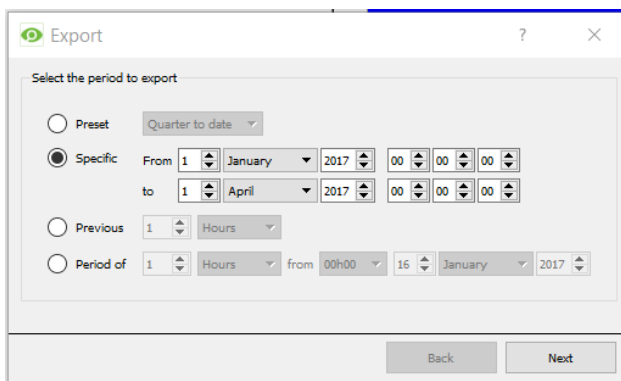
<p>① <b>View</b></p>	<p>The way the database is presented may be changed. Some integration databases have multiple view options. The <b>Multitone i-Message</b> database allows the user to view <b>Events</b>.</p>
<p>② <b>Sorted By</b></p>	<p>Events may be further sorted based on the following parameters: <b>Time</b>.</p>
<p>③ <b>Easy Search</b></p>	<p>The easy search option allows for a quick search of the database within one of the following options:</p> 
<p>④ <b>Filter</b> </p>	<p>Filter offers a more advanced way to sort information in the Integration Database table.</p> <p>Once the filters dialogue is open, the following options are available:</p> <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> <b>Enable filters</b> To enable filters, check this box.</li> <li> To add a new filter, click on this icon.</li> <li>The filter icon  will change to  when filters are active.</li> <li> To delete an added filter, click on this icon.</li> </ul> <p><b>Filter options:</b></p>  <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 (for example, <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 meta-database reports in PDF or CSV format. See below.</p>
<p>6 <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, and then click on the  icon.</p>

### 3.2.1 Generate Meta-Database Reports

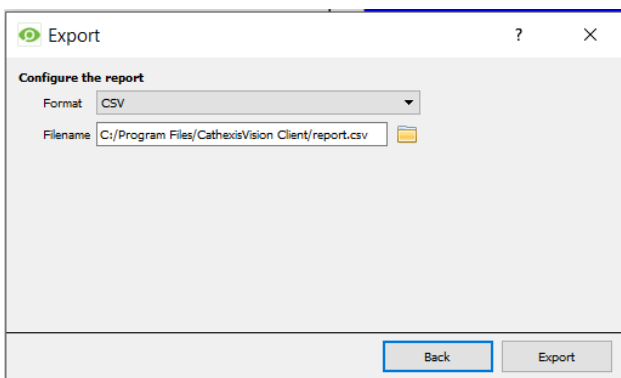


Click this icon to open the Export window.



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

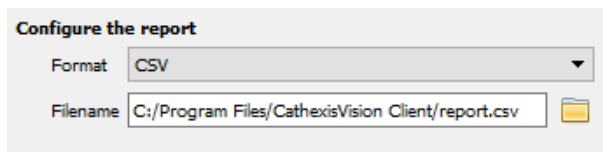
Click **Next**.



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

See below for the two options.

### 3.2.1.1 Export CSV



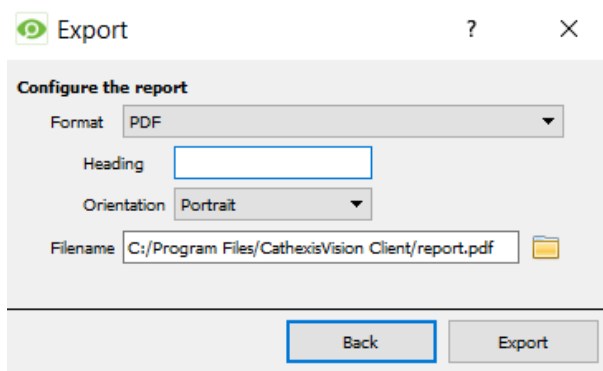
Select **CSV Format**.

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



to choose a new save folder and filename.

### 3.2.1.2 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.csv**), or click the



to choose a new save folder and filename.

## 3.2.2 Metadata

**Time** 2021-04-20 20:40:26  
**Type** Attack  
**Location** LOTUS ROOM 3 Z  
**User**

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

## 3.2.3 Viewing an Entry's Associated Recording

To view an entry's associated recording, left-click on a database entry which has this icon in the **Links** column:

Then click **play** in the video player.

## 4. Events

A CathesisVision event has a trigger, which causes an action. Integrated devices may be set to act at triggers, or as actions. This chapter details the Multitone i-Message specific aspects of Events.

Refer to the **CathesisVision Setup Manual** for a comprehensive guide to CathesisVision events. Most of the data that CathesisVision receives from a device is presented in the Events interface.

### 4.1 Create an event

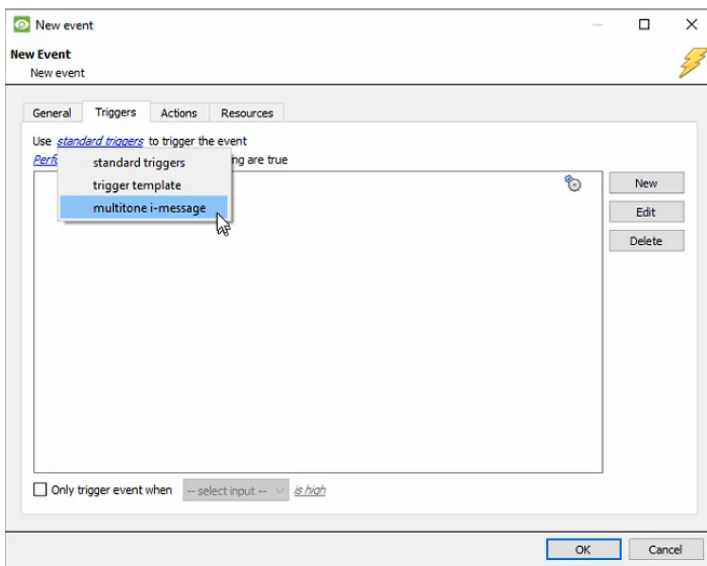
To create an event using the Multitone i-Message device, enter the Events management area:



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

### 4.2 Triggers

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



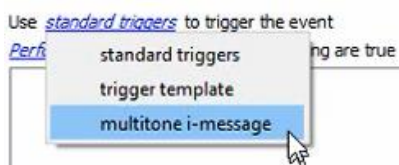
In this window, define the rules and constraints which will trigger an event on the Multitone i-Message device.

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

**Note:** The user may set multiple constraints, choosing if any, or all constraints need to be fulfilled to set off a trigger.

#### 4.2.1 Set the device as the trigger

Choose the Master Trigger type here.

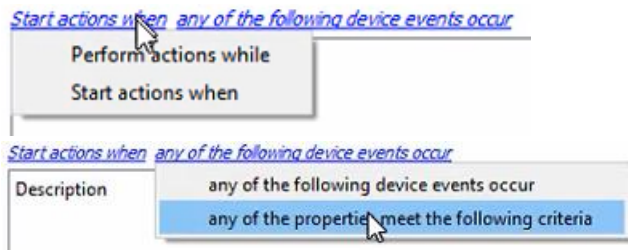


If creating a new event, the trigger type will default to: Use standard triggers.

To define what will trigger the event, click on the hyperlink after "use". To set it as the Multitone i-Message device, click on the hyperlink, and select the relevant name from the dropdown menu.

## 4.2.2 While/When and Any

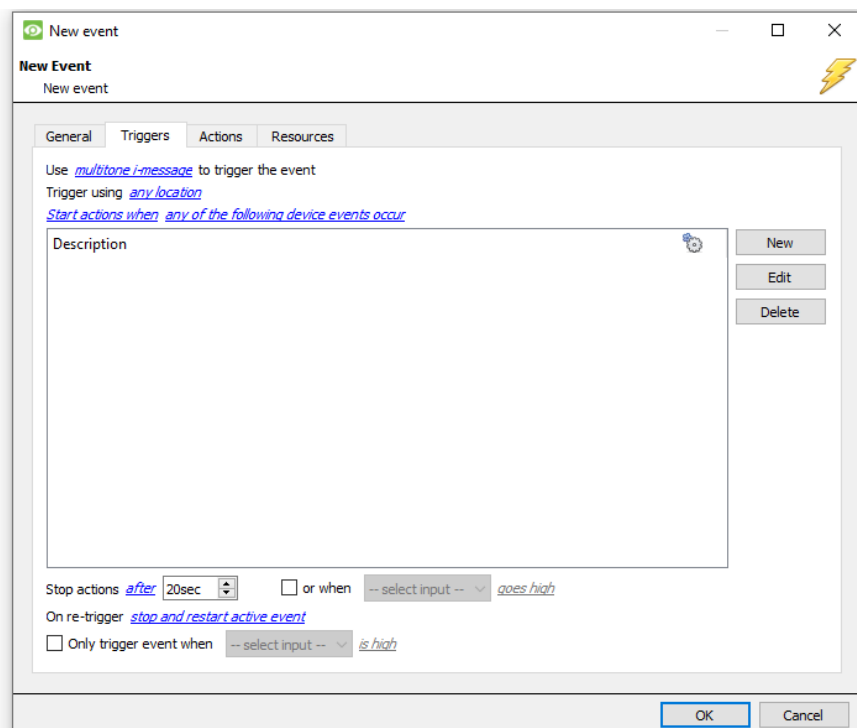
When using the device to trigger the event, there are options to **perform actions while** or **start actions when (while/when)** a trigger is active. The user will be able to select multiple triggers, and define whether events will be set off while/when **any of the following device events occur** or **any of the properties meet the following criteria**.




To change these settings, click on the blue hyperlinks.

## 4.2.3 Trigger Types

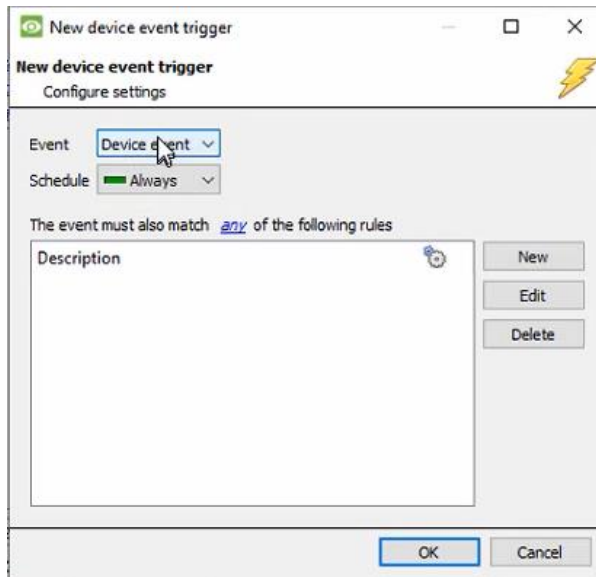
Choose whether certain device objects or any device event will trigger an event.



### 4.2.3.1 Device Event Triggers

After selecting a master trigger type, add a trigger to the event. Click on  in the Triggers tab. This will bring up the dialogue box below:





Select the **Event** type.


Define the **Schedule**.

Click on the blue hyperlink to define whether the **any** or **all** of the configured device event rules should trigger an event.

Next, add rules to the device event trigger.

### Add Rules to Device Event Triggers

If no constraints are set, every device event will cause a trigger. Once constraints are set, only the constraints chosen will trigger the event.

Once the type of device event that will be the trigger is selected, add a new **device event rule**. To do this, click on  in the **New Device Event Trigger** window.



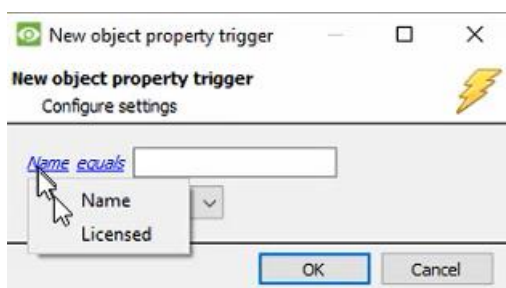
To change the constraint, click on the first hyperlink. This will bring up the full list of available rules: **Type**, **Location**, or **User**.

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

### 4.2.3.2 Object Property Triggers

After selecting a master trigger type, add a trigger to the event. Click on New in the Triggers tab.

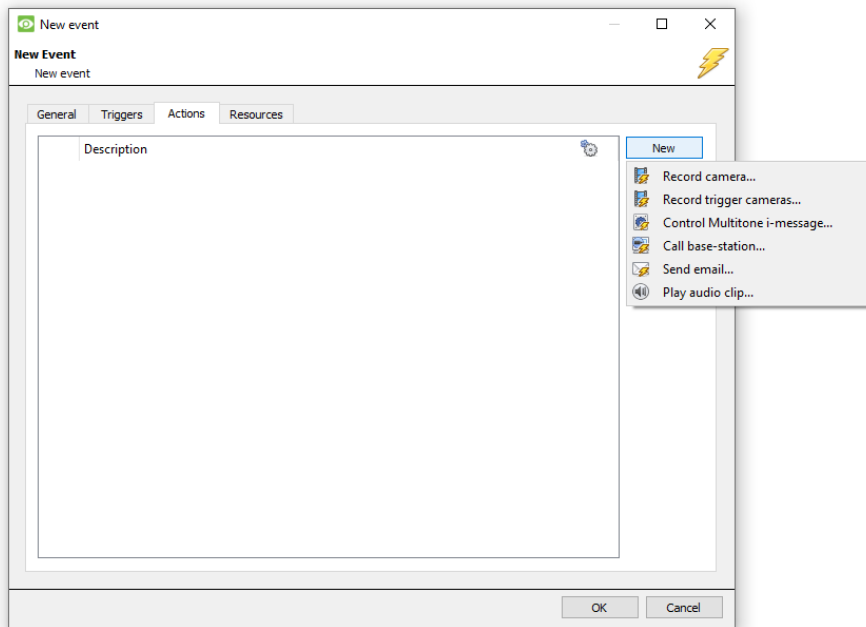
If the user has selected for events to be trigger while/when any of the properties meet certain criteria, this will bring up the **New object property trigger** box:



### 4.3 Actions

Once the triggers that are going to initiate the event have been defined, to define some Actions in the **Actions** tab of the **New Event** window. To set an action for an event trigger, click .

Select an action from the available options:

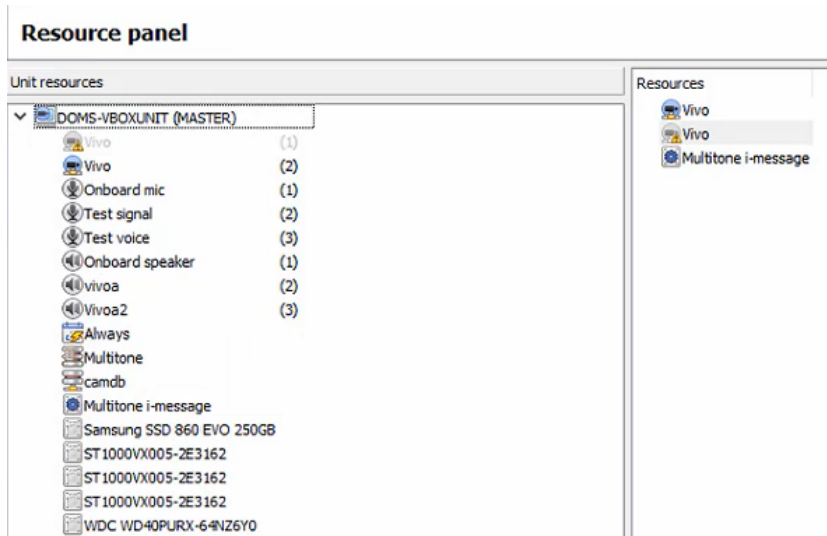


**Note:** the device **cannot** be controlled.

## 5. Map

It is possible to add the Multitone i-Message device to a site map, which will allow for a number of action options. These options include the animation of triggered zones and connecting to site cameras when zones are triggered. **Note:** This section will only deal with the specifics of the Multitone i-Message device. For more information on using the CathesisVision Map Editor and Map Tab, please consult the *Map Editor Operation Manual*.

### 5.1 Add the Multitone i-Message device as a resource



To configure the map, the Multitone i-Message device must be added as a resource to be added to the map.

#### 5.1.1 Add the Device in the Resource Panel

1. Navigate to the **Resource Panel** by following **Site / Open Tab / Setup / Resource Panel**.
2. Drag the Multitone i-Message device from the **Unit Resources** list into the **Resources** list, on the right.

### 5.2 Add the Device in Map Editor

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

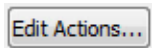
#### 5.2.1 Adding Device Objects



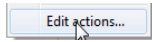
Drag the Multitone i-Message device from the Site Resources list onto the map area. Select one of the associated objects.

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

## 5.2.2 Adding Device Actions

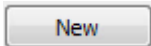


To add actions to the device objects, either select the object on the map and click **Edit Actions**, or right-click the map object and select **Edit Actions**.



### 5.2.2.1 Action Options

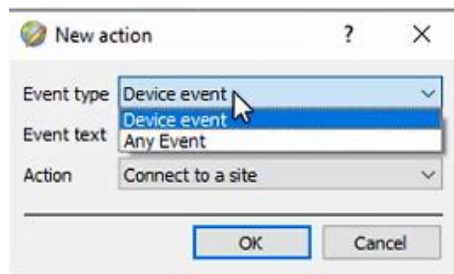
Actions may be set for **Left Clicks**, **State Changes** and **Events**.



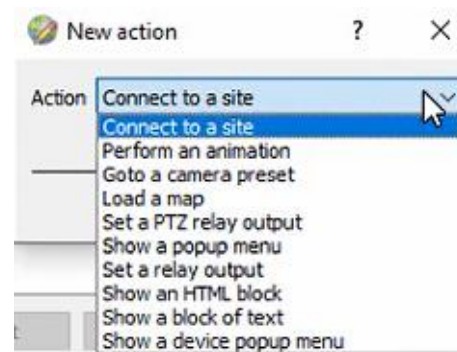
To create a new action, select **New**.

The action triggers will differ according to the object selected. Consider the following example for an action based on a Multitone i-Message AP Pro event:

#### Event type options:



#### Action options:



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

Once finished, save the map. **Note:** the map must **not be saved** in the Work folder of the installation directory.

## 5.3 Map Tab

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

## 6. Conclusion

**Note:** this app-note was designed to deal specifically with this integration. For further information about the CathesisVision software, please consult the **CathesisVision Setup Manual** (<http://cathesisvideo.com/>).

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

### 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>