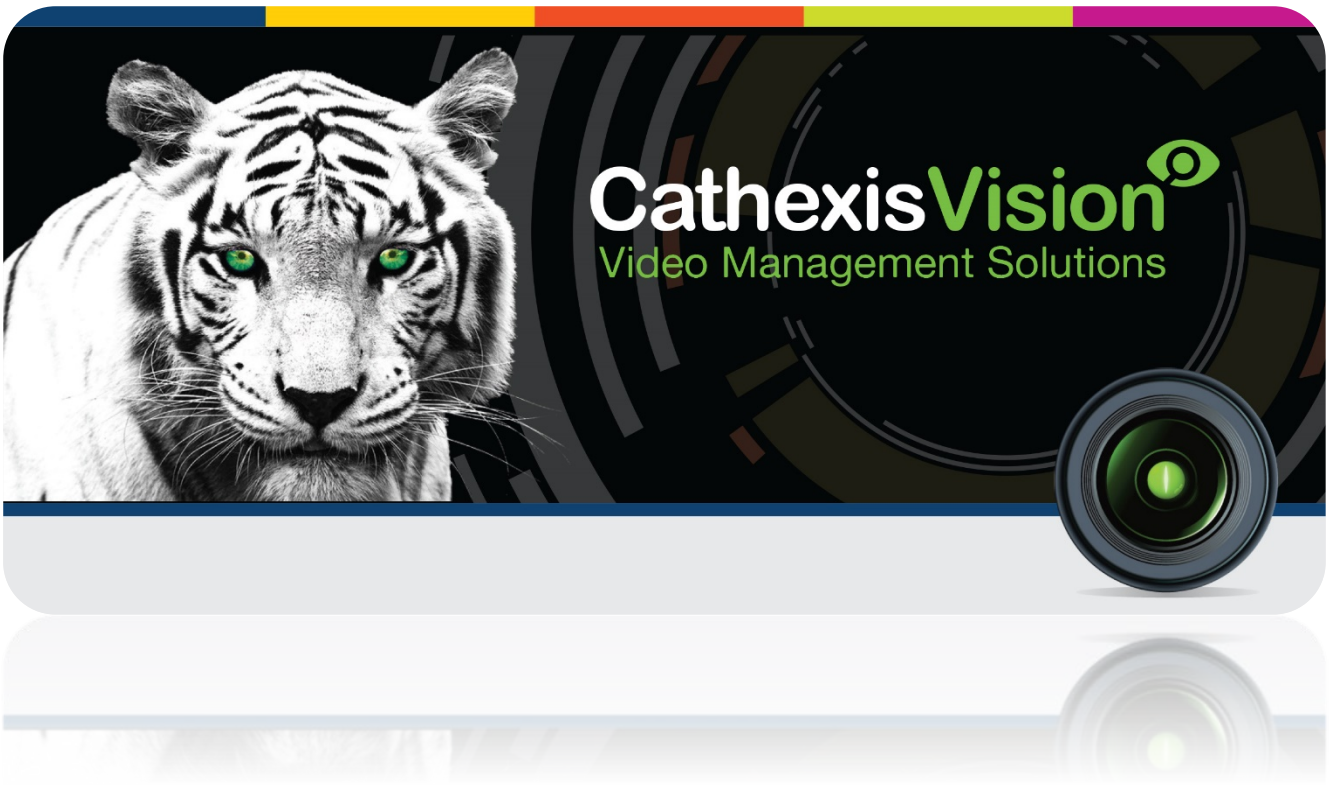


Southwest Microwave Intrepid Perimeter Monitoring Integration Document

Contents

1 Introduction[1]

This document will detail the integration of the Southwest Microwave Intrepid Perimeter Monitoring device, with the CathexisVision software. CathexisVision will receive information from the integrated device which monitors the site perimeter for incidents of tamper. This information may be used to trigger CathexisVision events.

Requirements

- CathexisVision 2016 Service Pack 3 and later.
  - Tested using a RS232 connection to the Micropoint II module.
  - The following modules are supported, but were not tested:
    - Relay Output Module II-16.
    - Relay Output Module II-8.
    - Alarm Input Module II.
    - MicroTrack II.
    - ModelWave 330.

- CathexisVision 2019 Service Pack 3 and later.
  - Tested using an Ethernet connection to the Remote Polling Module II (RPM II) and the following attached modules were tested:
    - Alarm Input Module II (AIM II)
      Firmware: 64A46269-A01 REV H 2011-02-15 13:10:23
    - MicroPoint II – Processor Module II (PM II)
      Firmware: 64A46370-A01 REV E 2011-06-23 12:43:26
    - MicroTrack II – MicroTrack Processor II (MTP II)
      Firmware: 64A46237-A01 REV A 2010-10-07 16:06:13
    - MicroWave 330
      Firmware: 64A46490-A01 REV 0 2012-12-11 11:42:52
    - Relay Output Module II (ROM II)
      Firmware: 64A46239-A03 REV G 2011-02-15 13:20:18
    - Remote Polling Module II (RPM II)
      Firmware: 64A46776-A01 REV C 2016-10-20 10:53:06

Notes:

1. For information regarding the regular operation of a Southwest Microwave device, please consult the relevant company documentation.
2. The individual Southwest Microwave Intrepid device addresses are set on the physical hardware by adjusting 8 DIP switches. The address range is 0-255. Each device should have a unique address.

a. License requirements

The CathexisVision licenses below are compulsory for setting up a Southwest Microwave Intrepid integration.

License Name	License Description
CSMI-1000	Southwest Microwave Intrepid Module license.
CSMI-1001	Each added module requires a CSMI- 1001 Southwest Microwave Intrepid Module license.
CSMI-2000	Southwest Microwave Intrepid device license.

[1] 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.

b. Integration Components

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

Device The device is CathexisVision software's interface, which handles all the interaction between CathexisVision and the integrated hardware. Adding an integration to the CathexisVision system means adding a device. 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.

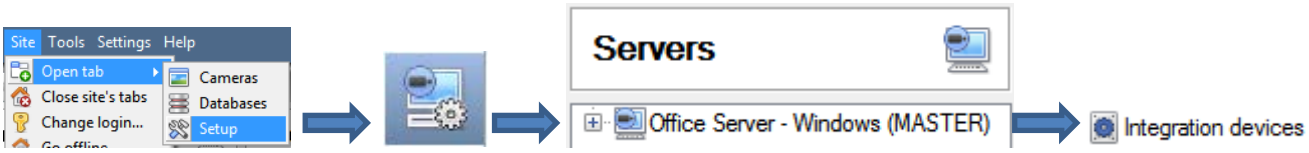
2 Device Addition and Configuration

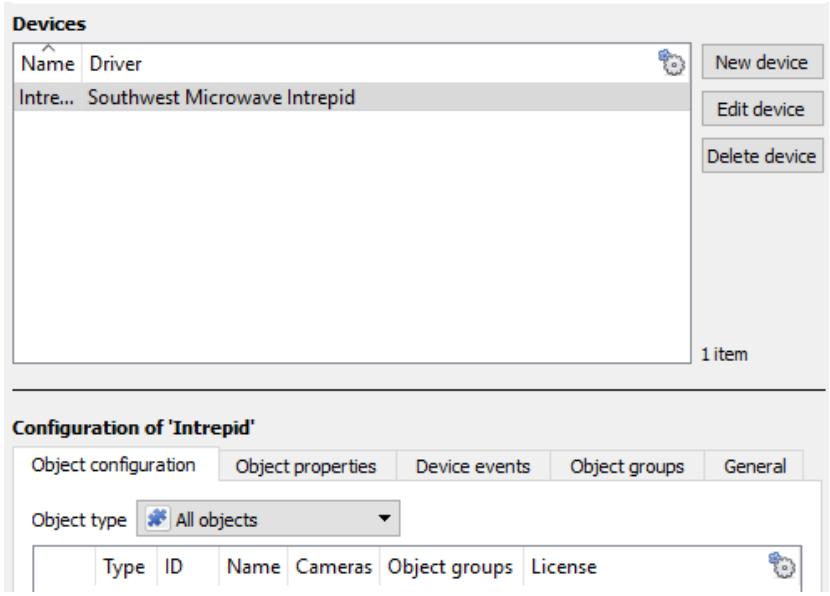
This section will detail the procedure for setting up the two systems to effectively communicate with each other.

a. Devices Section (Add a New Device in CathexisVision)

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:

The Integrations Panel





There are two sections in the Integration Panel:

The **Devices** list will list the integration devices that are attached to the server.

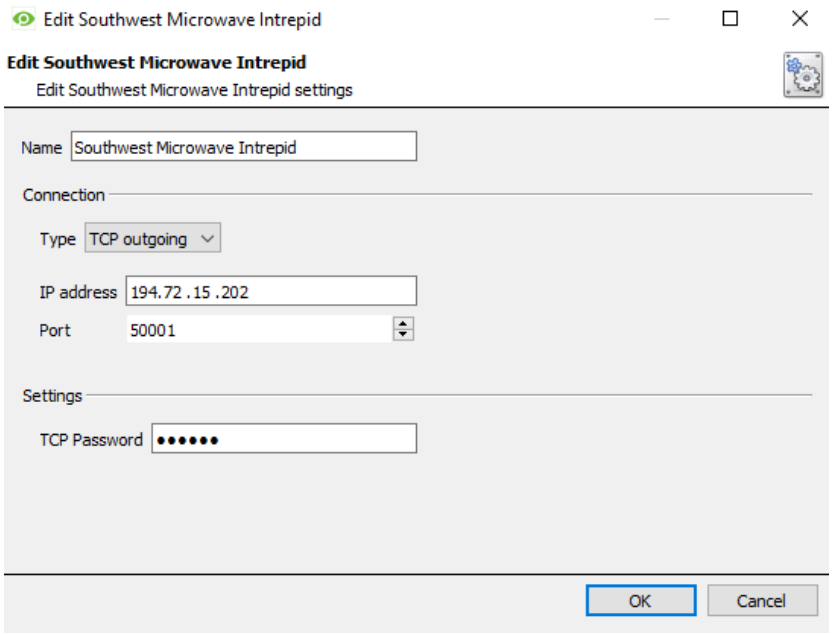
The **Configuration** section enables the editing/review of the device which added in the **Devices** section.

- ***Device Addition***

1. Once in the Integration Panel, click on 

, in the Devices section. This will open the addition dialogue.
2. Select the **Southwest Microwave Intrepid** driver from the list and click on 

.

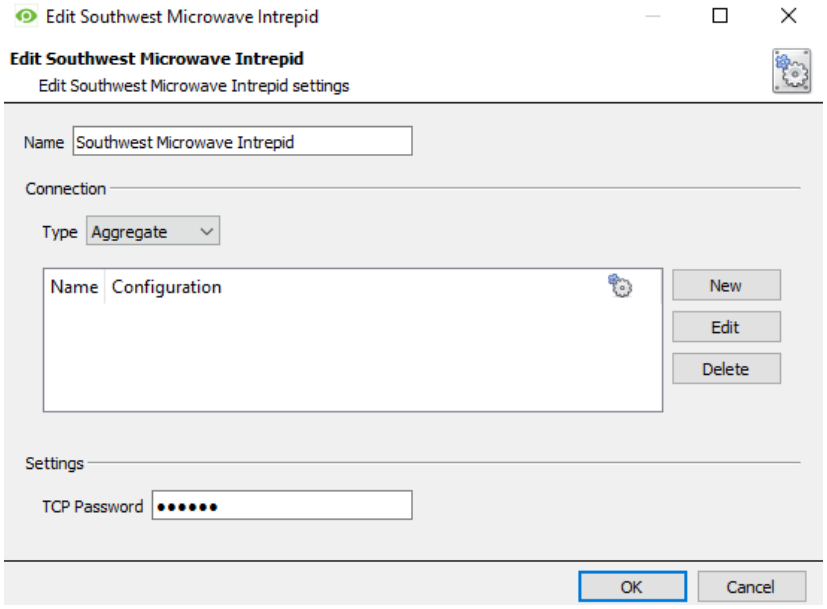


Name the device.

Select the connection type.
Aggregate: When connecting via RS232
TCP outgoing: When connecting via ethernet.

When selecting TCP outgoing enter the IP address, port number and password of the Remote Polling Module II.

Click **OK** when done.



When selecting Aggregate click on New to add a serial channel to the device.

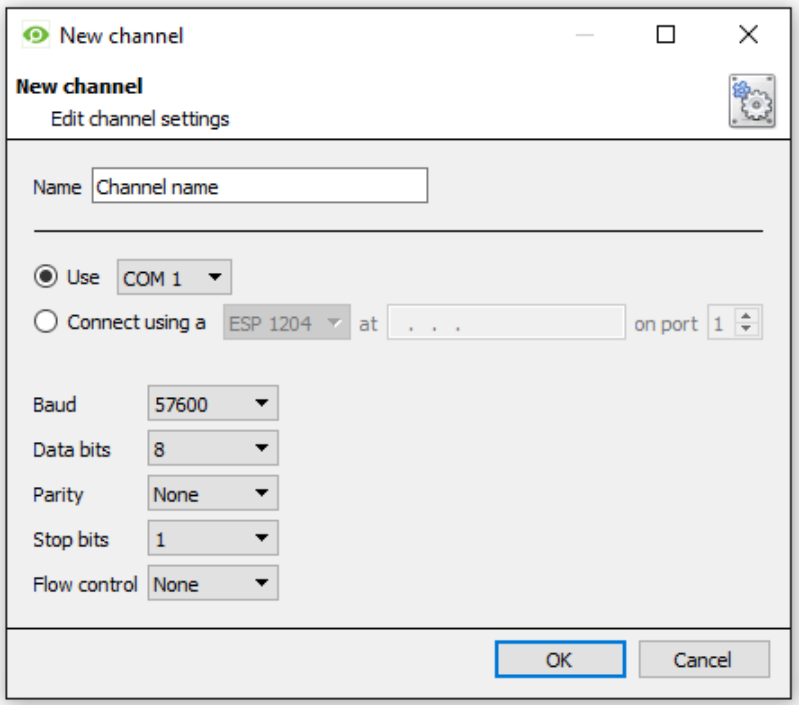
Select Edit to change channel settings.

Select Delete to remove a channel.

Multiple channels may be added for supported devices.

Click **OK** when done.

New Channel



When adding a new channel:

Give the channel a **Name**.

Select to use either a COM or ESP connection.

If COM, select COM number.

If ESP, enter IP address and port number.

Select desired settings from the **Baud**, **Data bits**, **Parity**, **Stop bits** and **Flow control** options.

Click **OK** when done.

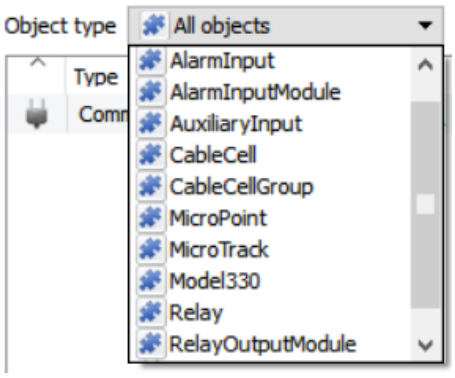
b. Configuration Section (Tabs)

The configuration section is divided up into a number of tabs. These tabs are: **Object configuration, Object properties, Device events, Groups,** and **General.**

Object Configuration Tab

The object configuration tab is the tab in which the individual objects that comprise the integration can be viewed.

Objects will only be created when the corresponding hardware is present. Below is a mapping of physical hardware to object types:



- **Alarm Input Module II**
  - AlarmInput
  - AlarmInputModule
- **MicroPoint II**
  - AuxiliaryInput
  - CableCell
  - CableCellGroup
  - MicroPoint
  - Relay
  - Relay Output Module II-16
  - RelayOutputModule
- **MicroTrack II**
  - CableCell
  - CableCellGroup
  - MicroTrack
- **MicroWave 330**
  - Model330
- **Relay Output Module II**
  - Relay
  - RelayOutputModule
- **Remote Polling Module II**
  - RPM

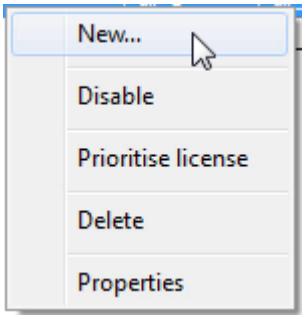
- ***Object Configuration Buttons***

Add a new object by clicking on New.

Will open up an existing object for editing.

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

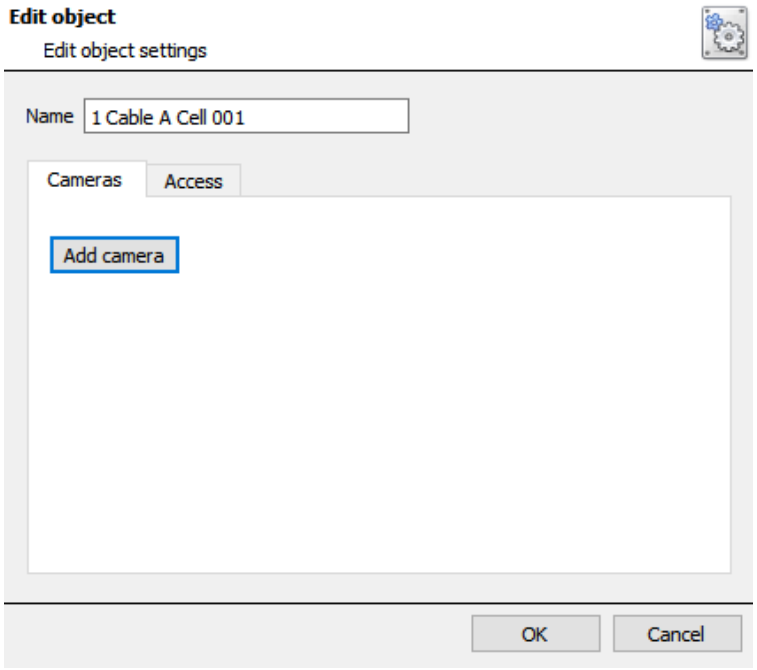
- ***Object Configuration Right-click Options***



New will open up the dialogue to add a new object.
Disable/Enable will manually enable/disable individual objects.
Prioritise license will give a specific till license preference, in case there are more tills than licenses.
Delete will permanently remove this object from the list.
Properties will open up the object properties. Objects may be edited from here. (Specifically, cameras will be assigned to this object, as well as user access levels assigned.)

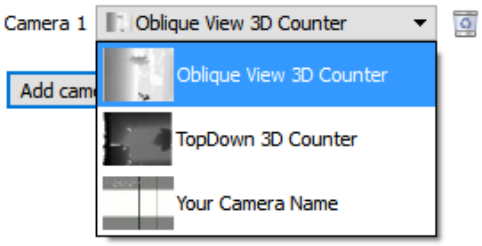
Properties: Cameras

Adding a camera to an object will mean that, whenever there is an event on that object, the recording from that camera will be related to the time and date of the object event, in the Integration database. Up to 4 cameras can be linked to an object.



Click Add camera .

From the dropdown menu that appears, click the desired camera.



To delete a camera click on .

Note: If ***continuous recording*** is not set up, on associated cameras, this runs the risk of device objects triggering while the cameras are not recording. To only record cameras, when an object triggers, set up **Events** that trigger a recording when one of these objects is activated.

Properties: Access

Access protects sensitive objects by ensuring that only certain user access levels can access them.

Under **View,** set the access levels.

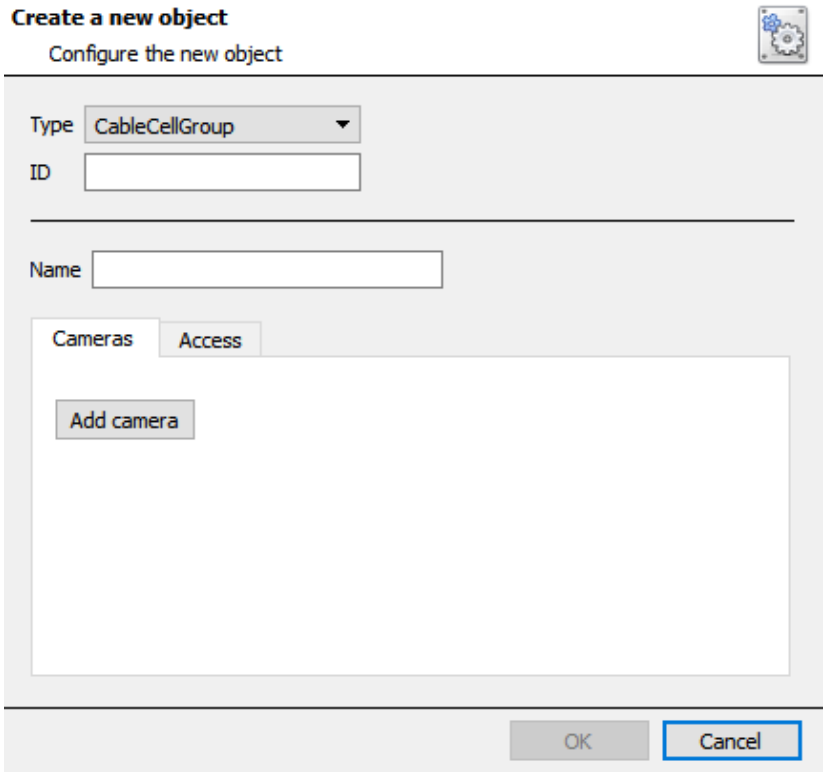
Note: If *Use default access rights* is checked, make sure that those default rights have been correctly defined. Click on **Configure default access** to do this.

- ***Create Cable Cell Group***

In this integration, cable cell groups are created in the Object Configuration tab by creating a **CableCellGroup object**. The group object can be used to monitor and issue enable/disable commands to all cable cells assigned to that group. Using the CableCellGroup objects will enable commands to be issued to a group, and to display the group on a map.

Note: Cable cell groups can still be created in the Object Groups tab, but commands cannot be issued to them. Groups of CableCellGroup objects created in the Object Groups tab, however, can still be used to trigger events.

In the Object Properties tab, click New at the bottom of the screen to create a new object.



Select **CableCellGroup** as the object type.

Assign the group any **ID** number, as long as it is a positive integer.

Give the group a descriptive **name**.

Add Cameras to the group object.

Configure the **Access Rights** for this group object.

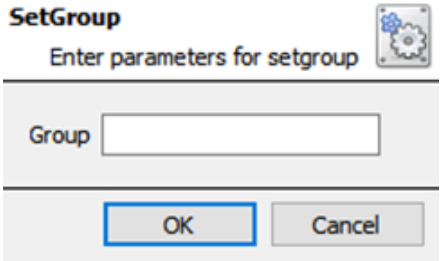
Note: These settings will only affect the group, and not the individual cells in isolation from the group.

Assign Cable Cells to Cable Cell Group

Once a **CableCellGroup** object has been created, assign cables to this group. Cells may be assigned individually (cell by cell) or simultaneously. See below for the two methods.

Add/Remove Cable Cells Individually

1. In the Object Properties tab, select the **CableCell** object type from the dropdown menu.
2. Right-click on the desired cable cell, and select **SetGroup** or **Remove from group.**
3. Enter the ID number assigned to the relevant group object, and click **OK**.

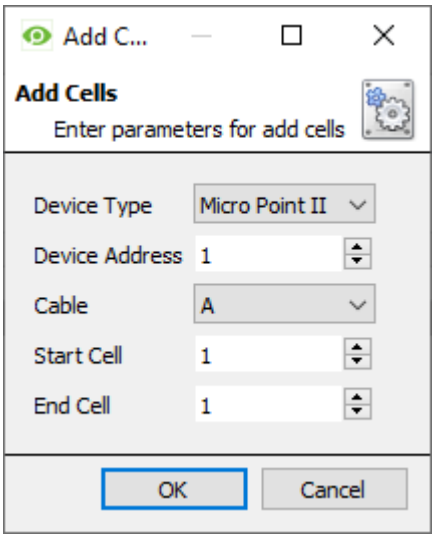


Note: Enter the exact group ID. Entering an ID for a group object that does not exist will not create a group.

Note: This process must be carried out for each cable cell individually.

Add/Remove CableCells Simultaneously

1. In the Object Properties tab, select the **CableCellGroup** object type from the dropdown menu.
2. Right-click on the desired **CableCellGroup**, and select **Add/Remove Cells**.



Choose the **Device Type**.

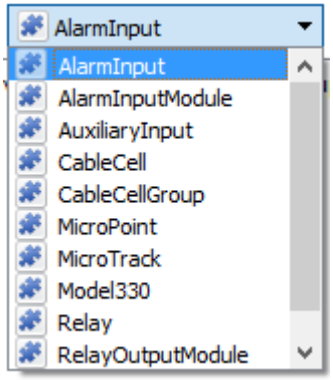
Enter the **Device Address**.

Select the relevant **Cable**.

Enter the IDs of the **Start** and **End Cells** to add them to the group.

Click **OK** when done.

Objects Properties Tab



The Object properties tab allows objects to be viewed by type. In the case of the Intrepid device objects can be viewed by the following types: **AlarmInput**, **AlarmInputModule**, **AuxiliaryInput**, **CableCell**, **CableCellGroup**, **MicroPoint**, **MicroTrack**, **Model330, RPM, Relay**, and **RelayOutputModule**.

Selecting any of these object types will populate the configuration section with the object type properties.

See below for the various column definitions and command options for the relevant object types.

Note: The Set Tag command will not be available when connecting to the Remote Polling Module II via ethernet.

Please note that the columns below are sorted according to the physical hardware and its associated object types.

- ***Alarm Input Module II-8***

AlarmInput	
Name	Name of the Alarm Input.
Device Address	Serial port of the AlarmInputModule
Device Tag	The tag set for the alarm input module.
Supervised Alarm State	The alarm states will reflect: • Unknown • Unlicensed • Alarm • Normal
Alarm state	The alarm states will reflect: • Unknown • Unlicensed • Alarm • Normal
There are no right-click options for this object.	

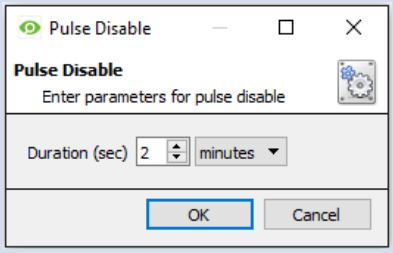
AlarmInputModule	
Name	Name of the AlarmInputModule.
Device Address	Serial port of the AlarmInputModule
Device Tag	Tag set for the AlarmInputModule. Right-click to set.
State	Indicates the state of the AlarmInputModule. State options are:

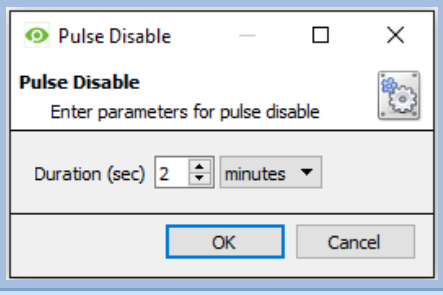
	• Unknown • Alarm • Normal
Tamper	A  indicates that the device is currently not in a tamper state; a  indicates that it is.
MAC Address	MAC address of the AlarmInputModule.
Version	This field shows the hardware/firmware version.
Licensed	A  indicates that the module is unlicensed; a  indicates that it is.
Right-click Options	
Set Tag	Sets the name of the device. All objects associated with this device will be tagged as such.

- ***MicroPoint II***

AuxiliaryInput	
Name	The name of the auxiliary input.
Device Address	Address of the physical hardware.
Device Tag	The tag set for physical hardware.
Auxiliary Input State	Indicates state of the input. State options are: • Unknown (if there is no connection) • Unlicensed • Alarm • Normal
No right-click options for this object.	

CableCell	
Name	Name of the cable cell.
Device Address	Address of the physical hardware.
Device Tag	Displays the tag set for the physical hardware.
Cable	Indicates which cable the cell belongs to.
Cell	The cell number, out of 216.
State	Indicates the state of the cell. State options are: • Unknown (if there is no connection) • Unlicensed • Alarm • Normal • Disabled
Group ID	Displays the ID of the CableCellGroup the cell is associated with.

Group name	Displays the name of the CableCellGroup the cell is associated with.
Right-click Options	
Enable	Enables the object.
Disable	Disables the object.
Pulse Disable	Disables and re-enables object after the configured period. 
SetGroup	Adds the object to an existing cable cell group object.
Remove from group	Remove the object from the cable cell group.

CableCellGroup Note: **First create a cable cell group** object**, in the** Object Configuration **tab.**	
Name	Name of the cable cell group object.
State	Indicates the state of the group object. State options are: • Unknown (if no communication) • Alarm • Normal • Disabled • Partially Disabled o This means that some, but not all of the cells in the group are disabled
Right-click Options	
Add Cells	Add CableCell objects to the CableCellGroup.
Disable	Disables all CableCell objects in the group.
Enable	Enables all CableCell objects in the group.
Pulse Disable	Disables and re-enables all cable cells in the group after the configured period. 
Remove Cells	Remove cablecells from this cablecell group.

MicroPoint	
Name	Name of the MicroPoint object.

Device Address	Address of the MicroPoint device.
Device Tag	Tag for the device. Right-click to set.
MAC Address	MAC address of the MicroPoint device.
State	Indicates the current state of the device. State options are: • Unknown (indicates no communication between device and software) • Tamper • Normal • Cable A Fault • Cable B Fault • Cable A and B Fault • Software Trap
Tamper	A  indicates that the device is currently not in a tamper state; a  indicates that it is.
Cable Fault	A  indicates that there is currently no cable fault; a  indicates that there is.
Software Trap	Indicates the Software Trap. Please consult Southwest Microwave for more information.
Service Status	This field shows whether or not the '**Universal Installation Tool** II' is currently communicating with the device.
Version	This field shows the hardware/firmware version.
Licensed	A  indicates that the module is unlicensed; a  indicates that it is.
Right-click Options	
Set Tag	Sets the device tag. All objects associated with the MicroPoint device will be tagged with this.

Relay	
Name	Name of the Relay object.
Device Address	Address of the RelayOutputModule.
Device Tag	Tag set for the RelayOutputModule.
State	Indicates the state of the object. State options are: • Unknown (if there is no connection) • Unlicensed • Normal Position; Relay is energized • Alarm Position; Relay is de-energized
Right-click Options	
Set relay to Normal Position	Will set the relay to Normal position.
Set relay to Alarm Position	Will set the relay to Alarm position.

RelayOutputModule	
Name	Name of the RelayOutputModule.
Device Address	Address of the RelayOutputModule.
Device Tag	Tag for the RelayOutputModule. Right-click to set.
State	Indicates the state of the device. State options are: • Unknown • Tamper • Normal
Tamper	A  indicates that the device is currently not in a tamper state; a  indicates that it is.
MAC Address	MAC address of the RelayOutputModule.
Version	This field shows the hardware/firmware version.
Licensed	A  indicates that the module is unlicensed; a  indicates that it is.
Right-click Options	
Set Tag	Sets the device tag. All objects associated with this device will be tagged as such.

- ***MicroTrack II***

MicroTrack	
Name	Name of the MicroTrack object.
Device Address	Address of the MicroTrack device.
Device Tag	Tag for the device. Right-click to set.
State	Indicates the current state of the device. State options are: • Unknown • Tamper • Normal • Cable A Fault • Cable B Fault • Cable A and B Fault • Software Trap
Tamper	A  indicates that the device is currently not in a tamper state; a  indicates that it is.
MAC Address	MAC address of the MicroTrack device.
Cable Fault	A  indicates that there is currently no cable fault; a  indicates that there is.
Software Trap	Indicates Software Trap. Please consult Southwest Microwave for more information.

Service Status	This field shows whether or not the '**Universal Installation Service Tool II'** is currently communicating with the device.
Version	This field shows the hardware/firmware version.
Licensed	A  indicates that the module is unlicensed; a  indicates that it is.
Right-click Options	
Set Tag	Sets the device tag. All objects associated with this device will be tagged as such.

- ***Model 330***

Model330	
Name	Name of the Model330 object.
Device Address	Address of the Model330 device.
Device Tag	Tag for the device. Right-click to set.
State	Indicates the current state of the device. State options are: • Unknown (if there is no connection) • Tamper • Normal • Alarm
Sensor Alarm	Indicates True/False. Please consult Southwest Microwave for more information.
Tamper Alarm	Indicates True/False. Will trigger if the device's enclosure is opened.
Path Alarm	Indicates True/False. Please consult Southwest Microwave for more information.
Auxiliary Alarm	Indicates True/False. Please consult Southwest Microwave for more information.
Service Alarm	This field shows whether or not the '**Universal Installation Service Tool II**' is currently communicating with the device.
MAC Address	MAC address of the device.
Version	This field shows the hardware/firmware version.
Licensed	A  indicates that the module is unlicensed; a  indicates that it is.
Right-click Options	
Set Tag	Sets the device tag. All objects associated with this device will be tagged as such.

- ***Relay Output Module II-8***

RelayOutputModule	
Name	Name of the RelayOutputModule.
Device Address	Address of the RelayOutputModule.
Device Tag	Tag for the RelayOutputModule. Right-click to set.
State	Indicates the state of the device. State options are: • Unknown • Tamper • Normal
Tamper	A  indicates that the device is currently not in a tamper state; a  indicates that it is.
MAC Address	MAC address of the RelayOutputModule.
Version	This field shows the hardware/firmware version.
Licensed	A  indicates that the module is unlicensed; a  indicates that it is.
Right-click Options	
Set Tag	Sets the device tag. All objects associated with this device will be tagged as such.

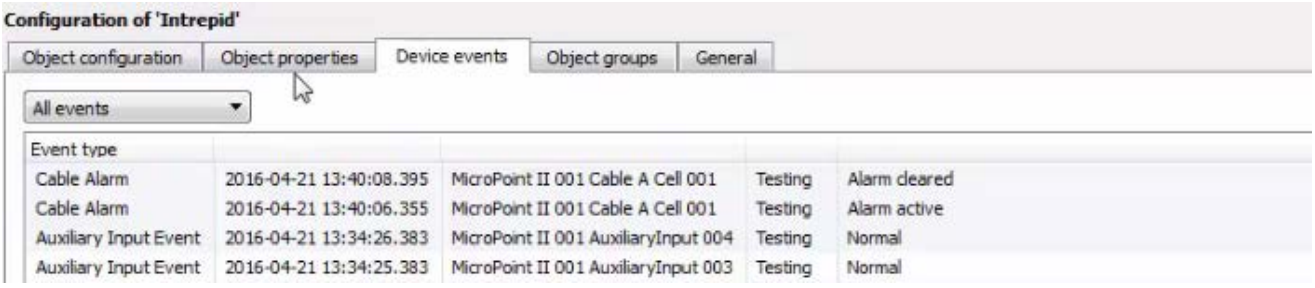
- ***Remote Polling Module II (RPM II)***

RPM	
Name	The name of the auxiliary input.
Device Tag	The tag set for physical hardware.
Version	This field shows the hardware/firmware version.
MAC Address	MAC address of the device.
Tamper	A  indicates that the device is currently not in a tamper state; a  indicates that it is.
Low input voltage	A  indicates that the device is currently not in a low input voltage state; a  indicates that it is.
Line break	A  indicates that the device is currently not in a line break state; a  indicates that it is.
No right-click options for this object.	

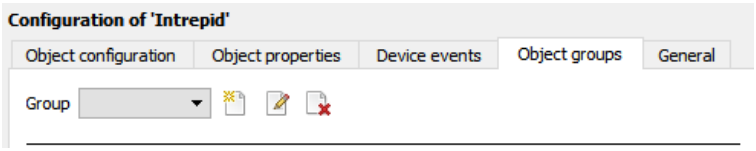
-

Device Events Tab

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



Groups Tab

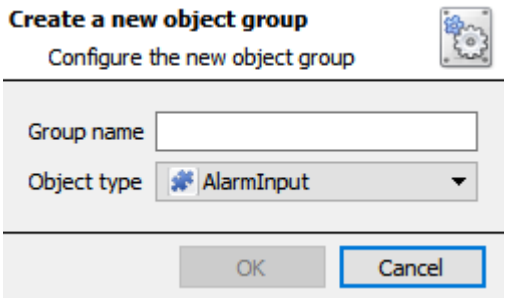


Groups of the same type of object can be created.

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.)

Please note: It is recommended to use the CableCellGroup object to group cable cells together. This has the added benefit of allowing cameras to be assigned to the group, show the group on the site map, and to control all the cells in the group.

- ***Create a Group***



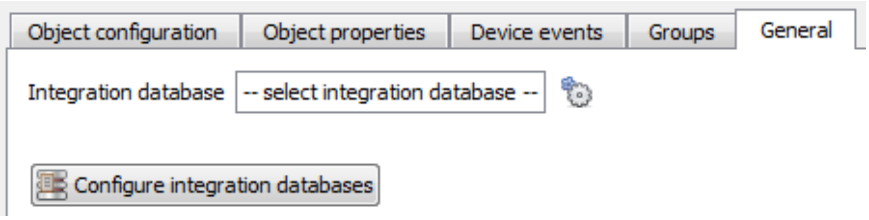
To create/edit an Intrepid group click on / . (**Note**: Once a group has been created, the object type of the group may not be chaned.)

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

Click on the drop-down menu to select the **Object type** to view. A list of Available Objects will appear. To add/remove, select the object/s (multiple may be selected), and click on / .

General tab

Currently the general tab deals with the **Integration database**. Here it is possible to either select an existing database, or



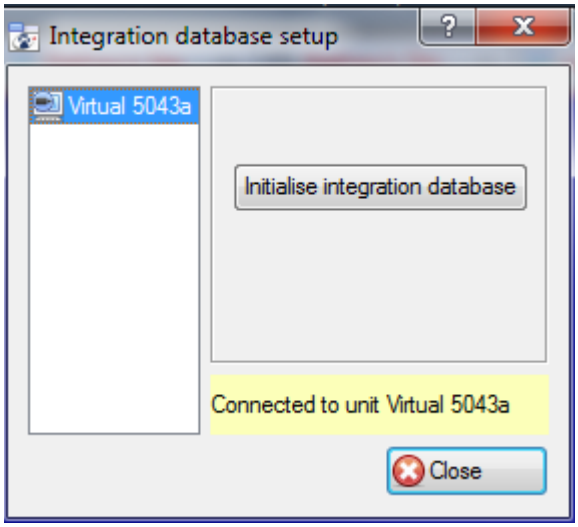
configure a new database for the integration.

Important 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 CathexisVision system.

- ***Configure a new database***

If there is no database created yet, click on this button to set up the integration database.

Initialise the Integration Database



The first time an integration database is added, this feature needs to be initiated on the unit. This will add a broad database, within which all of the integrated device's databases will be added.

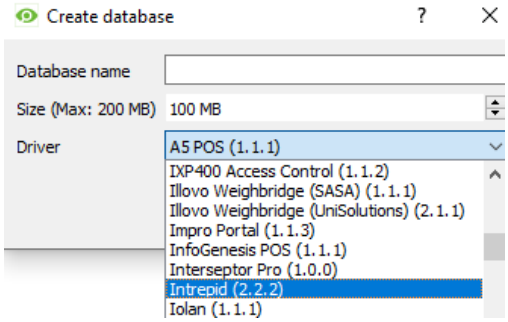
Select the unit to add the database to, from the list on the left, and click 

. 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 current integration. Click on the 

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. The max is 500MB.

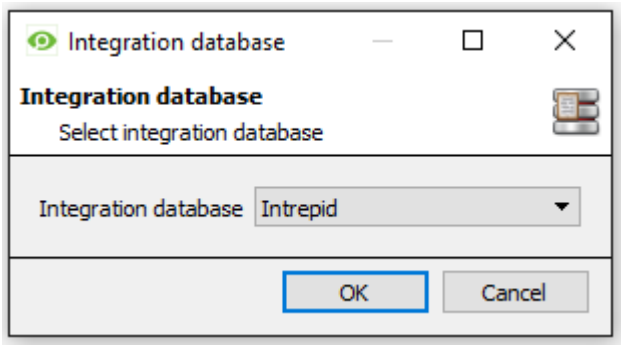
Choose the Intrepid 2.2.2 **Driver**.

Click **OK** to create the database.

Once created, close the **Integration Database Setup** window.

- ***Select the Intrepid Integration database***

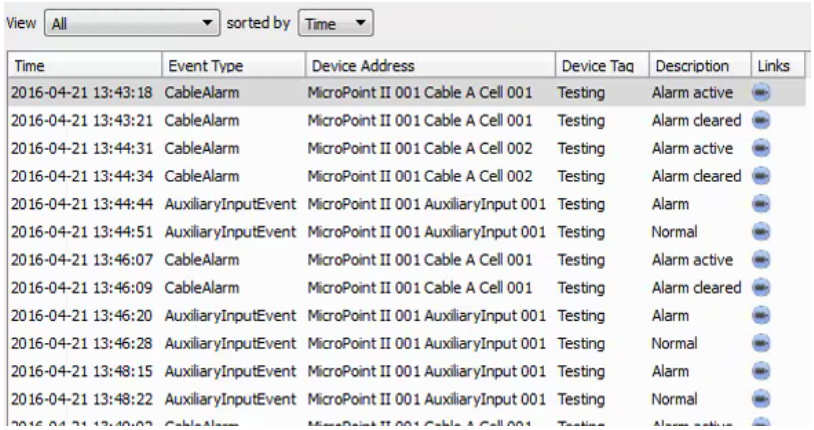
Once a database has been created the user may select it by clicking on the  icon, and selecting it from the dropdown menu in the dialogue that appears



3 Database

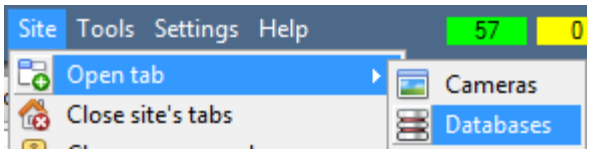
a. Introduction

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



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

b. Navigate to the Database

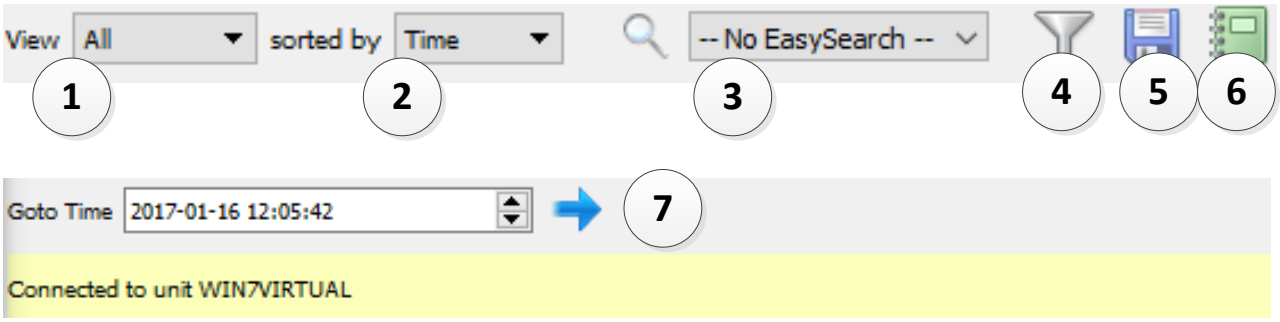


The information stored in the Integration database may be viewed by following this path.
Site → Open tab → Databases

From 2016.2 onwards, when the database tab opens, the relevant integration database must be selected 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:


and

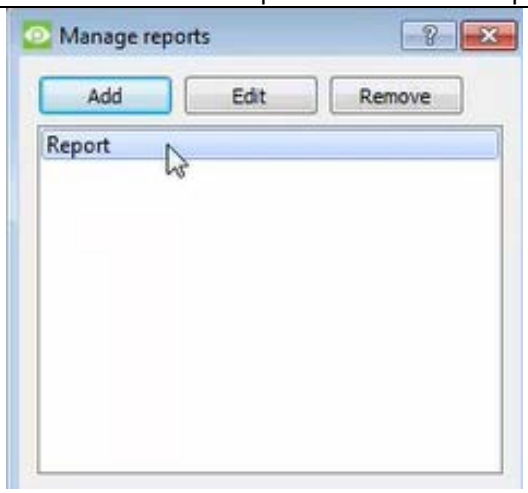
c. Database Interface



① **View**	**View** changes the way the database is presented. Some integration databases have multiple view options. The Intrepid database has **All, AuxiliaryInputEvent, CableAlarm, CableCellGroup, InputEvent, InputModuleEvent, MicroPointEvent, MicroTrackEvent, Model330Event, RelayEvent, RelayModuleEvent, and RemotePollingModule.**
② **Sorted By**	For the Intrepid integration, Events may only be sorted by Time .
③ **Easy Search**	The easy search option quickly searches the database within one of the following options: **Device Address, Device Tag and Description.**
④ **Filter**	Filter offers a more advanced manner of sorting information in the Integration Database table. Once the filters dialogue is open, these are the options: 1. To **enable** filters check this box: Enable filters 2. To **add** a new filter click on . The filter icon will change to when filters are active. 3. To **delete** an added filter click on . The options in this integration are**: Time, Event Type, Device Address, Device Tag and Description.** **Note**: 1. Multiple filters may be run simultanously. 2. The same perameter may be used more than once. 3. To change a filter click on the blue hyperlinked text. (For example, click on *Timestamp* to change the filter from Timestamp, to any of the other available options.)
⑤ **Export**	Generate metadatabase reports in PDF or CSV format. See below.
⑥ **Manage Reports**	Generate scheduled metadatabase reports. See below.
⑦ **Go to Time**	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.

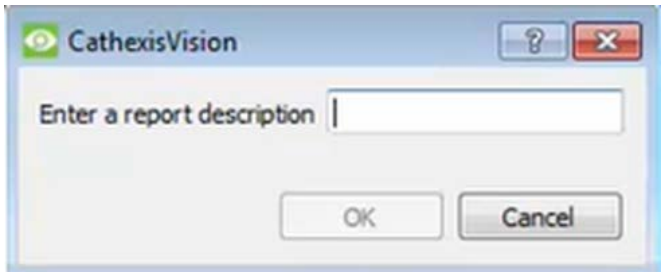
Scheduled Metadatabase Reports

Click the  icon to open the scheduled report window.

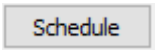
	All created reports will be listed here. First, click **Add** to create a report. Then **edit** to define the reporting schedule. See below for more detail. To create, edit, or delete a report, select the entry and click on the corresponding button.

- ***New Scheduled Report***

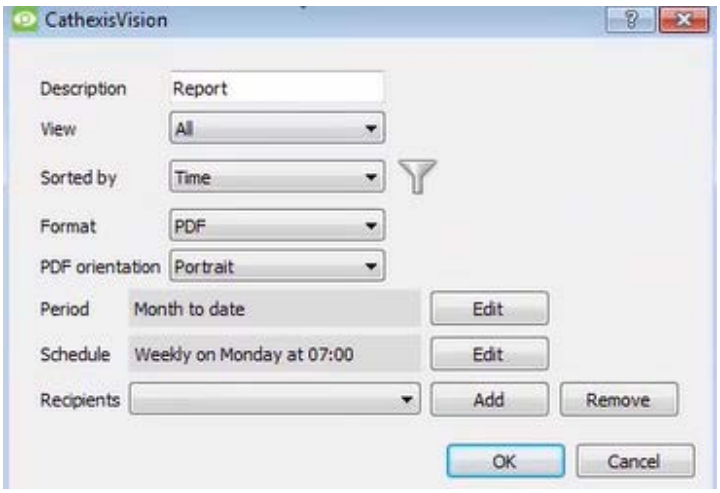
Click Add and give the report a description:



Click **OK** when done.
Once the new report is listed with the other reports, select it for editing to define the reporting schedule.

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

.



Edit the **description** if needed.

Edit **Viewing** options.

Select the **Sorted by** option.

Select the **Format**.

Select the **orientation** of the Format.

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

Define the **Schedule** for the report.

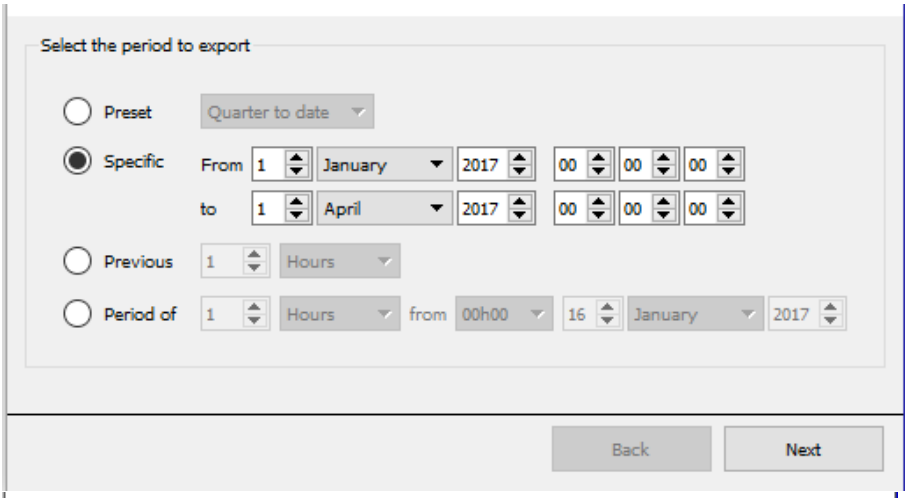
Add/remove recipients to whom reports will be sent.

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

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

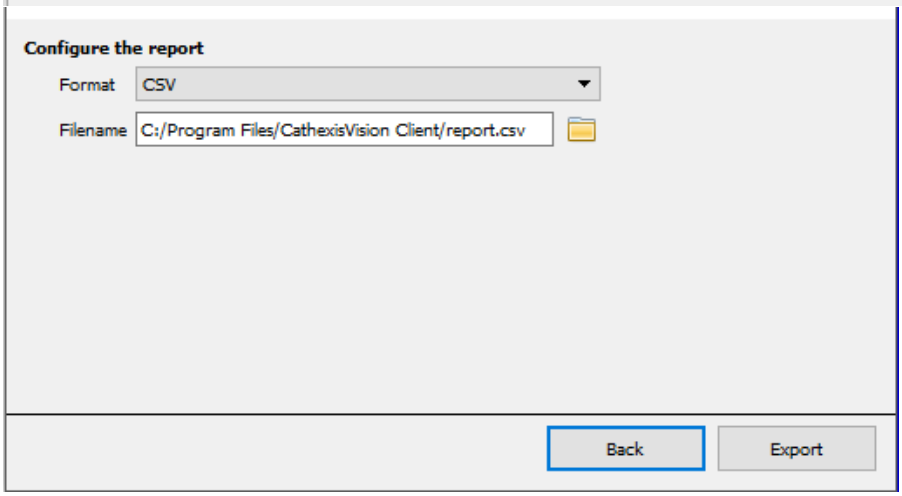
Generate Metadatabase Reports

Click the  icon to open the Export window.



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

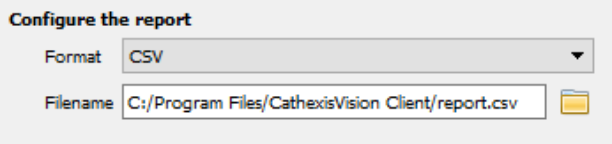
Click **Next**.



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

See below for the two options.

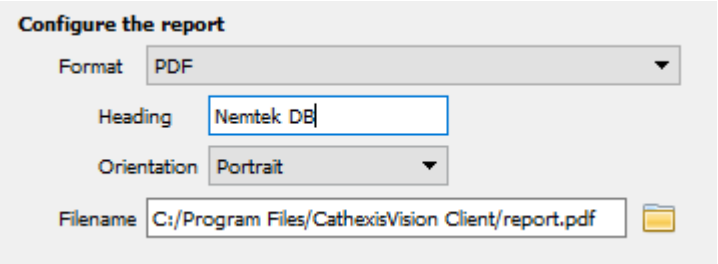
- ***Export CSV***



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.

- ***Export PDF***



Select PDF **Format**.

Give the PDF a **Heading**.

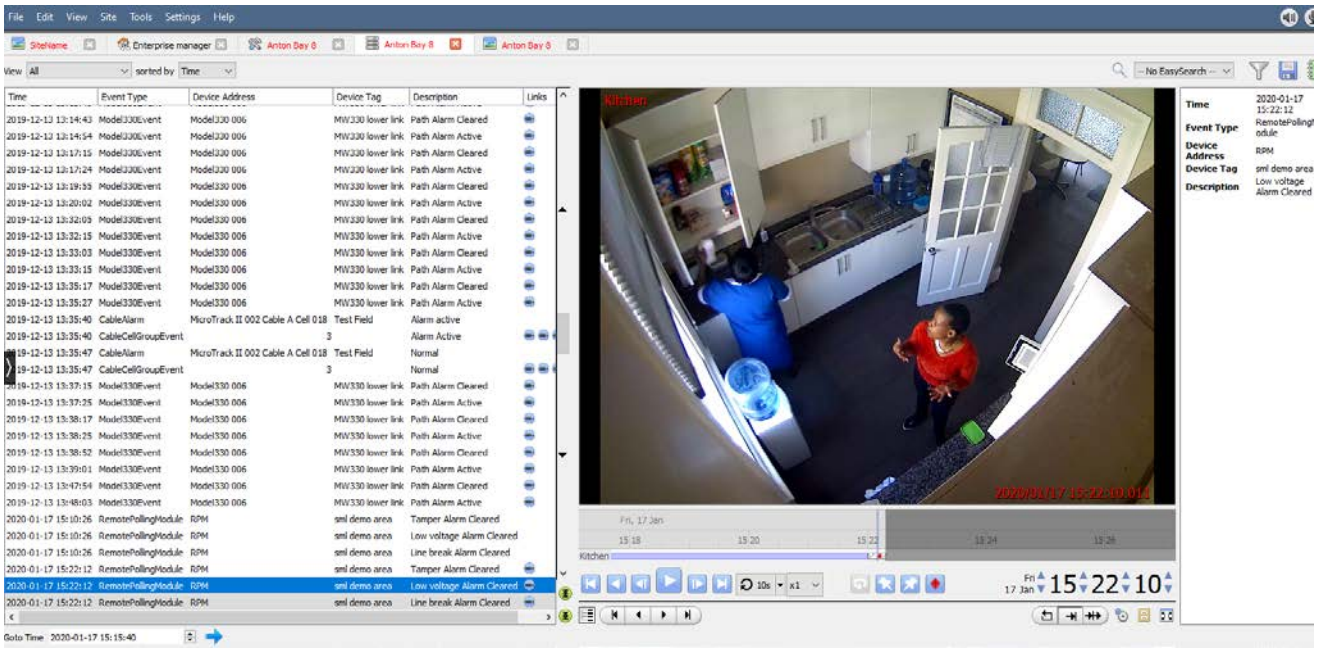
Select either Landscape or Portrait **Orientation** of the PDF.

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.

Viewing an Entry's Associated Recording

This integration uses the new video option where the video player is embedded in the database view. This player uses the same timeline features as the CathexisVision cameras tab.

To view an associated recording, simply left-click on a database entry which has the icon in the **Links** column. Then click play in the video player.



4 Events

a. Introduction

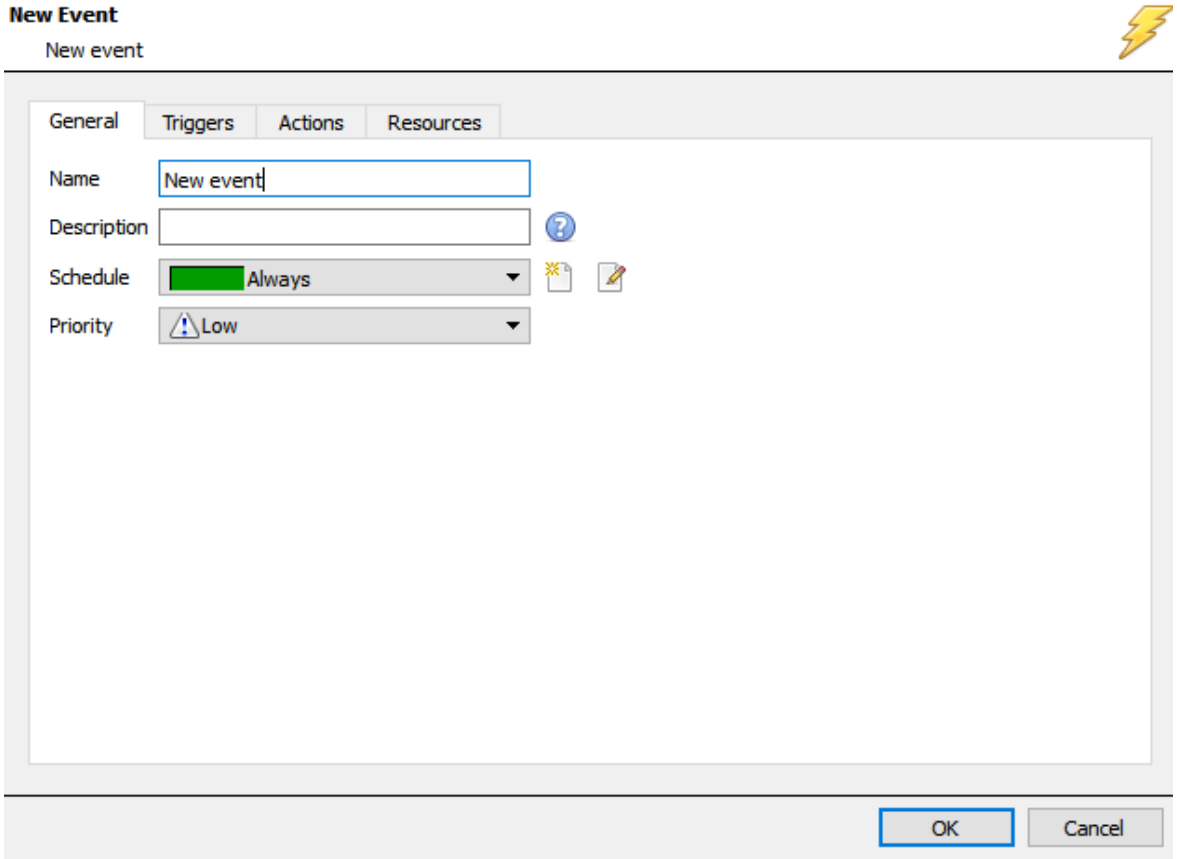
A CathexisVision Event has a trigger, which causes an action. Integrated devices can be set to act at triggers, or as actions. This document will detail the Intrepid specific aspects of Events. There is a comprehensive guide to CathexisVision Events in the main setup manual. For more information, please consult it.

Most of the data that CathexisVision receives from a device is presented in the Events interface. This is done in order to give the user a full range of options. As a result, some of the options presented in the interface may be *impractical* for being used as an event trigger, or action.

Event Window

Events in CathexisVision are setup via the Event Window. This has 4 tabs:

1. In the **General Tab** an event is given a name, description, schedule and priority.
2. In the **Triggers Tab** the trigger/s for the event is defined.
3. In the **Actions Tab** the action/s which the event takes is defined.
4. In the **Resources Tab** the various site resources which can be used as part of an event are defined.



b. Creating an Event

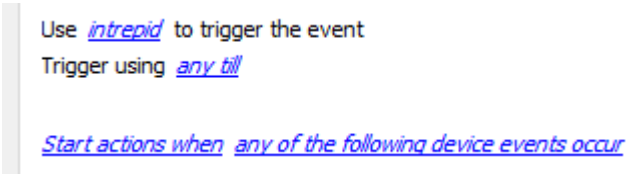
To create an event using the Intrepid device, enter the Events management area:

Once in Events management click on 

. This will open up the New Event window.

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

When triggering on an object the user will have 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.

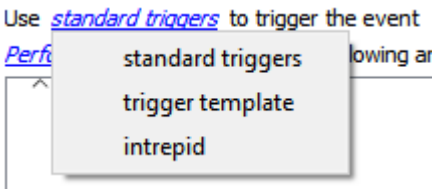


As usual, to change these settings click on the related, blue, hyperlinks.

c. 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).

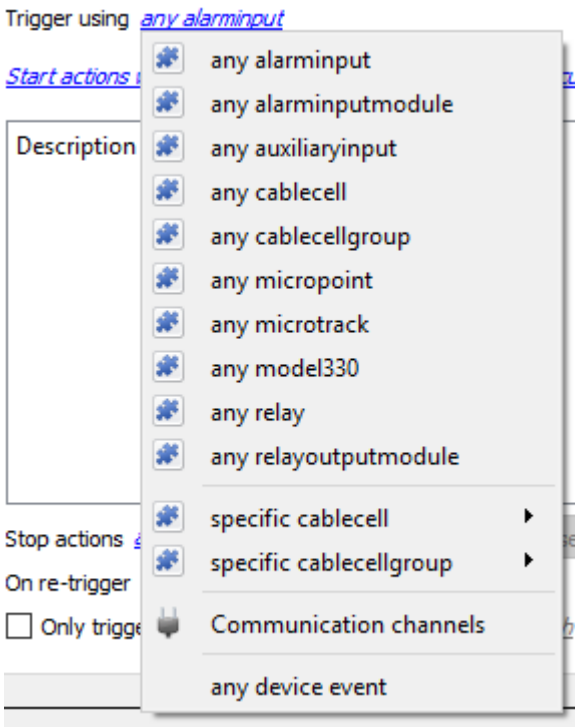
Set the device as the trigger



If creating a new event, the trigger type will default to: Use *standard triggers* . To define which device will trigger the event, click on the hyperlink after "use". To set it as the Intrepid device, click on the hyperlink, and select the relevant device name from the dropdown menu.

Trigger Types (Trigger Using)

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



Any … will trigger when on an event from *any* of these objects.

Specific … will only trigger on an event from a specific object.

Specific cablecell group... If a cablecellgroup object has been set up and cablecells have been assigned to it, it will appear in this list.

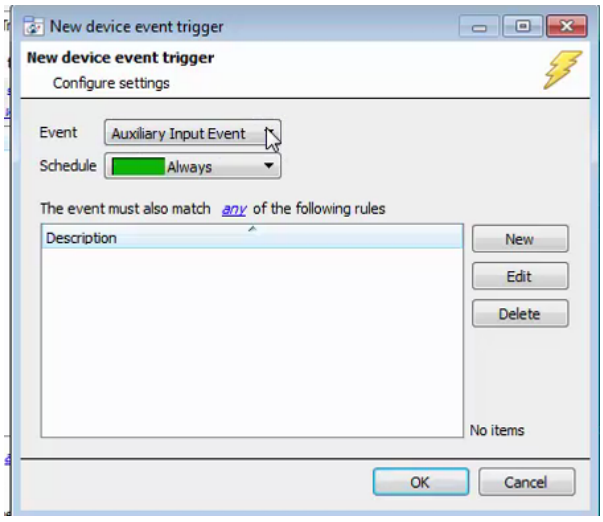
Communication channels will trigger only on the Communication channels.

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 events to be databased under the name of a specific object, and not the name of the triggering group, the Description field in the **General tab of the Event setup** needs to be modified. Click on the to see a list of available descriptions. Here is an Intrepid example:

Define the Trigger

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



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.

Note: Multiple constraints (**Device Event Triggers**) may be set. If a constraint is not 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.

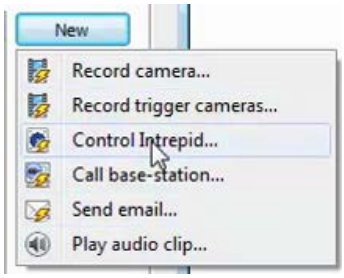
To modify the way this rule will be treated click on the second hyperlink (equals in the example) to display the rules options.

Note: When all available options are known to CathexisVision a drop-down menu will be available. When these variables are not pre-defined, they will need to be filled in manually. The information pulled through to the events is information sent to CathexisVision from the Intrepid device, see the Intrepid settings for the strings needed here.

d. Actions

Once the triggers that are going to initiate the event have been defined, the user will need to define some Actions in the **Actions tab** of the **New Event** window.

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

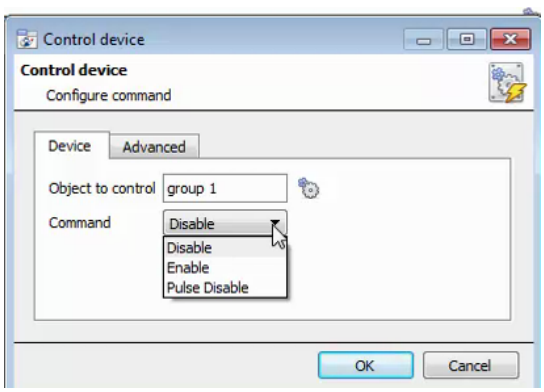


One of the available actions will be to *control* the Intrepid device.

Control device

This will bring up the **control device** dialogue. Under the **device** tab the user defines how the device will be controlled; under the **advanced** tab, the scheduling of the action is defined.

- ***Device***

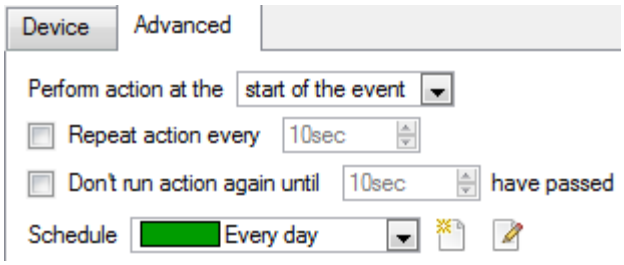


Select an Object to control by clicking on . This will display a selection of all the Objects available on the Intrepid device. The **command** drop-down will change to present the commands available to that Object.

In the example on the left, cablecellgroup object 1 has been selected as the **object to control**, and can be **Disabled**, **Enabled**, and **Pulse Disabled**. The chosen command will affect **all cablecells** in this group.

Note: Only global action can be taken here, and global actions may only apply to **controllers**. For example, **communication channels** cannot be controlled as part of an event action. If one of these objects is selected, there will be no options in the *Command* menu.

- ***Advanced***



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

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

Schedule is a standard CathexisVision schedule, which can be applied to the actions.

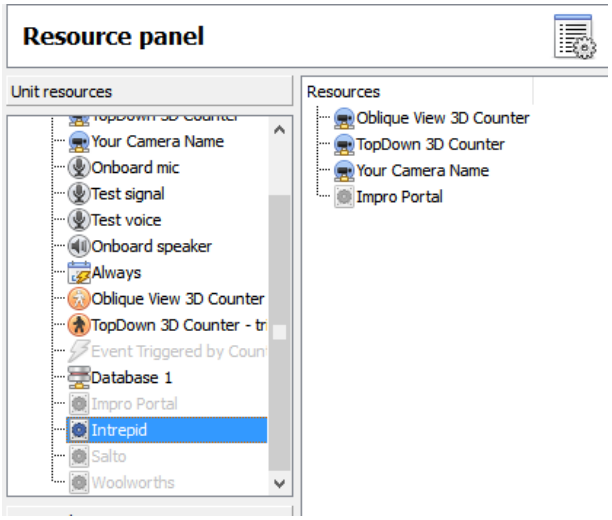
5 Map

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

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

a. Add the Intrepid Device as a Resource

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



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

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

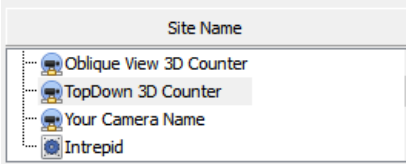
b. Add the Device in Map Editor

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

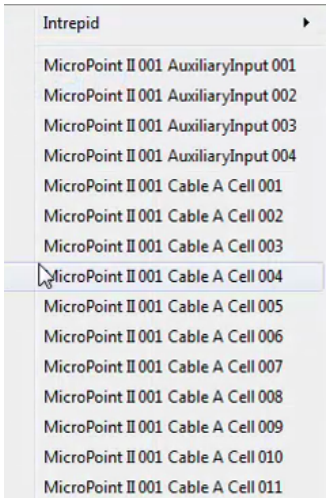
Connect to Site

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

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



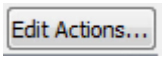
Adding Device Objects

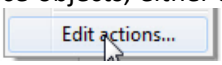


Drag the Intrepid device from the Site Resources list onto the map area. All of the Intrepid device objects will appear in a list. Select an object.

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

- ***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 

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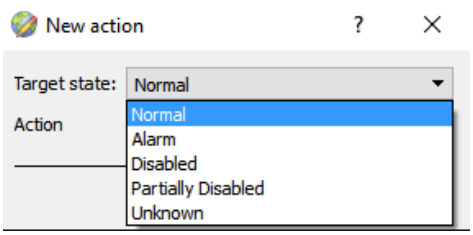
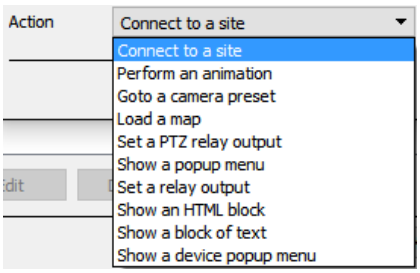
- ***Action Options***

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

.

The action triggers will differ according to the object selected. Consider the following example for an action based on an Intrepid event:

State change options:	
Action options:	

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

- ***Save Map***

Once finished, save the map.

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

c. 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.
Note: RPM module map object doesn't have states, but actions can be set up using Events.

6 Conclusion

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

For support please contact support@cat.co.za