



TecnoAlarm Panel Integration App-note

27 July 2022

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1. Introduction

This document details the integration of the TecnoAlarm Panel, with the CathesisVision software.

Functionally this integration will entail the triggering of standard CathesisVision Events, based on the triggers from the device.

1.1 Requirements

1.1.1 General Requirements

- CathesisVision 2018 Service Pack 2, or later.

1.2.2 License Requirements

License	Name	Description
CTEC-2000	TecnoAlarm Panel Device License	This license is the “base” license to integrate with an alarm panel. It is applied to the server to which the alarm panel is connected. It will allow for the connection of a single TecnoAlarm panel.

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

1.2 Specifications

The following are the TecnoAlarm panels and firmware supported for this integration.

- TP16-256 Release 3.0 and following.
- TP8-96 VIDEO Release 0.7.01 and following.
- TP16-512 Release 0.7.01 and following.
- TP8-88 Release 0.8.02 and following.
- TP8-88 PLUS Release 0.0.00 and following.
- TP20-440 Release 1.1.03 and following.

Note:

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

1.3 Integration Components

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

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

A NOTE ON CAMERA CHANNELS

The CathexisVision 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 CathexisVision 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.

1.4 Features and Abilities

1.4.1 General

1.4.1.1 Connection

- Communication between CathexisVision and the panel takes place over a TCP connection with AES128 encryption.
- CathexisVision server IP address needs to be whitelisted for communication on the panel.

1.4.1.2 Panel

- Zones, areas, and user setup are configured on the panel itself. Consult manufacturer for help.
- Panel covers 4 to 256 zones.
- All device messages are databased.

1.4.1.3 Integration Objects

- Zone name and state overlays can be shown in camera feed.
- Some device objects can be used to trigger events, and some can be controlled as event actions.
- Device can be embedded in a site map which offers multiple action options when messages are received from the device, and/or the device triggers an event.

1.4.2 Device Objects

Device objects populate automatically once communication is established. As the panel supports many expansion modules, the objects displayed in CathesisVision will vary depending on the objects that are configured on the panel.

Object Type	Feature	Abilities
	General	<ul style="list-style-type: none"> • Panel can have up to 2110 objects. • Commands are hidden/shown based on the current object state. • Functionality of object commands are dependent on configurations done on the panel. • Users are required to enter a code when attempting to execute a command. • Objects may be linked to cameras to associate device events with video footage.
Panel	State Indication	<ul style="list-style-type: none"> • Offline/online status.
	Command	<ul style="list-style-type: none"> • Synchronise panel time with NVR
Zone	General	<ul style="list-style-type: none"> • Supports overlays in video feed, indicating zone name and state.
	State Indication	<ul style="list-style-type: none"> • Active • Isolated • Alarm • Low battery • Stand-by • Masked • Failure • Power failure • Tamper
	Command	<ul style="list-style-type: none"> • Isolate zone/s to prevent from triggering alarms.
Program	State Indication	<ul style="list-style-type: none"> • Standby • Arming (exclusion time running) • Arming (exit time running) • Armed • End of by-pass • By-passed

		<ul style="list-style-type: none"> • End of by-pass signaling active
	Command	<ul style="list-style-type: none"> • Disarm • Arm • Bypass • End Bypass
Remote Control	Command	<ul style="list-style-type: none"> • Activate/Deactivate
Timer	Command	<ul style="list-style-type: none"> • Block/Unblock timer
Console	State Indication	<ul style="list-style-type: none"> • Normal
Keypoint		<ul style="list-style-type: none"> • Lost
Output Expansion		<ul style="list-style-type: none"> • Tamper • Blocked
GSM Communicator		<ul style="list-style-type: none"> • Isolated
Wireless Module	State Indication	<ul style="list-style-type: none"> • Normal • Lost • Tamper • Isolated
Expansion Output	State Indication	<ul style="list-style-type: none"> • Output deactivated • Output active • Quickly blinking (125 ms) • Slowly blinking (500ms)
Wireless Siren/Console	State Indication	<ul style="list-style-type: none"> • Normal • Low battery • Tamper • Isolated • Supervision alarm

1.4.3 Events

A CathesisVision Event has a trigger, which causes an action. Integrated devices may be set to act as event triggers, and/or to be controlled via an event action.

Event Element	Features/Abilities
General	<ul style="list-style-type: none"> • A message is displayed when communication to the panel is lost or restored. • Device events are read from the panel's log every second and are displayed in CathesisVision as device events. • Device events which occur on the panel while communication is lost will be displayed in CathesisVision once communication is established again.
Event Triggers	<p>Some TecnoAlarm device objects and (and groups of appropriate objects) may be used to trigger CathesisVision events:</p> <ul style="list-style-type: none"> • Program • Timer • Zone

Event Actions	<p>Some TecnoAlarm device objects may be controlled via a CathesisVision event action, to perform an action:</p> <ul style="list-style-type: none"> • Control Panel → Set panel time (synchronise with NVR) • Program → Arm/Bypass/Disarm/End Bypass • Remote Control → Activate/Deactivate • Zone → Isolate/Reintegrate
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1.4.4 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
General	<ul style="list-style-type: none"> • All messages received from the device are entered into the database. • Database entries include the footage from cameras linked to device objects. • Multiple cameras may be linked to multiple objects. • Device event metadata is displayed where applicable. • Databased device events may be viewed in the embedded video player, which includes the usual CathesisVision video review tools.
View Options	<ul style="list-style-type: none"> • All • Zone • Program • Remote Control • Device • GSM • Timer • Communication • User Code • General • Wireless Key
Sort Options	<ul style="list-style-type: none"> • Device event time
Easy Search	<ul style="list-style-type: none"> • Notifications • Fields 1-3, dependent on the event type, to be configured by the user
Filter	<ul style="list-style-type: none"> • Time • Event Type • Notification • Fields 1- 3 (see above)

1.4.5 Maps

The CathexisVision GUI provides for configurable site maps that feature multi-layered, hierarchical, interactive interfaces providing representation and control of a site and its resources.

Map Element	Features/Abilities
General	Device objects can be embedded in a site map which offers multiple action options when messages are received from the device, the device triggers an event, and/or the user manually initiates a map action.
Map Action Triggers	<ul style="list-style-type: none"> All device objects may be set to trigger a map action if the user left-clicks on map. Some device objects may be set to trigger a map action if a state change message is received from the device. <p>Note: See the Device Object Features table, above, for state change information.</p> <ul style="list-style-type: none"> All device objects may be set to perform a map action if any event occurs on the device. Device objects which can be configured to trigger CathexisVision events, may also be set to perform a map action when specific CathexisVision events are triggered.
Map Actions Options	<p>When triggered (see above), objects may perform the following map actions (where applicable):</p> <ul style="list-style-type: none"> Connect to a site Perform an animation Go to a camera preset Load a map Set a PTZ relay output Show a popup menu Set a relay output Show an HTML block Show a block of text Show a device popup menu Show a device event notification

USEFUL LINKS

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

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

2. Device Addition

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

2.1 Setup on the Device

The TecnoAlarm panel needs to be configured to communicate with the relevant CathesisVision unit. The IP address of the CathesisVision unit needs to be whitelisted on the panel.

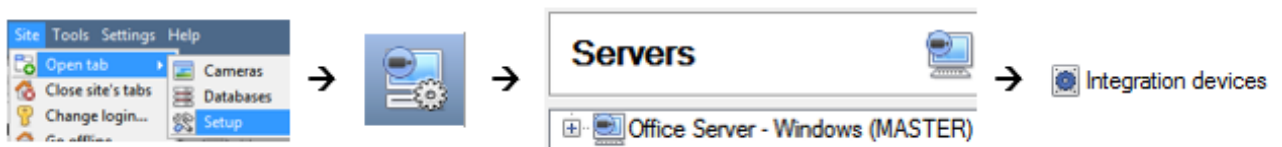
Consult the panel manufacturer for instructions about how to perform panel configurations.

2.2 Add a New 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.

2.2.1 The Integration Panel

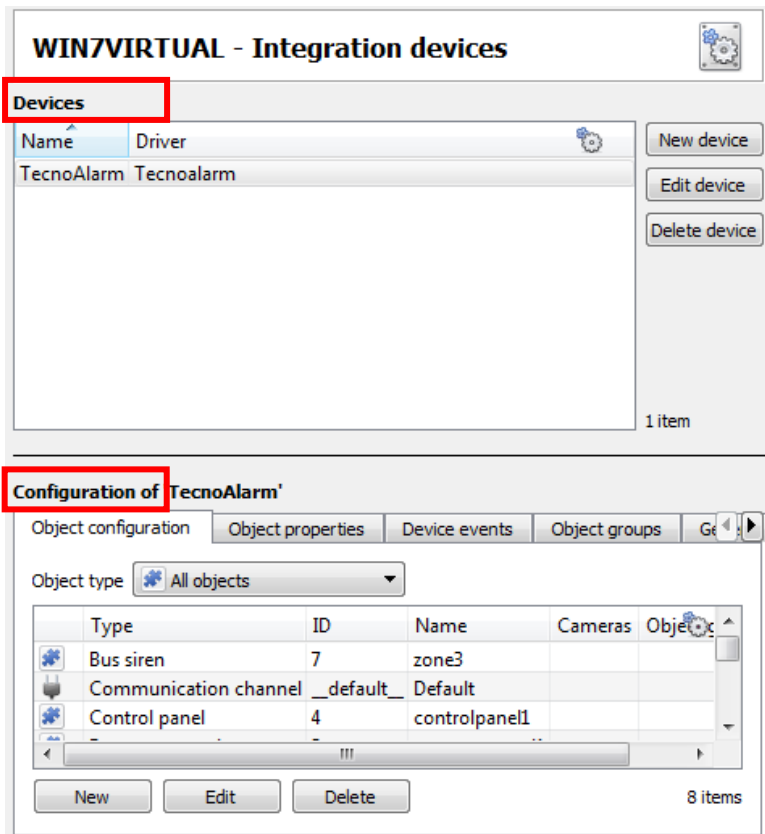
To get to the Integration Panel, follow this path: **Site / Open tab / Setup / Configuration icon / Server / Integration devices**.



There are two sections in the Integration Panel:

1. The **Devices** list shows the integration devices attached to the integration database.
2. The **Configuration** section enables editing/reviewing the device selected in the **Devices** section.

See the image below.



2.2.2 Device Addition

New device

1. In the Integration Panel, navigate to the **Devices section**.
2. Click on the **New device** button on the right-hand side. This will open the addition dialogue.
3. Select the **TecnoAlarm** driver from the list.

Configure the device

Name

Connection

IP address

Port

Settings

User code

Encryption passphrase

Give the device a descriptive **name**.

Enter the **IP address** and **Port** number configured on the panel.

Enter the **User Code** and **Encryption Passphrase**, as configured on the panel.

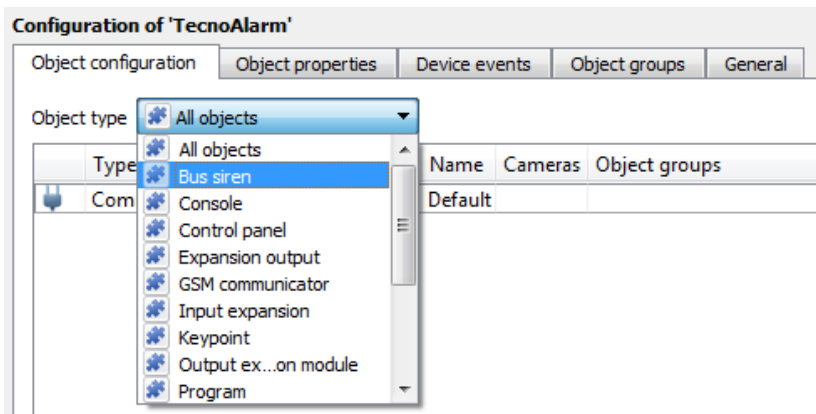
Click Finish.

3. 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**.


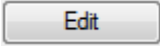

3.1 Object Configuration Tab

The object configuration tab shows all individual objects that comprise the integration.

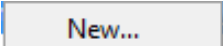
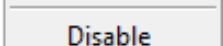
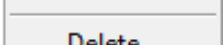
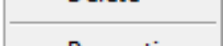


Note: Device objects populate automatically once communication is established. As the panel supports many expansion modules, the objects displayed in CathexisVision will vary depending on the objects that are configured on the panel.

3.1.1 Object Configuration Buttons

-  Click **New** to add a new object.
-  Click **Edit** to change an existing object.
-  Click **Delete** to remove an existing object from the CathexisVision configuration.

3.1.2 Object Configuration Right-Click Options

-  **New** will open up the dialogue to add a new object.
-  **Disable/Enable** allows objects to be enabled/disabled manually.
-  **Delete** will permanently remove this object from the list.
-  **Properties** will open up the object properties. The object may be edited from here. Specifically, assign cameras to this object, and define user access levels.

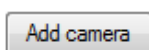
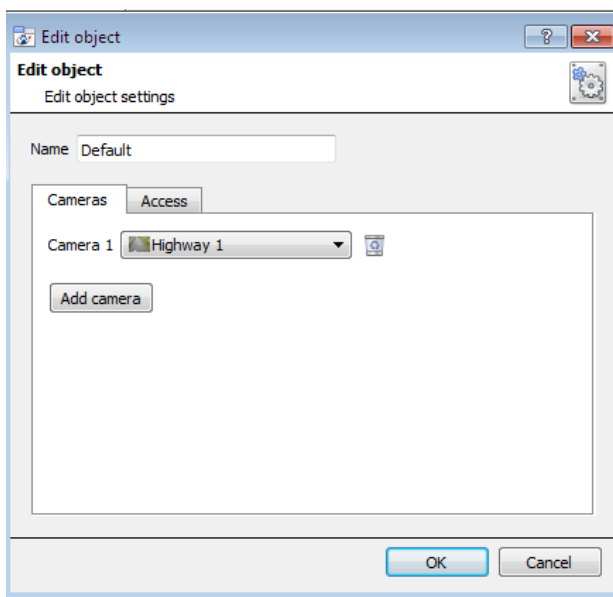
3.1.3 Edit Object

Use the Object configuration tab to make changes. Open the object **editing window** by selecting object from the list, and clicking the **Edit button**, or **right-click Properties**.

This window is where cameras are added to objects, overlays are configured, and access rights to the integration are added. These are dealt with in two tabs: **Cameras** and **Access**.

3.1.3.1 Properties: Cameras

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



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



To **delete** a camera, click the trash icon.

Note:

- If **continuous recording** is not set up, on associated cameras, this will run the risk of objects triggering while the cameras are not recording. To record only cameras, when an object triggers, set up **Events** that trigger a recording, when one of these objects is activated.
- Multiple cameras may be associated with individual objects.

3.1.3.2 Properties: Access

Access protects sensitive objects, by only allowing certain user levels access to them.

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

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

3.1.4 Configure Overlays



Overlays may be configured individually, or globally.

- If individual, then the overlay settings are applied only to the *selected object*. If global, then the overlay settings are applied to *all objects* of the selected *type*.
- The only difference in the configuration process, however, is *navigating* to the overlay settings window for each option. Thereafter, the overlay settings window is the same.



See below for navigating to the overlay configuration window for individual/global overlays.

Note: Overlays can only be configured for **Zone** objects.

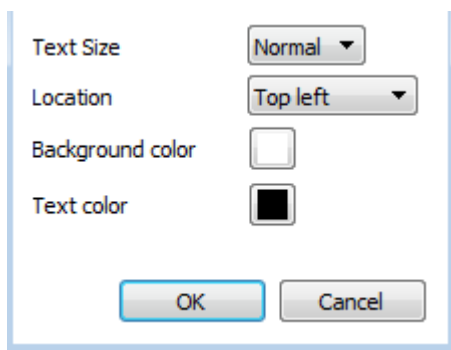
3.1.4.1 Configure Individual Overlays

1. Right-click the individual object and open the Properties window.
2. Add a camera to the object.
3.  Click the Edit Overlays icon.
4.  **Enable** Check Enable to enable overlays on the object.

3.1.4.2 Configure Global Overlays

1.  Select the object type from the Object type drop-down menu in the Object Configuration tab.
2.  Click the Default Settings icon.
3. Use defaults Uncheck Use defaults.

Overlay Configuration Window



Select **Text Size**.

Select overlay **Location**.

Select Background and text **colour**.



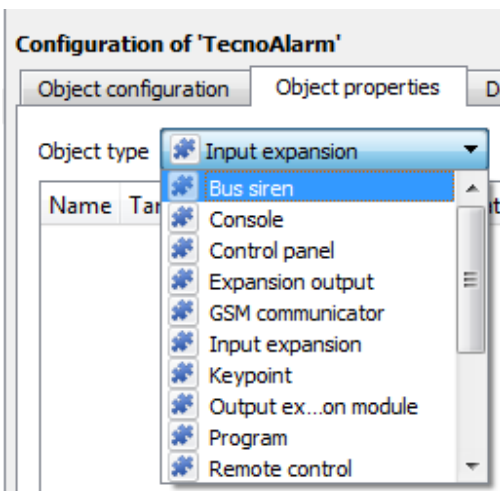
Selecting the colour blocks will bring up a chart with more colour options.



Click **OK** to complete.

3.2 Objects Properties Tab

The Object properties tab shows the object properties, sorted by object type.



As the panel supports many expansion modules, the objects and command options displayed in CathexisVision will vary depending on the objects that are configured on the panel, as well as the current states of those objects.

Note: NVR and panel time need to be synchronised. This can be accomplished by **right-clicking** on the **control panel object** in **Object Properties tab**.

3.2.1 Object Options

As the TecnoAlarm panel has many possible device objects, the availability of objects and their commands/functionality will vary. Note the following:

- Commands are hidden/shown based on the current object state.
- Users are required to enter a code when attempting to execute a command.
- Functionality of object commands are dependent on configurations done on the panel.

Thus, only some TecnoAlarm objects are described below. These selected objects have either multiple state options, or right-click options.

Note: All right-click command options require the user to enter a user code.

3.2.1.1 Control Panel Object

Column Name	Description	
Connection	Indicates connection to the panel. Either Online/Offline.	
Right-Click Object	Set Panel Time	NVR and panel time need to be synchronised. This can be accomplished by right-clicking on control panel object in Object Properties tab of Integrations Panel.

3.2.1.2 Zone Object

Column Name	Description	
State	Indicates state of zone. Options are: Active, Isolated, Alarm, Low battery, Stand-by, Masked, Failure, Power failure, Tamper.	
Right-Click Object	Isolate	Prevents the zone from triggering alarms.
	Reintegrate	Removes the isolation status.

3.2.1.3 Program Object

Column Name	Description	
State	Indicates state of program. Options are: Standby, Arming (exclusion time running), Arming (exit time running), Armed, End of by-pass, By-passed, End of by-pass signaling active.	
Right-Click Object	Disarm	
	Arm	
	Bypass	
	End bypass	

3.2.1.4 Remote Control Object

Right-Click Object	Activate
	Deactivate

3.2.1.5 Timer Object

Right-Click Object	Block Timer
	Unblock Timer

3.2.1.6 Console/Keypoint/Output Expansion/GSM Communicator Objects

Column Name	Description
State	Indicates state of object. Options are: Normal, Lost, Tamper, Blocked, Isolated

3.2.1.7 Wireless Module

Column Name	Description
State	Indicates state of object. Options are: Normal, Lost, Tamper, Isolated

3.2.1.8 Expansion Output

Column Name	Description
State	Indicates state of object. Options are: Output deactivated, Output active, Quickly blinking (125 ms), Slowly blinking (500ms).

3.2.1.9 Wireless Siren/Wireless Console

Column Name	Description
State	Indicates state of object. Options are: Normal, Low battery, Tamper, Isolated, Supervision alarm.

3.3 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.

Configuration of 'Tecnoalarm'

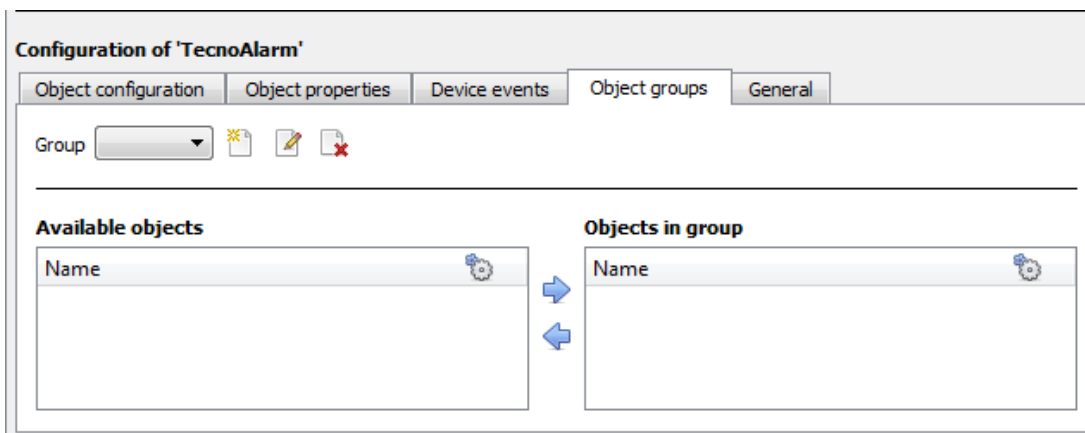
Object configuration | Object properties | **Device events** | Object groups | General

All events

Event type					
Program	Program_001	Remote disarming	2000-01-16 20:09:01	Code: Installer	Operation through TECNO OUT
Program	Program_002	Remote arming	2000-01-16 20:09:06	Code: Installer	Operation through TECNO OUT
Program	Program_003	Remote arming	2000-01-16 20:09:11	Code: Installer	Operation through TECNO OUT
Program	Program_004	Remote arming	2000-01-16 20:09:16	Code: Installer	Operation through TECNO OUT
Program	Program_005	Remote arming	2000-01-16 20:09:21	Code: Installer	Operation through TECNO OUT
Program	Program_006	Remote arming	2000-01-16 20:09:26	Code: Installer	Operation through TECNO OUT
Program	Program_007	Remote arming	2000-01-16 20:09:31	Code: Installer	Operation through TECNO OUT
Program	Program_008	Remote arming	2000-01-16 20:09:36	Code: Installer	Operation through TECNO OUT
Program	Program_009	Remote arming	2000-01-16 20:09:41	Code: Installer	Operation through TECNO OUT
Program	Program_010	Remote arming	2000-01-16 20:09:46	Code: Installer	Operation through TECNO OUT

3.4 Groups Tab

The user can create groups of the *same* type of object.



Tip: This is useful when setting up Events, because events can be triggered by an object group. (I.e. A group will trigger, if any of the devices in that group is triggered.)

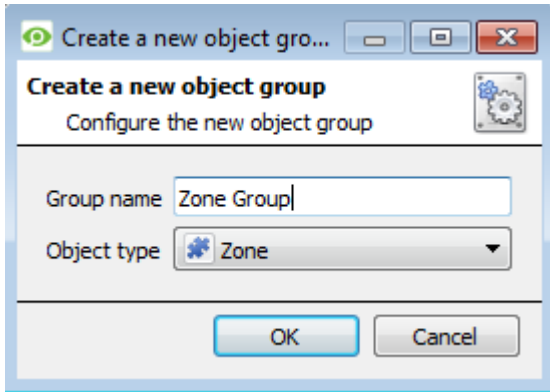
3.4.1 Create a Group

To **create** a group, click on this icon.

To **edit** a group, click on this icon.

To **delete** a group, click on this icon.

A new dialogue box will open.



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



Click on the drop-down menu to select the **Object type** for grouping.

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

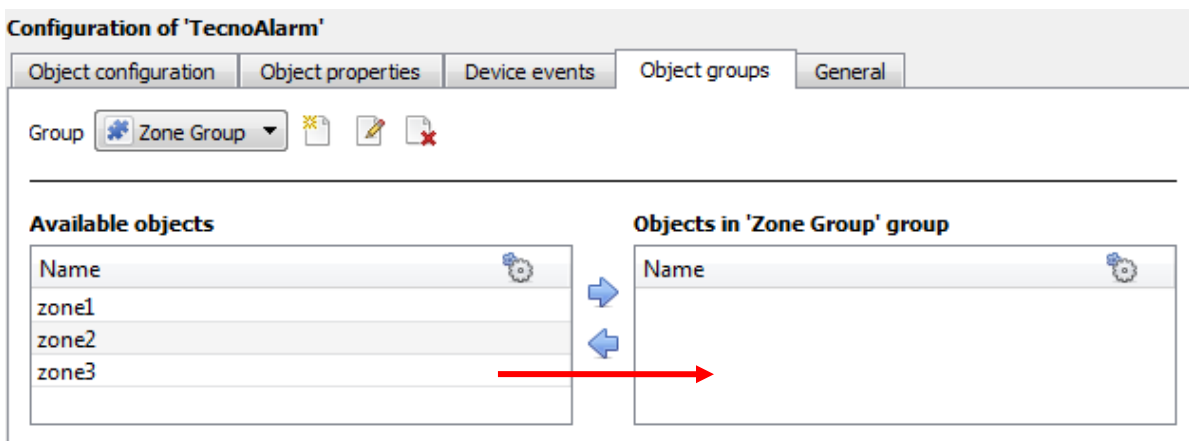
The next step is to add individual objects to the group.

3.4.2 Add or Remove Objects

After creating a group, a list of all the available objects for that group will be displayed in the Available objects panel, on the left-hand side. These are ready to be added to the group.

-  To **add** these objects to the group, select them from the list, and **click on the right arrow**.
-  To **remove** these objects from the group, select them and **click on the left arrow**.

Note: Multiple objects may be selected at a time.



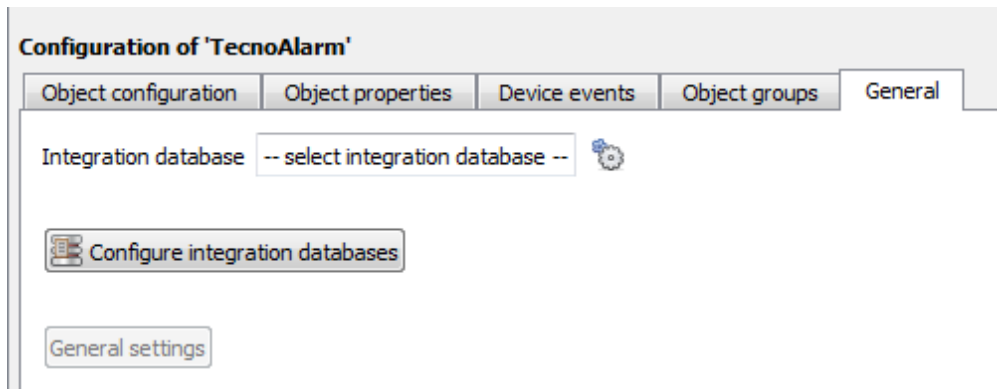
Once individual objects have been added to the group using the arrows (above), they will appear in the section on the right-hand side.

3.5 General Tab

The General tab of the Configuration section (Integration panel) deals with the integration database. Setup must be completed here, before the Databases tab can be used to search events and view associated footage.

From the General tab, the user must:

- *Select* an existing database, or
- Configure a *new* database for TecnoAlarm, and then select.



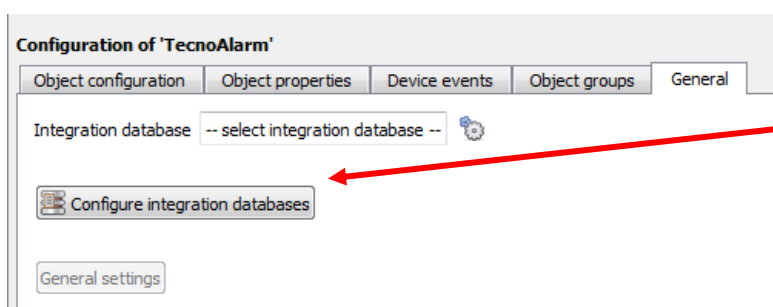
Important: Each integrated device needs to be attached to an Integration database. Without setting up/adding a database here the integration will not function properly within the CathesisVision system.

3.5.1 Configure a New Database

- The first time an integration database is added, the general integration database will need to be *initialised*. This will add a broad database, within which all integration device databases will be added.
- After the database is initialised, then a database for a *specific integration* (i.e., TecnoAlarm) must be created.
- Finally, the integration database must be *selected*.

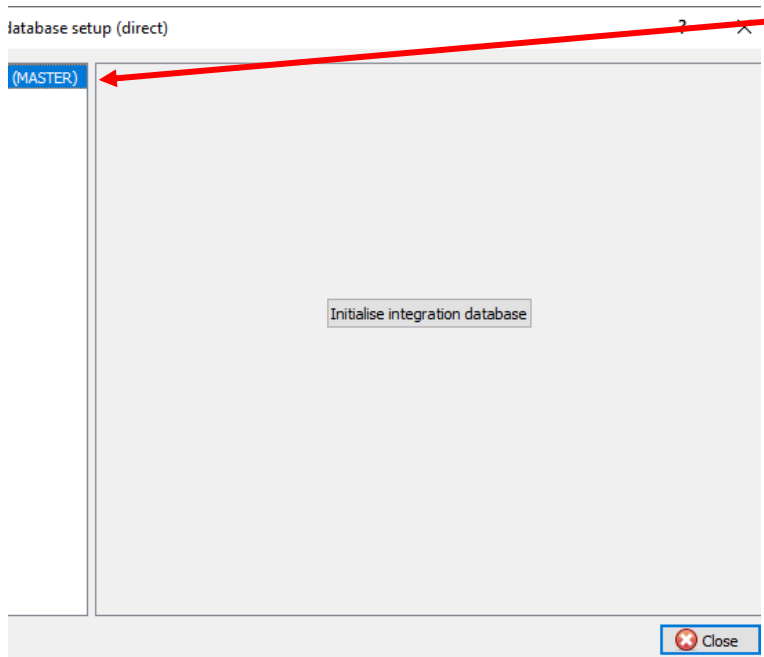
3.5.1.1 Initialise the Integration Database

If an integration database has not yet been created, follow the steps below.



Click the **Configure integration databases** button from the General tab.

This opens the Integration database setup window.



Select the unit to which the database will be added, from the list on the left.

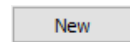
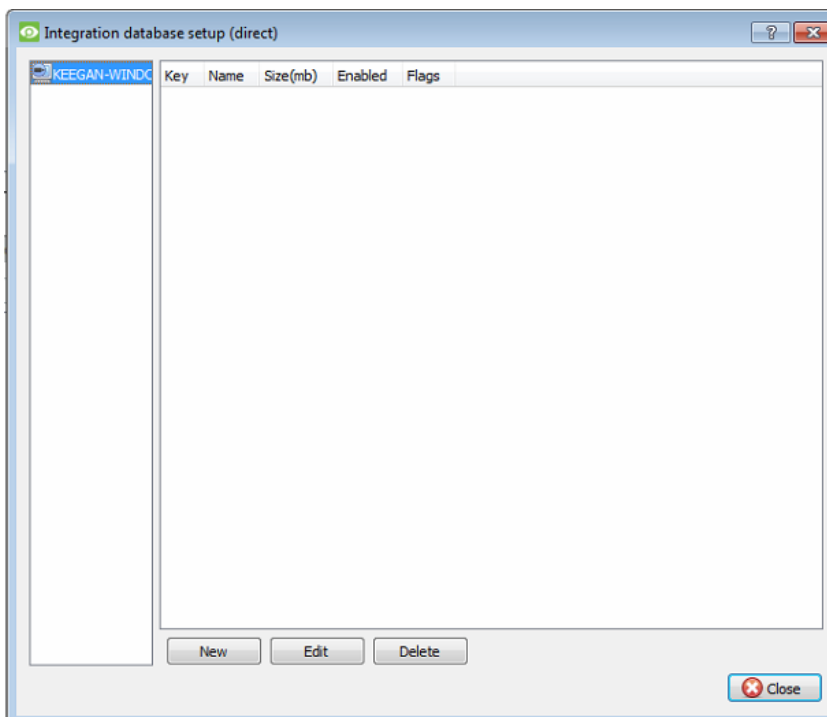
Then, click **Initialise integration database**.



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

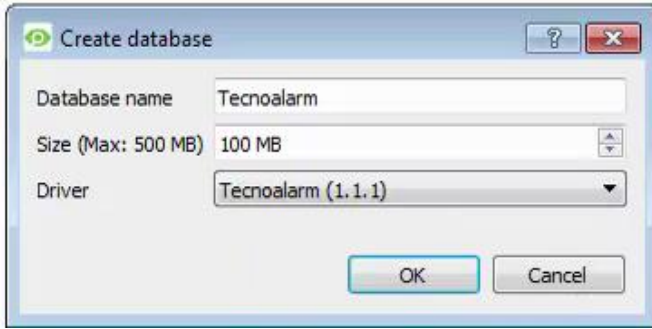
3.5.1.2 Add a New Devices Database

After initialisation, add the database for the integration being added.



Click the New button.

A dialogue will appear.



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

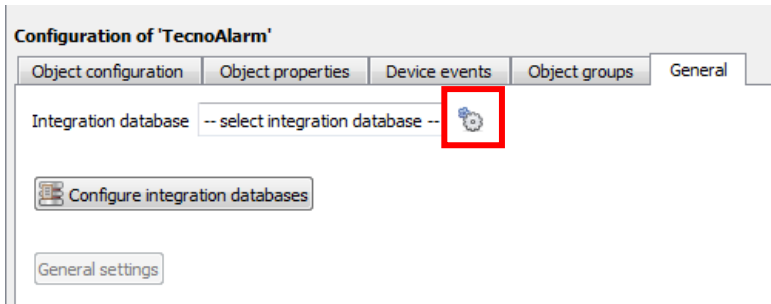
Allocate a **Size** to the new device database.

Choose the relevant device **Driver**.


Click on **OK** to create the database.

3.5.2 Select the Integration Database

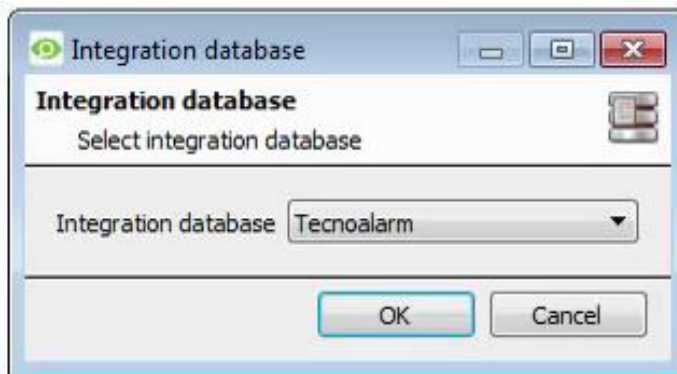
Once the database has been created, the database must be selected.



Return to the General tab.

 Then, click the **settings icon**.

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



Select the TecnoAlarm database from the drop-down menu.

Then click **OK**.

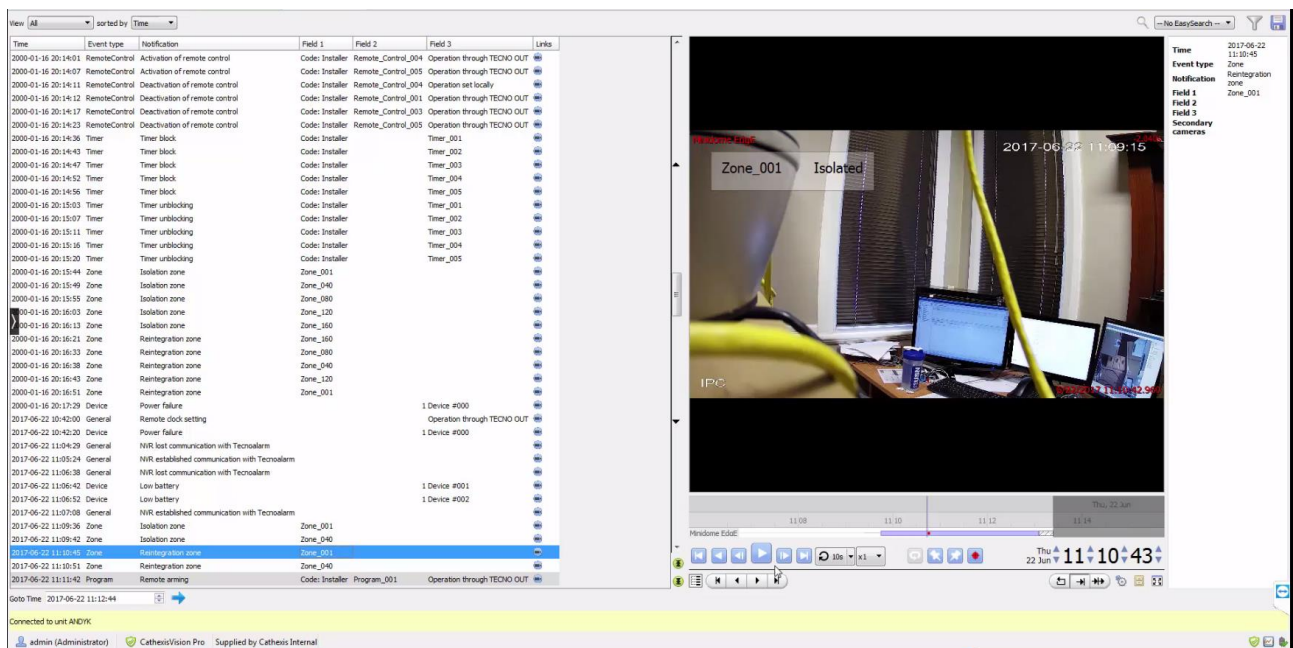
Note: The information on setting up an integration database may be found in the **Integration Devices General Settings** section of the *CathexisVision Setup Manual*.

4. Database

The databases tab allows the user to navigate the databased entries, for each individual database. In the databases 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 can launch this recording, from within the databases tab.

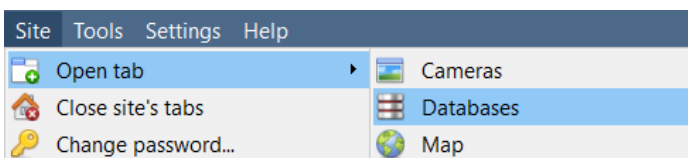
Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathesisVision by the integrated device.

The TecnoAlarm database is information rich. This is an example of some of the information that is included:



4.1 Navigate to the Database

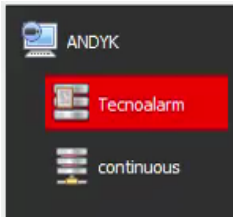
To view information stored in the Integration, first navigate to the Databases Tab.



Follow the path on the left: **Site / Open tab / Databases.**



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

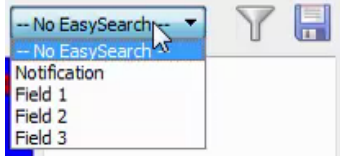







Select the **TecnoAlarm** integration database from the database panel that opens on the left-hand side.

The databases are ordered under the NVRs to which they are attached.

4.2 Database Interface



<p>① View</p>	<p>This changes the way the database is presented. Some integration databases have multiple view options.</p>
<p>② Sorted By</p>	<p>This sorts the Events based on the following parameters: Time.</p>
<p>③ Easy Search</p>	<p>This searches the database one of the following options:</p>  <p>The values stored in Field 1, Field 2 and Field 3 change depending on the message type. It is recommended to select the appropriate view first before using these filters.</p>
<p>④ Filter</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 filter options are available:</p> <ol style="list-style-type: none"> To enable filters check this box: <input checked="" type="checkbox"/> Enable filters To add a new filter click on . The filter icon  will change to  when filters are active. To delete an added filter click on . <p>The TecnoAlarm panel has the following filter options:</p> 

	<p>Note:</p> <ol style="list-style-type: none"> Multiple filters may be run simultaneously. Filters may be run using the same parameter more than once. 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.)
<p>⑤ Go to Time</p>	<p>This goes 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 on the arrow icon.</p>

4.2.1 Viewing an Entry's Associated Recording

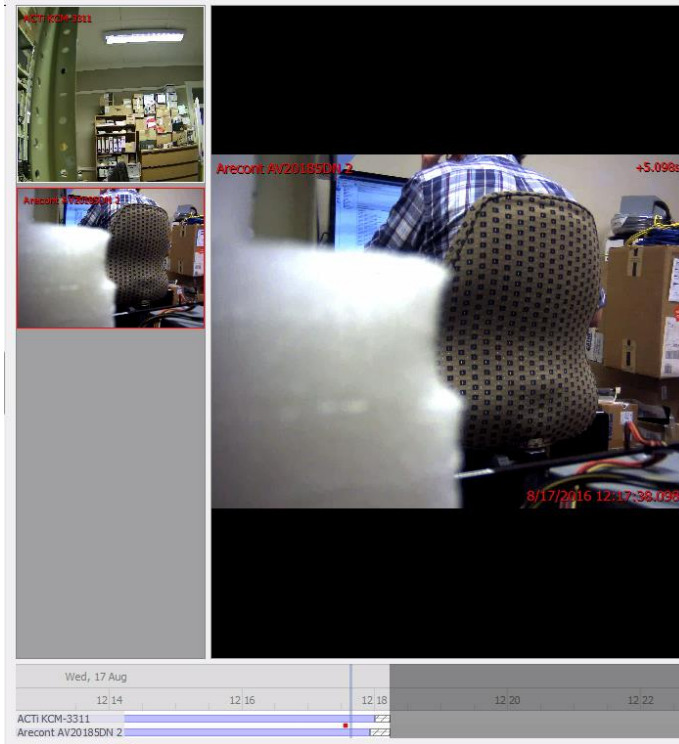
If cameras have been attached to device objects in the Integration setup and if there are available recordings for those cameras, then each Integration database entry will have a corresponding recording.

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.

Time	Event Type	Status Description	Event Name	Device Name	Panel Name	Links
2018-08-17 12:12:26	state_change	Disabled	Zone State Change	Panel1.Zone4		1
2018-08-17 12:12:31	state_change	Disabled	Device State Change	Panel1.Address2		1
2018-08-17 12:12:36	state_change	Disabled	Device State Change	Panel1.Address4		1
2018-08-17 12:12:46	state_change	Disabled	Output State Change	Panel1.Output12		1
2018-08-17 12:12:46	state_change	Disabled	Output State Change	Panel1.Output13		1
2018-08-17 12:12:51	state_change	Disabled	Output State Change	Panel1.Output1		1
2018-08-17 12:12:51	state_change	Disabled	Output State Change	Panel1.Output2		1
2018-08-17 12:12:56	state_change	Disabled	Input State Change	Panel1.Input1		1
2018-08-17 12:13:26	other	FAULT Functional Condition Activated	Panel Status Change			1
2018-08-17 12:13:26	state_change	Unknown	Input State Change	Panel1.Input2		1
2018-08-17 12:13:26	fault	Open circuit	Panel Fault	Panel1.Input2		1
2018-08-17 12:13:31	other	Buzzer Silenced ON	Panel Status Change			1
2018-08-17 12:13:46	other	Buzzer Silenced OFF	Panel Status Change			1
2018-08-17 12:13:46	state_change	Unknown	Output State Change	Panel1.Output15		1
2018-08-17 12:13:46	fault	Open circuit	Panel Fault	Panel1.Output15		1
2018-08-17 12:13:46	fault	Sounders fault	Panel Fault			1
2018-08-17 12:14:16	other	Buzzer Silenced ON	Panel Status Change			1
2018-08-17 12:15:47	state_change	Disabled	Loop State Change	Panel1.Loop1		1
2018-08-17 12:15:47	state_change	Disabled	Loop State Change	Panel1.Loop2		1
2018-08-17 12:15:47	other	Buzzer Silenced OFF	Panel Status Change			1
2018-08-17 12:15:52	state_change	Enabled	Loop State Change	Panel1.Loop1		1
2018-08-17 12:15:52	state_change	Enabled	Loop State Change	Panel1.Loop2		1
2018-08-17 12:16:07	state_change	Enabled	Device State Change	Panel1.Address2		1
2018-08-17 12:16:17	state_change	Enabled	Device State Change	Panel1.Address4		1
2018-08-17 12:16:17	state_change	Enabled	Zone State Change	Panel1.Zone1		1
2018-08-17 12:16:22	state_change	Enabled	Zone State Change	Panel1.Zone2		1
2018-08-17 12:16:22	state_change	Enabled	Zone State Change	Panel1.Zone3		1
2018-08-17 12:16:22	state_change	Enabled	Zone State Change	Panel1.Zone4		1
2018-08-17 12:16:32	state_change	Enabled	Output State Change	Panel1.Output12		1
2018-08-17 12:16:32	state_change	Enabled	Output State Change	Panel1.Output13		1
2018-08-17 12:16:37	state_change	Enabled	Output State Change	Panel1.Output1		1
2018-08-17 12:16:37	state_change	Enabled	Output State Change	Panel1.Output2		1
2018-08-17 12:16:42	state_change	Enabled	Input State Change	Panel1.Input1		1
2018-08-17 12:16:42	other	Enabled	Panel Status Change			1
2018-08-17 12:17:33	other	Normal Reset	Reset			1
2018-08-17 12:17:33	other	Configuration Utility Connected	Panel Status Change			1
2018-08-17 12:17:33	other	Buzzer Silenced OFF	Panel Status Change			1
2018-08-17 12:17:33	other	Configuration Utility Connected	Panel Status Change			1
2018-08-17 12:17:33	other	Buzzer Silenced OFF	Panel Status Change			1
2018-08-17 12:17:33	other	Buzzer Silenced ON	Panel Status Change			1

4.2.2 Reviewing Multiple Cameras

If multiple cameras were added to the recorded object during the integration setup, these are displayed on the left of the video player screen as thumbnails.



Click a camera thumbnail to review it.

4.2.3 Device Event Metadata

When a database entry is selected, its event information will be displayed on the right of the video player.

Time	2017-06-22 11:10:45
Event type	Zone
Notification	Reintegration zone
Field 1	Zone_001
Field 2	
Field 3	
Secondary cameras	

5. Events

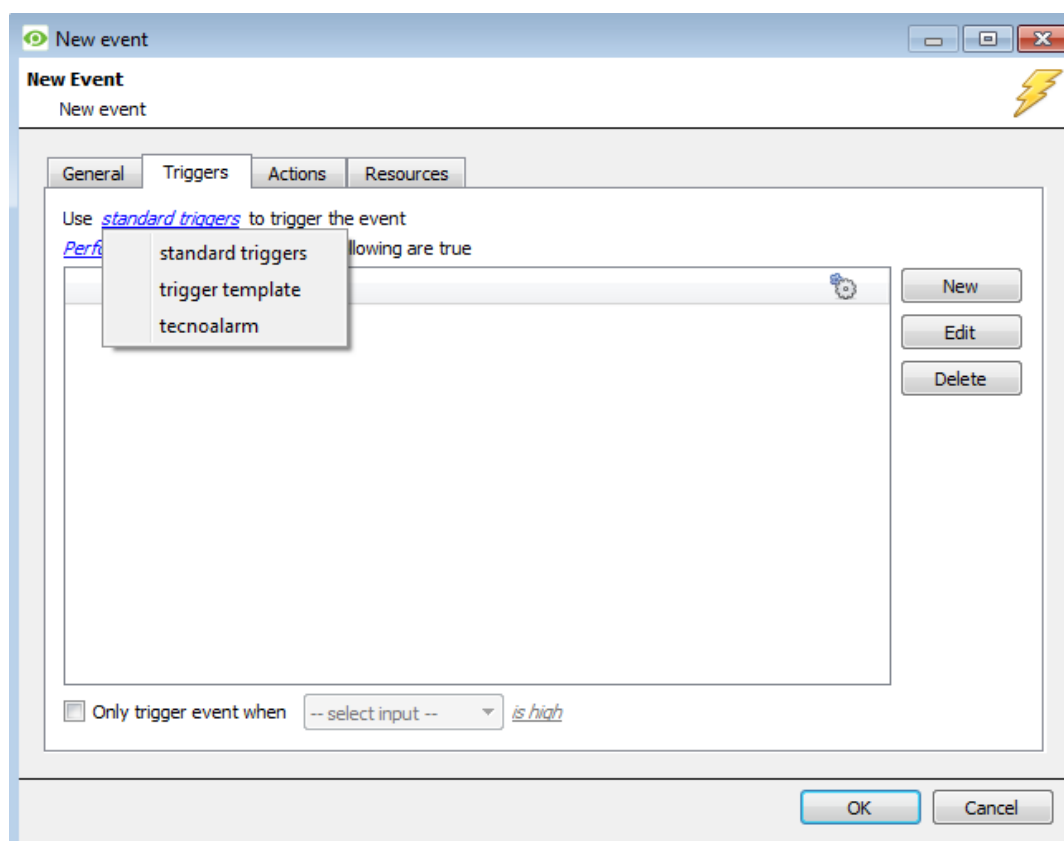
A CathexisVision Event has a trigger, which causes an action. Integrated devices may be set to act at triggers, or as actions. This document will detail the TecnoAlarm specific aspects of Events. There is a comprehensive guide to CathexisVision Events in the main setup manual.

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

5.1 Event Window

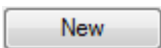
Events in CathexisVision are set up via the Event Window, which has four tabs.

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



5.2 Creating an Event

To create an event using the TecnoAlarm device, navigate to the Events management area by following the sequence: **Open Tab / Setup / Servers / Master Server / Events**. This is shown below.



Once in Events management area, click the **New** icon at the bottom of the screen. This will open up the **New Event window**. Alternatively, right-click and select **New**.

The new event window has four tabs which can be used to set up the event: General, Triggers, Actions, and Resources.

5.3 General Tab

Create a new event under the General tab by filling in the fields.

New Event

New event

General	Triggers	Actions	Resources
Name	<input type="text" value="New event"/>		
Description	<input type="text"/>		
Schedule	<input checked="" type="checkbox"/> Every day (DEMO) ⌵ 📅 ✎		
Priority	<input checked="" type="checkbox"/> Low ⌵		

Give the event a descriptive **Name**.

Set up a **Schedule** if desired by clicking the icon.

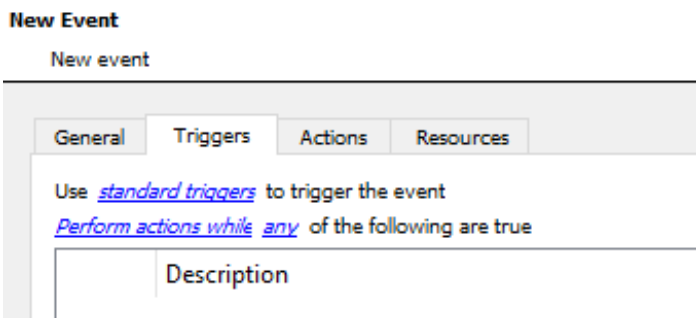
Select a **Priority**.

Modify the **Description** if relevant. See below.

5.4 Triggers Tab

The Triggers tab is where a user chooses which events sent from devices (or systems) will be used for an automated CathesisVision response (action).

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).

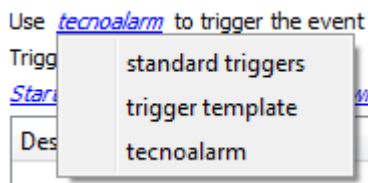


The user will need to click on the hyperlinks (depicted alongside) to set up the trigger.

The subsections below provide instructions.

5.4.1 Set the Device as the Trigger

For a new event, the trigger type will default to “standard triggers”. The user will need to change this to the TecnoAlarm device.



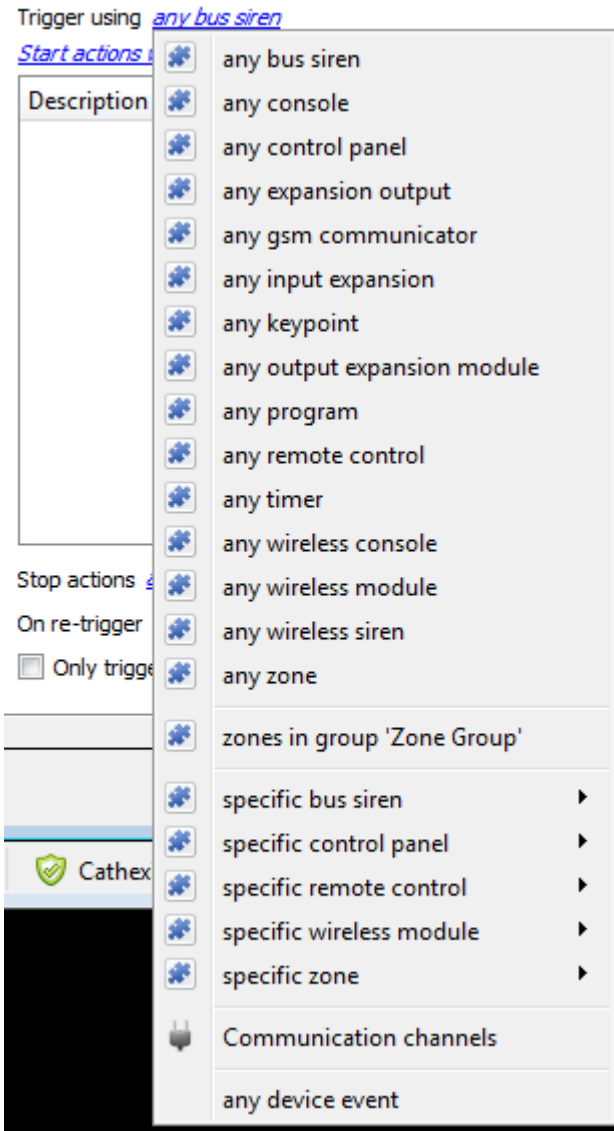
To define which device will trigger the event, **click on the hyperlink** after “Use”.

This will open more options.

To TecnoAlarm device as the trigger, **click on the hyperlink**, and **select the device name** from the drop-down menu.

5.4.2 Trigger Types (Trigger Using)

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



Click on the hyperlink after the words “Trigger using”.

This will open a drop-down menu with more options.

Click an option from the menu to select.

See the table below for descriptions of the options on the drop-down menu.

MENU OPTION	DESCRIPTION OF TRIGGER TYPE
Any ... object	This will trigger when any of these object types sends the selected trigger.
Object in group...	If groups have been configured, they will appear here in this list. This option will trigger if any objects in the selected group sends the selected trigger.
Specific object...	This will trigger only when a specific object sends the selected trigger.
Communication channels	This will trigger only on the Communication channels.
Any device event	This will trigger on any event that occurs on the device. Within the “any device event” setup “device event rules” which will constrain which device events will trigger the event.

Note for group triggers: For the 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 and instructions for how to enter these descriptions.

Here is an example which send the triggering object's name to the database, for the event:

Description ?

5.4.3 While/When and Any/All

The third row of hyperlinks further specifies when the event triggers. The user will choose to trigger either based on a *device event* occurring, or based on an *object property*.

<p>Use tecnoalarm to trigger the event</p> <p>Trigger using any bus siren</p> <p>Start actions when any of the following device events occur</p>	<p>To change these settings, click on the blue hyperlinks in the third row as shown in the image on the left.</p>
--	---

The user can choose the option to:

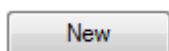
- start actions when** any of the properties meet user-configured criteria, or any user-configured device events occur, or
- perform actions while** any/all of the properties meet user-configured criteria.

Start actions when	any of the properties meet the following criteria any of the following device events occur
Perform actions while	any of the properties meet the following criteria all of the properties meet the following criteria

After selecting a master trigger type using the hyperlinks, the user may proceed to creating a new device event.

5.4.4 Define the Trigger (“Any Device Event” Option)

If the user has selected the hyperlink *any of the following device events occur*, they will need to follow the steps below to add a **new device event trigger**.

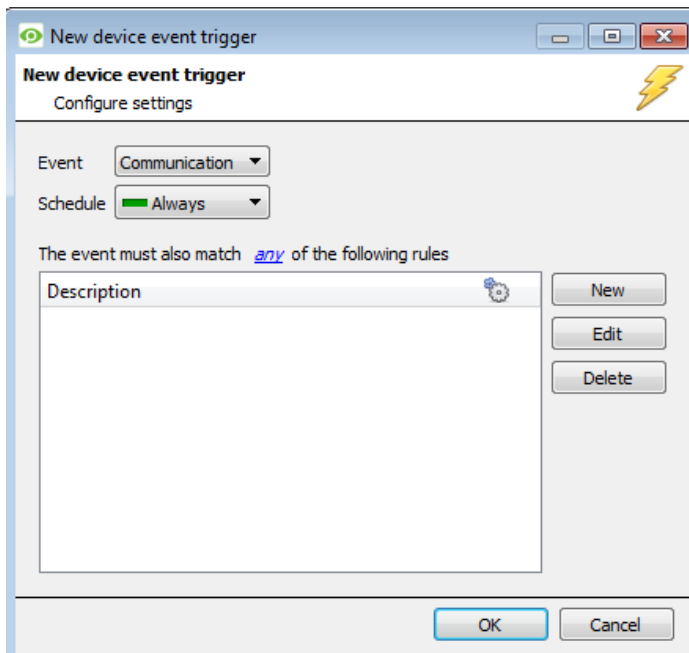


Click on **New** in the Triggers tab.

Clicking on New will bring up the **New device event trigger** dialogue box.

5.4.4.1 New Device Event Trigger

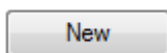
The user will then need to configure the new device event trigger.



- Select the **type of Event** where applicable.
- Choose a **schedule**.
- Choose whether [any](#), or [all](#) constraints need to be fulfilled to set off a trigger.
- Finally use the **new/edit/delete** buttons on the right-hand side to add a device event rule (a constraint). Follow the instructions below.

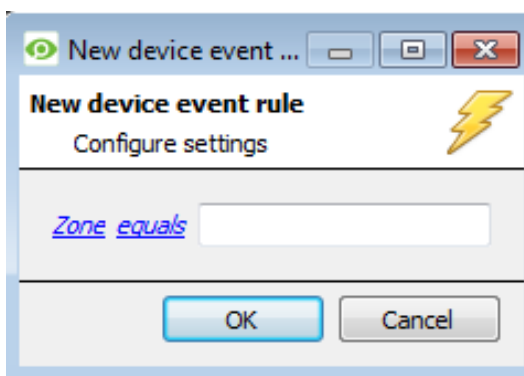
Note: Multiple constraints may be set (**Device Event Triggers**). If constraints are not defined, every single device event will trigger this event.

5.4.4.2 New Device Event Rule



To configure a New device event rule, **click on New** in the New device event trigger window.

This will bring up a further window, called **New device event rule**.



To change the constraint, **click on the first hyperlink** (which is Zone in this example). This will bring up the full list of available rules.

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

Defining a Constraint: Drop-Down or Written Description

When all available options are known to CathesisVision, 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 CathesisVision from the device. See the device settings for the strings needed here.

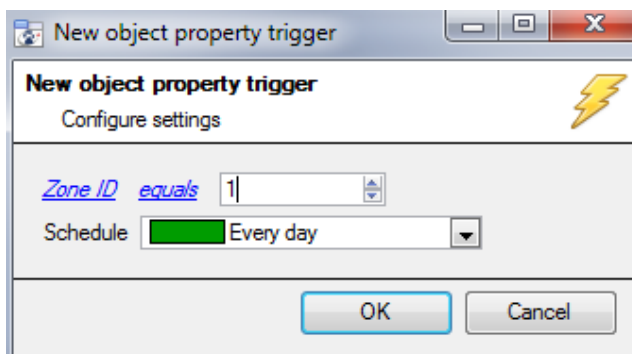
5.4.5 Define the Trigger (“Properties Meeting Criteria” Option)

If the user has defined the trigger by choosing according to *properties meeting criteria*, the **New object property trigger** dialogue box will open.

- In these instances, further constraints do not need be set, since they are being added one at a time.
- This option is better if a few triggers have been selected.
- This is also true for groups, since a group may only be made up of one object type.

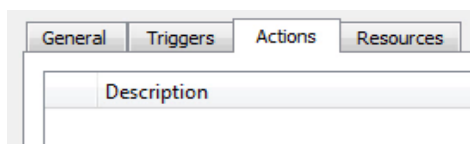
5.4.5.1 New Object Property Trigger

Since only one type of object is being used to trigger the event, the dialogue will appear as the **New Device Event Rule** window did previously.



Click the hyperlinks to modify the constraints.

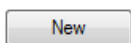
5.5 Actions Tab



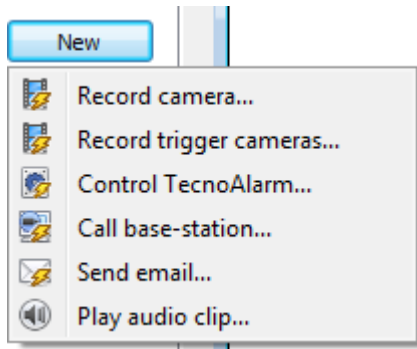
Having defined the triggers that will initiate an event, the user will need to define Actions.

Select the **Actions tab** from the **New event** window.


5.5.1 Adding an Action

 To add an action, click New in the Actions tab.

A list of available actions will appear. The drop-down contains all the available **action types**.



Select an option, for example, Record Camera.

 This icon represents an action to control. It will state "Control ..." and the name of the Action device e.g.



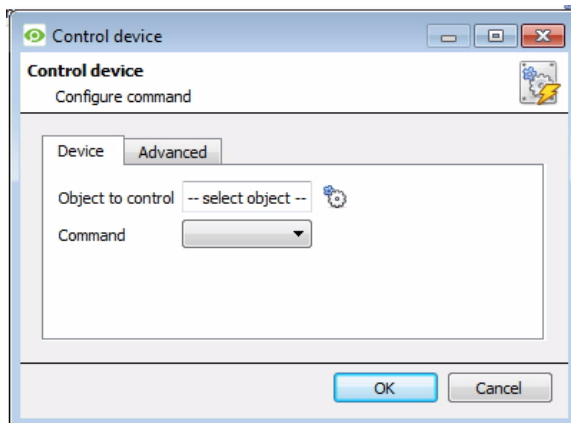
Select Control **TecnoAlarm** to control this device with the CathexisVision event.


5.5.1.1 Actions: Control Device

Note: The only action that can be taken with the TecnoAlarm device is to synchronize the time on the device panel with the time on the NVR.

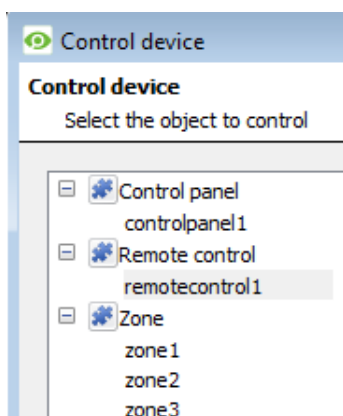
Under the **Device** tab, the user defines how the device will be controlled. Under the **Advanced** tab, the scheduling of the action is defined.

Control Command Window: Device Tab



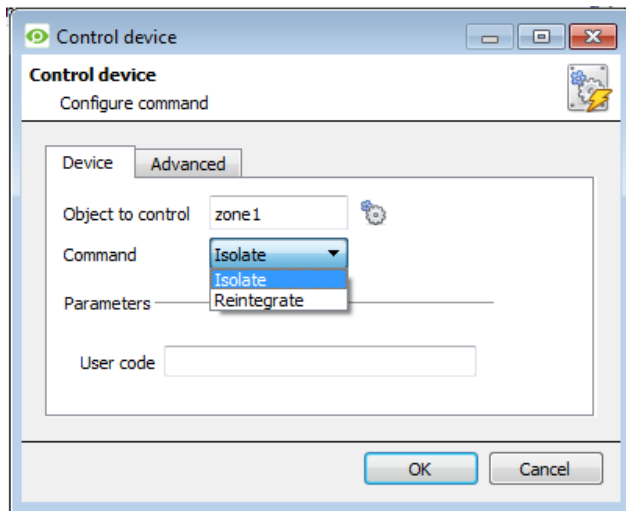
 To select an **Object**, click on the **settings icon**.

This shows all the Objects available on the TecnoAlarm device.



Select the object.

Click OK.

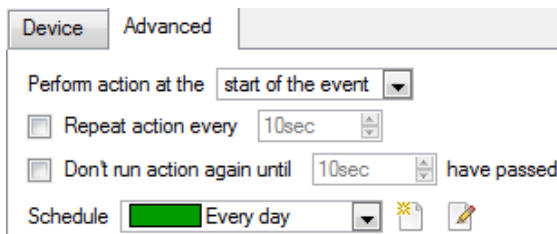


Select the **Command** from the drop-down menu.

The command options will vary depending on the selected object.

Enter user code.

Configure Command Window: Advanced Tab



Choose to **perform action**: either **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 Cathexis schedule, which may be applied to the actions.

6. Maps

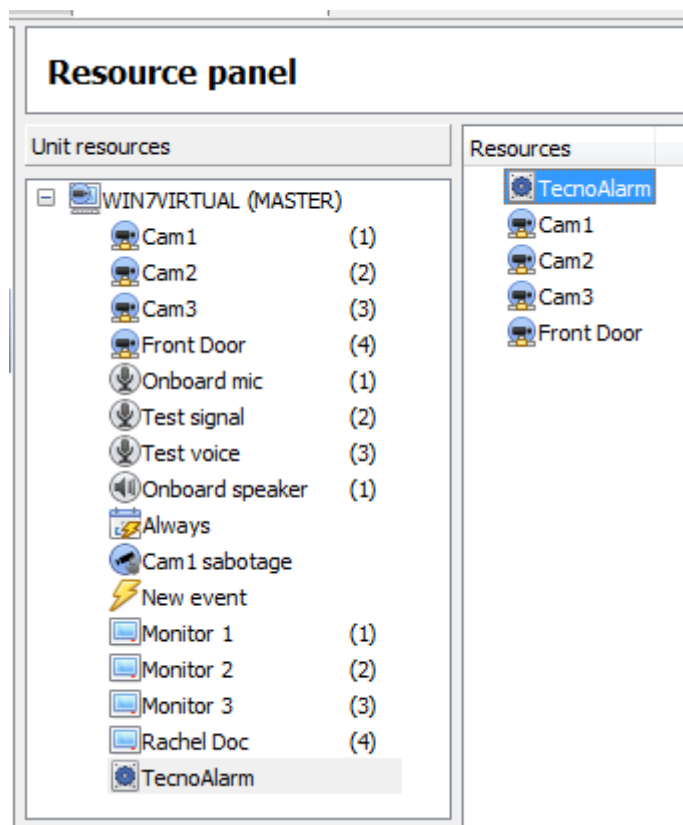
It is possible to add the TecnoAlarm device to a site map, which will allow for a number of action options when objects are triggered. These options include the animation of triggered zones and connecting to site cameras when zones are triggered, etc.

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

6.1 Add the Device as a Resource

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

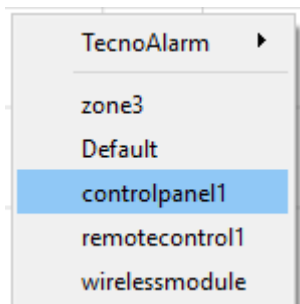
1. Navigate to the **Resource Panel** by following **Site / Open Tab / Setup / Resource Panel**.
2. Drag the device from the **Unit Resources** list into the **Resources** list, on the right.



6.2 Add the Device in Map Editor

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

6.2.1 Adding Device Objects

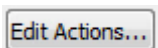


Drag the device from the Site Resources list onto the map area.

Select one of the associated objects.

Note: To add multiple objects, repeatedly drag-and-drop the device resource from the Site Resources list onto the map area to bring up this option.

6.2.1.1 Adding Device Actions

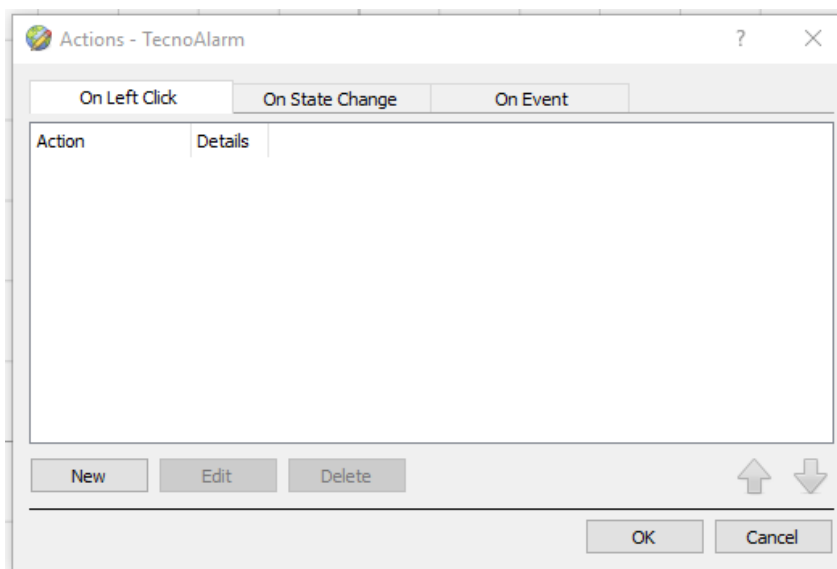


To add actions to the device objects, either select the object on the map and **click Edit Actions...** or **right-click** the map object and **select Edit actions.**

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



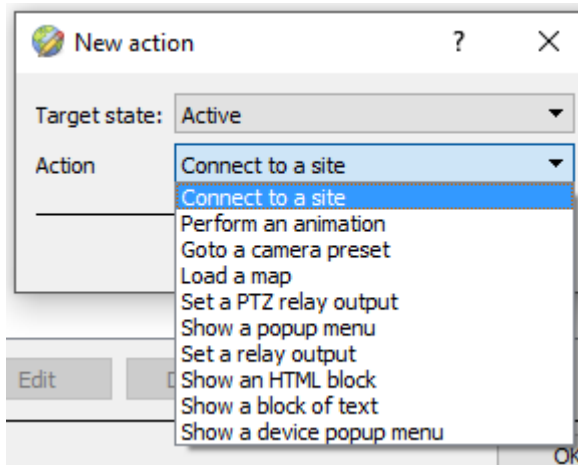
Click New in the relevant tab of the action window.



Once set, the list of actions will be displayed here.

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

Action Options



Action options are the same for all tabs, except for the On Events Tab, which has the added option to Show a Device Event Notification.

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

6.3 Saving the Map

Once finished, save the map.

Note: The map must not be saved in the default folder or Work folder of the installation directory. Instead, create a new directory when saving.

6.4 Map Tab

Upload the saved map 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.

7. Conclusion

This app-note was designed to deal specifically with this integration.

For further information about the CathesisVision software please consult the main manual (<http://cathesisvideo.com/>).

For support please contact support@cat.co.za.