Ipsotek Integration Document

Contents[1]

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[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.

1 Introduction

This document will detail the integration of the Ipsotek Analytic device, with CathexisVision's software. Functionally this integration will entail the triggering of standard CathexisVision Events, based on the triggers from the Ipsotek device.

Requirements

- CathexisVision 2014 Service Pack 4 and later. (The heartbeat feature will only work from 2015.3 onwards.)
- Win 7 - 64bit and later; Win Server 2008 R2 and later.
- Minimum of 4 GB of RAM required.
- Internet Explorer. (The Ipsotek interface will only run on Internet Explorer.)
- VIExplore software. (This comes with the Ipsotek device, or it can be requested directly from the manufacturer.)

Note:
1. If you need information regarding the regular operation of an Ipsotek device, please consult the relevant Ipsotek documentation.
2. There is a General Integration section in the main CathexisVision manual. It has vital information about creating an integration database, as well as a general introduction to the Integration Panel. **Read over this section**.
3. When using an ESP1204 the Communication channel will only show it is disconnected if the network connection to the ESP1204 is down.

a. License requirements

CIPS-1001 Ipsotek Camera License

This license is required per camera feed that you are using with the Ipsotek analytics.

CIPS-2000 Ipsotek Device License

This is the license needed to add an Ipsotek device to CathexisVision.

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. When you add an integration to the CathexisVision system, you add a device. The messages received from the device are called Device Events.

Objects   Objects are the individual pieces of hardware that comprise the integration. You may have 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 object.

2 Device Addition and Configuration

a. Introduction

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

b. CathexisVision Specific Ipsotek Setup

There are two ways to connect the Ipsotek device:

- *Connection Options*

The Ipsotek device is added via an IP network connection.

Setting up the Ipsotek Device for Integration

- *Step 1: Connect and Discover the Device*

Connect the device to a DHCP enabled network. It will be given an IP address.

After this run the VIExplore software. This software will find all Ipsotek devices that are attached to the network. Click on refresh list once the software is running. The list will populate.

- *Setup the Ipsotek Device, Using VI Configure*

Once the VIExplore software has discovered your device, double-click on the device that you are working with. This will open Internet Explorer, which will prompt you to install an add-on. Allow the installation of this add-on, and VI Configure

The default username and password for VI Configure:
Username: admin
Password: admin

Go to **Server Management**, by clicking on the [gear] icon at the top of the VI Configure homepage, then click on **Configure Startup Parameters**.
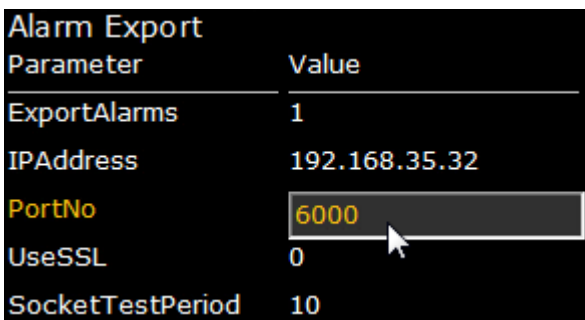
One in server management set the **IP address** to that of the CathexisVision server to which you will be adding your Ipsotek device.

Set the **port number**. **Note**: the same number must be entered when adding the Ipsotek device to CathexisVision.

After this click on **Done** on the bottom of the page, and then click on **Reboot** in **Server Management.**

You may close your browser and the VIExplore software now, and open CathexisVision.

c. 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
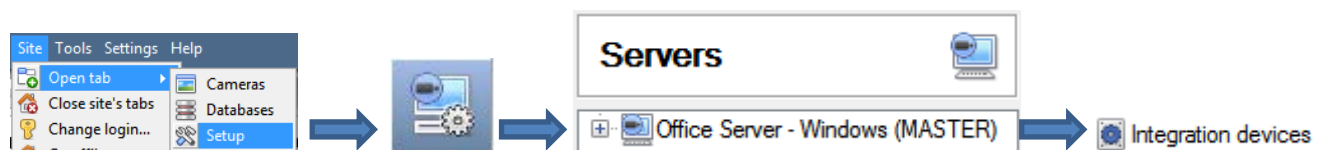
You will notice two sections in the Integration Panel:
1. The **Devices** list will list the integration devices that are attached to your server.
2. The **Configuration** section enables you to edit/review, the device which you have selected in the **Devices** section.

- *Device Addition*

1. Once in the Integration Panel, in the Devices section, click on [New device]. This will open the addition window.
2. Select **Ipsotek analytics** from the list.
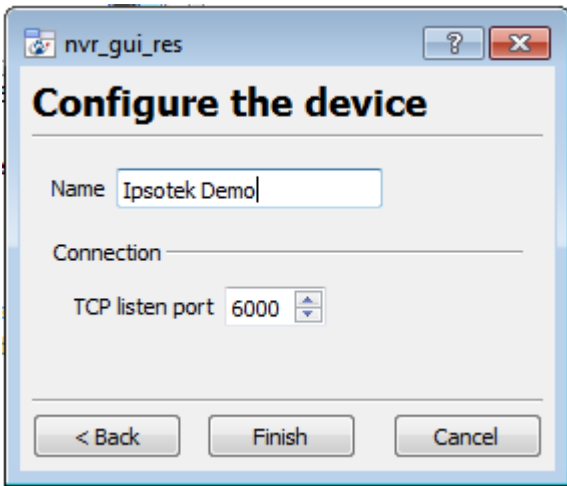
Give the device a descriptive **name.**

Set the **TCP listen port**.

Note: make sure that the TCP port number entered here is identical to the port number entered under **Server Management —> Configure Startup Parameters —> Alarm Export —> PortNo**. This was described in the previous section.

d. 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.**
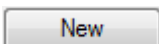
Object Configuration Tab
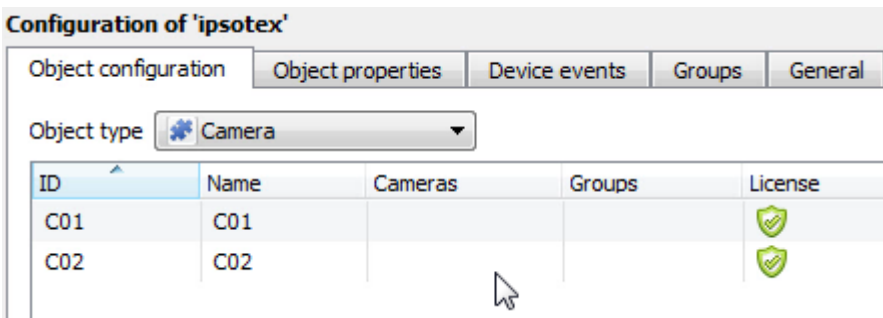
The object configuration tab is the tab where you may view all the individual objects that comprise the integration.

Cameras will only come through here once they have sent at information to CathexisVision. If they are not present after adding them you will need to disable and re-enable them in the Ipsotek software. This is done by going:

VIExplorer —> Open Ipsotek Device —> Login to VI Configure —> Click on the **icon —> Right-click on a selected camera and toggle the status between enabled and disabled.**
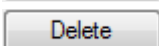
- *Object Configuration Buttons*
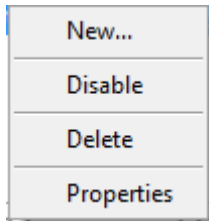
 You may add a new object by clicking on New.
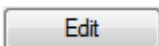
 Will open up an existing object for edition.

 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 allows you to manually enable/disable individual nodes.
Delete will permanently remove this object from the list.
Properties will open up the object properties. You may edit the object from here. (Specifically you will be able to assign cameras to this object, as well as define user access levels for it.)

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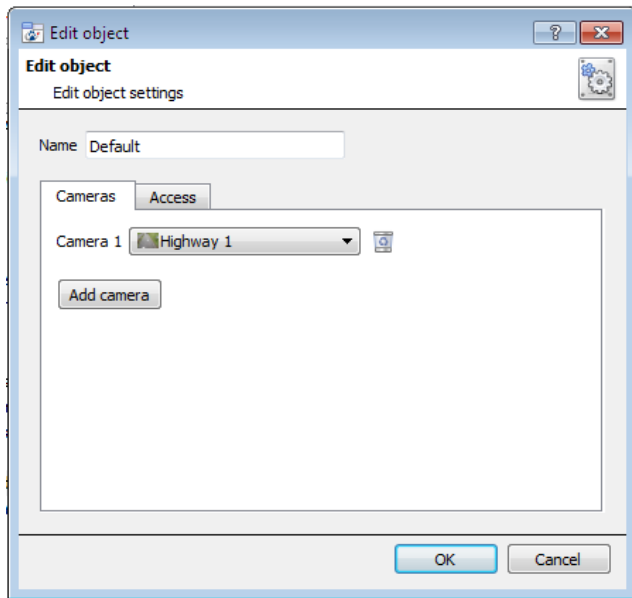
Adding a camera to an object will mean that, whenever there is an event on that object, the recording from that camera will be related to the time and date of the object event, in the Integration database.

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

To delete a camera click on .

Note: While you can add multiple cameras here, only the first camera added with the object will be linked in the integration database?

Note: If you do not have *continuous recording* setup, on associated cameras, you will run the risk of Ipsotek objects triggering while the cameras are not recording. To only record cameras, when an object triggers, you will need to setup **Events** that trigger a recording, when one of these objects is activated.

Properties: Access
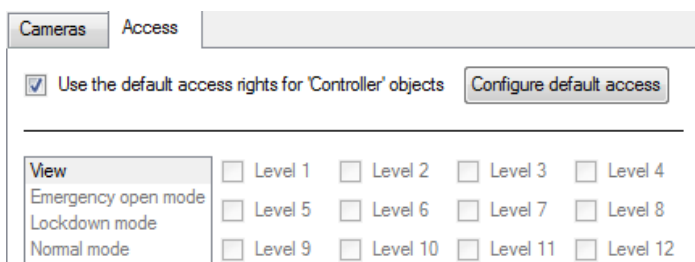
Access allows you to protect sensitive objects, by only allowing certain user levels access to them.

You will see a list of objects, whose access level you may set.

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

Objects Properties Tab
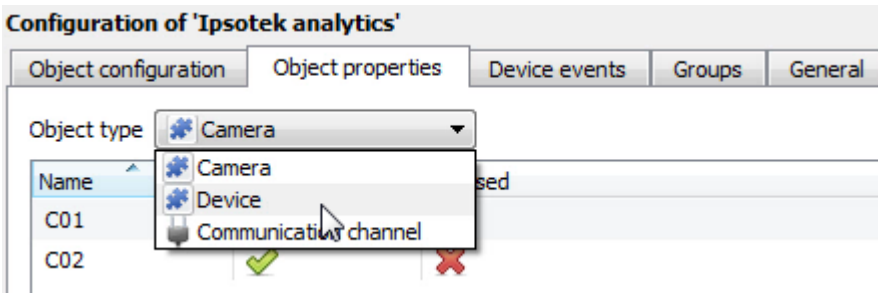
The Object properties tab allows you to view the objects, sorted by type. In the case of the Ipsotek device you will have the options of viewing by **Camera, Device,** or **Communication Channel.**

- ### Device Heartbeat Monitoring
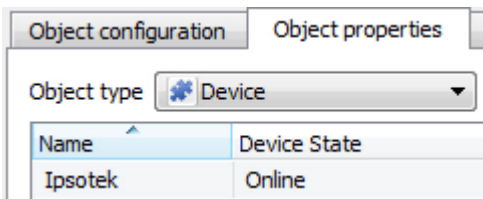
If CathexisVision loses connection to an Ipsotek device, the **Device State** will change from **Online**, to **Possibly Rebooting.** If the device stays disconnected the state will change to **Offline**. The user will need to check on this device, or reboot it manually to get the connection back up.

Note: This will only be present in CathexisVision 2015.3 and onwards.

Device Events Tab
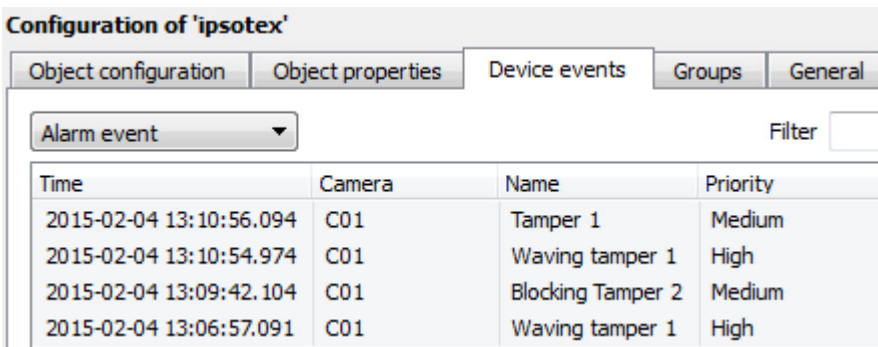
This will list real time events happening on this device. It is an excellent way for installers to see that the integration is functioning, and to monitor the live events happening on site. Ipsotek provides two types of event: **Alarm** and **Camera Status.**
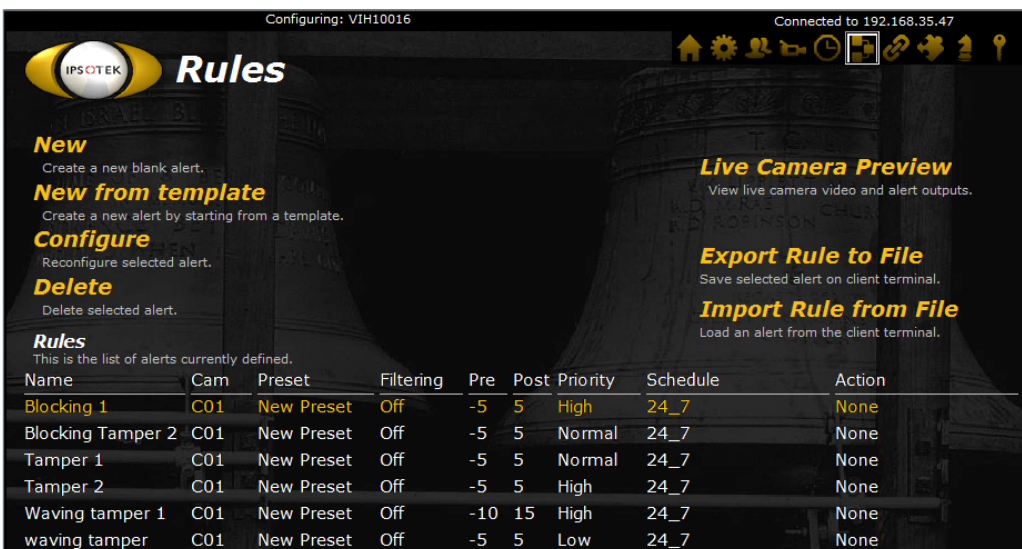
Note: **Camera status events** will be sent through automatically.

The **alarm events** here are those sent through by the Ipsotek device. These are Ipsotek alarms, and will need to be setup by the user, using the Ipsotek software.
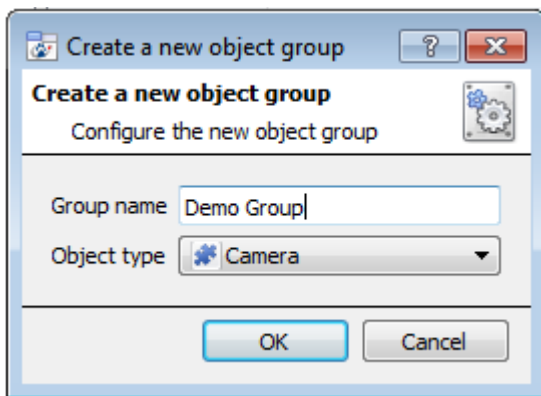
Groups Tab
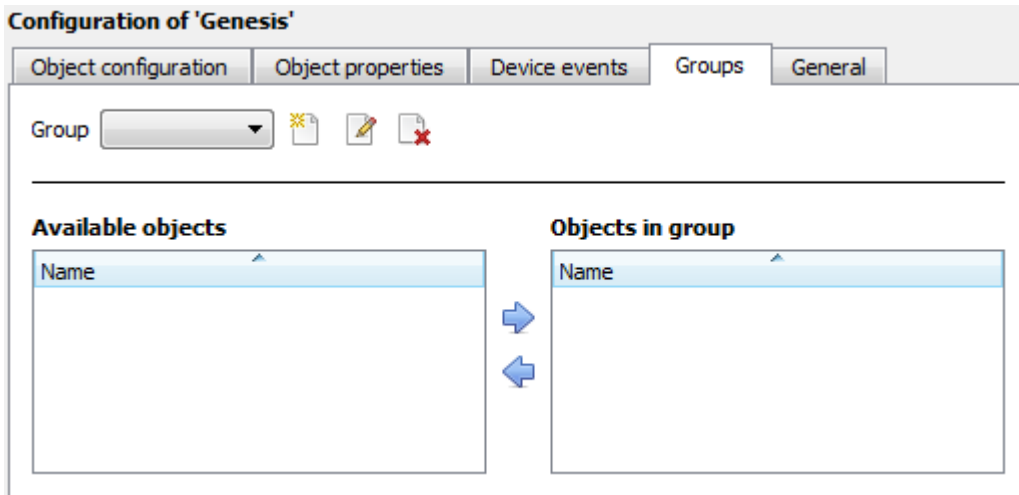
You can create groups of the same type of object.

Tip: 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 PIRs in that group is triggered.)
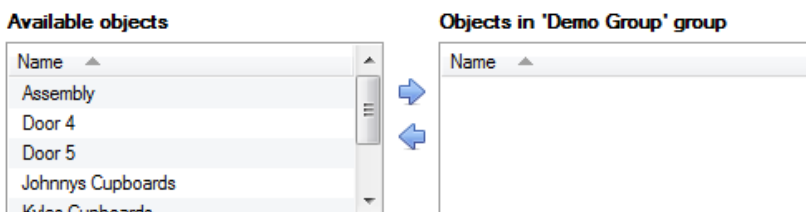
- ### Create a Group

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

Select what **object type** to include in the group.
Give the group a descriptive **Group name.**

Click on the drop-down menu to select the **object type** that you would like to group.

You will then see a list of Available Objects. To add/remove these objects to the group select them (you may select multiple at a time), and click on / .

General tab

Currently the general tab deals with the integration database. Here you will be able to select a pre-created database, or you will be able to configure a new database.
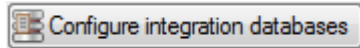
Important Note: without setting up/adding a database here your integration will not function properly within the CathexisVision system.

- *Select an Integration database*

Integration database | Ipsotek analytics | ⚙   To select a database click on ⚙, and select the relevant database. Only databases which relate to the device you are adding should appear.
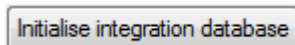
- *Configure a new database*

⬛ Configure integration databases   If there is no database created yet, clicking on this button will take you to the integration database setup.

Initialise the Integration Database
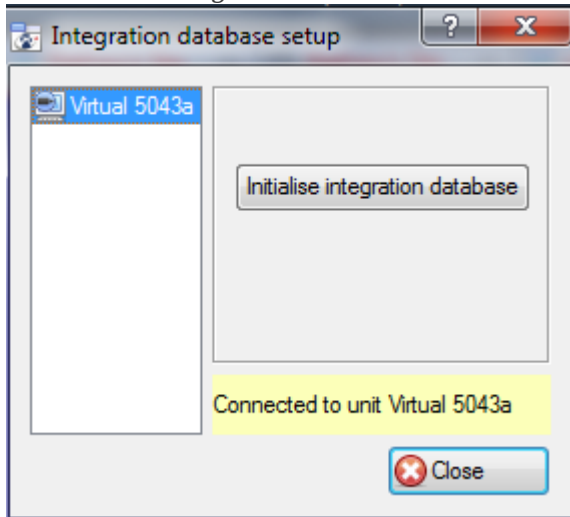
The first time you add an integration database you will have to initialise this feature on the unit. This will add a broad database, within which you will be adding all of your integrated device's databases.

Select the unit you wish to add the database to, from the list on the left, and click [Initialise integration database]. You will have to choose which partition the database will be formed on, and select how much space it will take up.

Partition	C:\ (C:\) ▾
Total space available	8134 MB
Disk space allocated to integration database	1000MB

Add a New Devices Database
After initialisation, you will be able to add the database for the integration that you are working with.

Right click on the white space that was occupied by [Initialise integration database] before you initialised your database, and click on New .
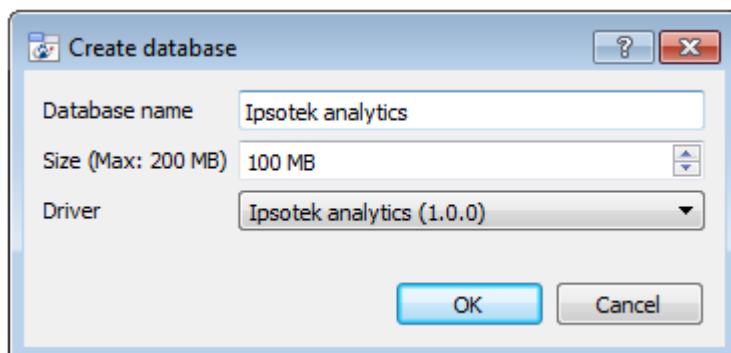
Give your database a descriptive **Database Name**. e.g. Ipsotek.

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

Then choose the device **Driver** that your device will be using.

3 Database

a. Introduction

The database tab will allow you 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 you 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.
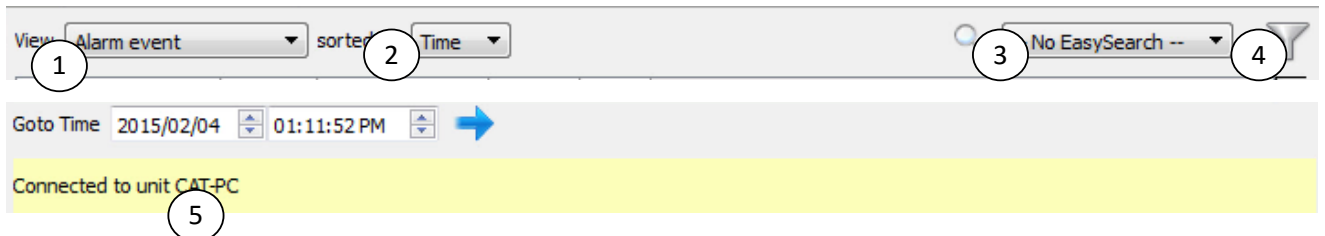
b. Navigate to the Database
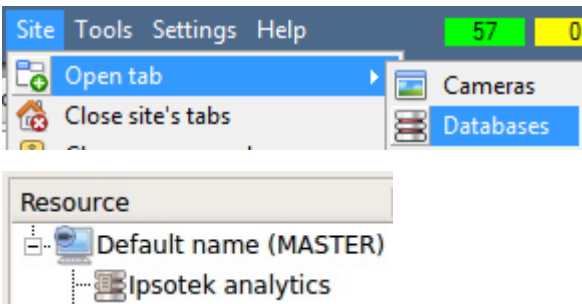
You may view the information stored in the Integration database, by following the path you see to the left.

This will take you to the Database Tab.
Once in the databases tab you will have to select the relevant integration database. The databases are ordered under the NVRs that they are attached to.

c. Database Interface

① **View**	You may change the way that your database is presented. Some integration databases have multiple view options. The Ipsotek database has **Alarm event,** and **Camera status event**
② **Sorted By**	You may sort the Events based on the following parameters: **Time**.
③ **Easy Search**	The easy search option allows you to quickly search the database within one of the following options: **Camera, Name,** and **Priority**.

④ **Filter**	Filter offers a more advanced manner of sorting information in the Integration Database table.
	
	You are able to filter based on the following Ipsotek parameters: **Time, Camera, Name** and **Priority**.
	
	Once you have the filters dialogue open you will have the following options:
	
	   1. To **enable** filters check this box:
	   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 📉. **Note**: 1. You may run multiple filters simultaneously. And you may even filter using the same parameter more than once. 2. 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 Go to Time	This will allow you to go 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 the click on the ➡ icon.

Viewing an Entry's Associated Recording
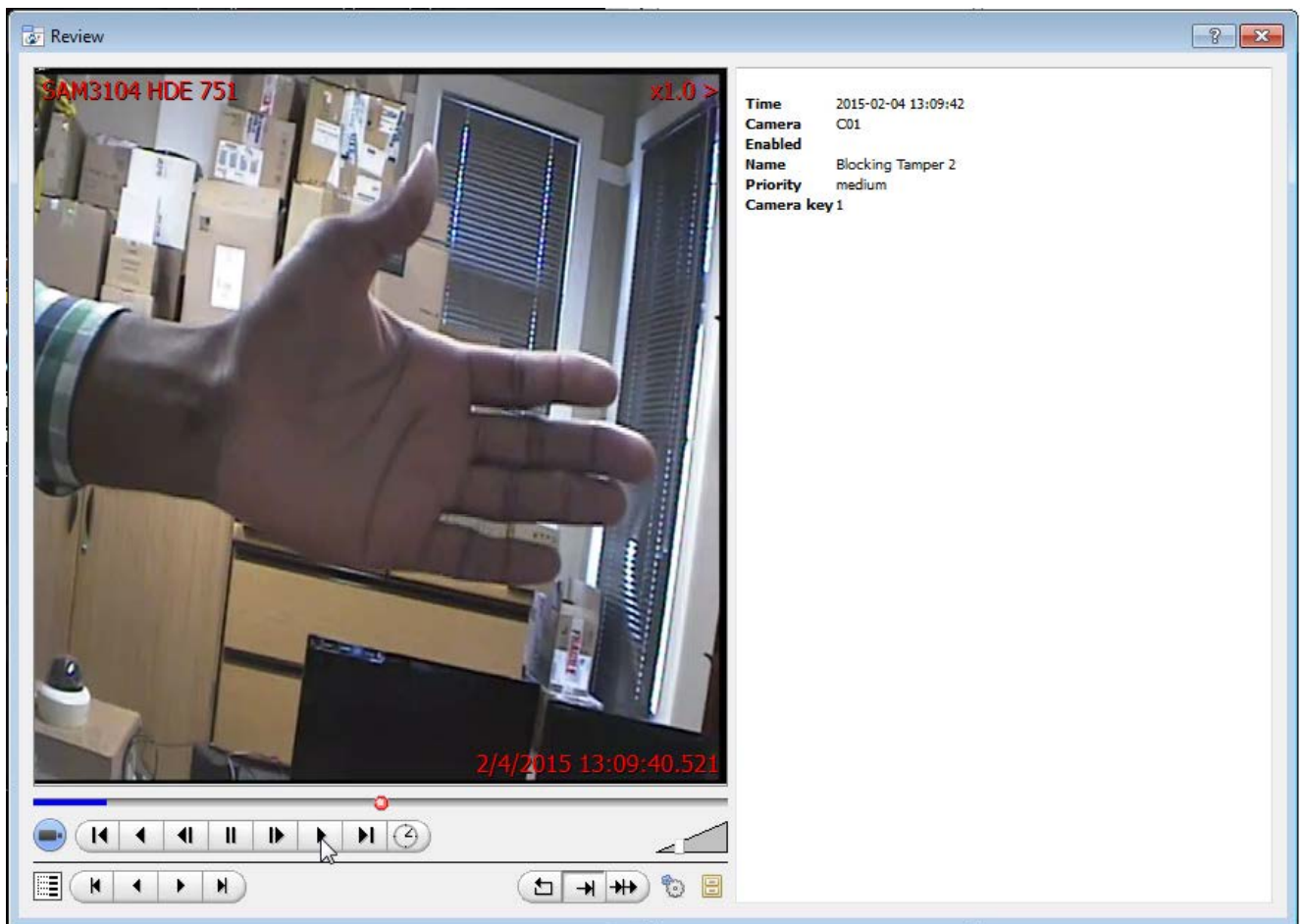
If you have attached cameras to device objects in the Integration setup and if there are available recordings for those cameras, then each Integration database entry will have a corresponding recording. To view a data-based event's recording double click it. A floating replay window will appear, from which you may review and archive video content.
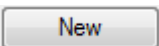
4 Events

a. Introduction

A CathexisVision Event has a trigger, which causes an action. You may set integrated devices to act at triggers, or as actions. This document will detail the Ipsotek 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.

b. Creating an Event

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

1. Once in Events management click on New. This will open up the New Event window.
2. Once in this window, select the Triggers tab and click on the hyper link titled, *standard triggers* .
   a. From the menu that drops down, left-click the Ipsotek device that you want to trigger the event with.

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

When triggering on an object you will have the option to trigger **while/when** a trigger is active. You 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 your device as the trigger
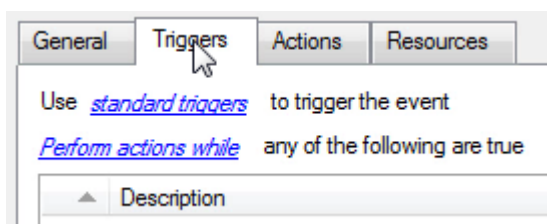
If you are creating a new event, the trigger type will default to: Use *standard triggers* . To define which device you want to trigger the event, click on the hyperlink after "use". To set it as the Ipsotek device, click on the hyperlink, and select the relevant device name from the dropdown menu.

Trigger Types (Trigger Using)

It is useful to think of this as a **master trigger type**.
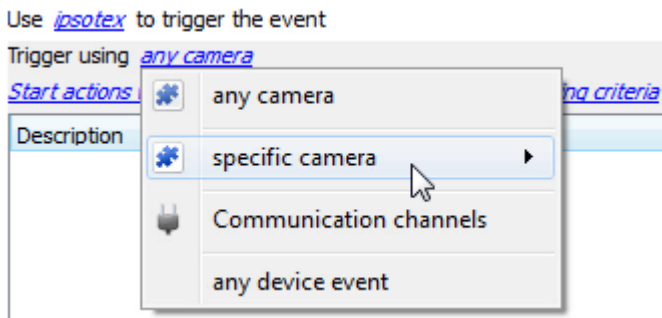
Any Camera will trigger on any of the cameras.

Cameras in group.... If you have set up a group it will appear here in this list.

Specific camera will trigger only on the selected camera.

**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 you may set "device event rules" which will constrain which device events will trigger the event.

Note for group triggers: If you want this event to be databased under the name of a specific object, and not the name of the triggering group, you will need to modify the Description field in the **General tab** of the Event setup. Click on the to see a list of available descriptions. Here is an example which will database the text "Camera name and State" along with the name and stat of whichever camera triggered the event:

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

- *Any Device Event*
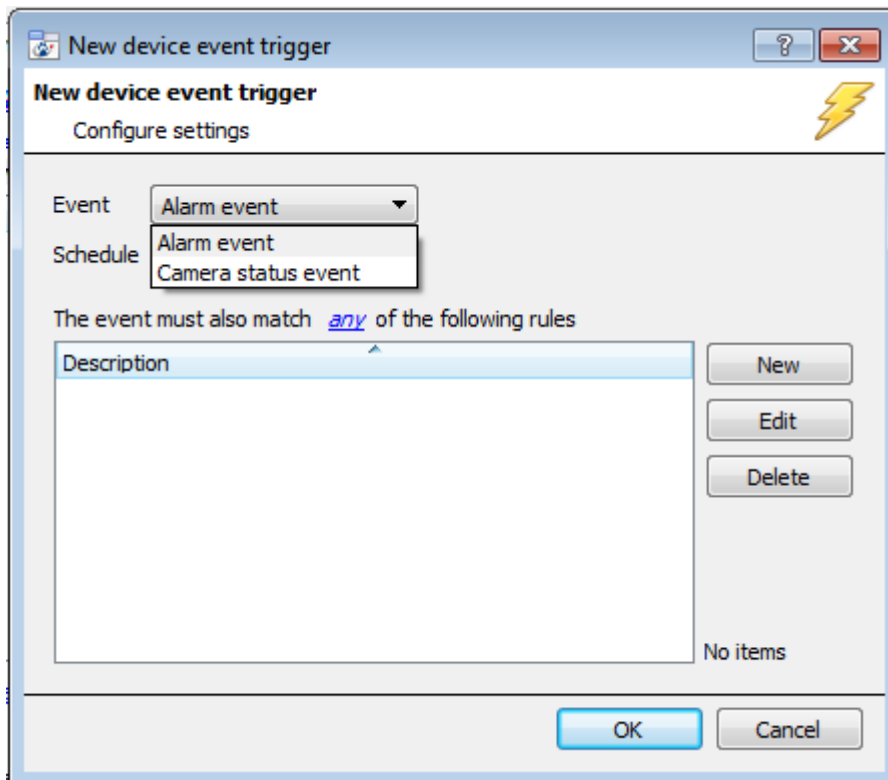
For example within the *any device event* option you may choose what type of device Event will be your trigger. Choose from the drop-down menu. The Ipsotek device offers Alarm Event, and Camera Status Event.

Note: You may set multiple constraints (**Device Event Trigger**). Choosing if *any*, or *all* constraints need to be fulfilled to set off a trigger. If you do not define a constraint, every single device event will trigger this event.

To add/edit/delete a **Device Event Trigger** (a constraint) use the **New, Edit,** and **Delete** buttons on the right hand side.
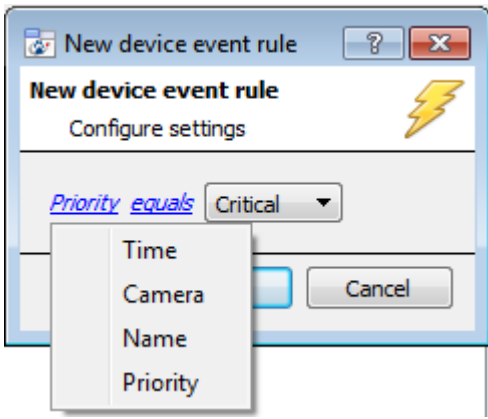
To change the constraint click on the first hyperlink, this will bring up the full list of available rules.

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

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

- *Any Camera or Group*

The non-**Any Device Event** triggers have a slightly different setup window. In these instances you do not need to set constraints, since you are essentially adding them one at a time. This option is better if you have a select few triggers that you want to use.
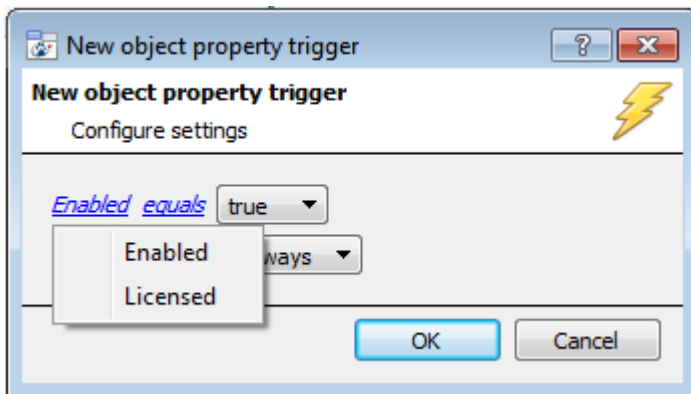
Since you are only using one type of object to trigger the event, the dialogue will appear as the **New Device Event Rule** window did previously.

Note: this is true for groups as well, since a group may only be made up of one object type.

d. Actions

Once you have defined the triggers that are going to initiate your event, you will need to define some Actions. With many integrations there will be the option to control the integrated device, as one of the actions. Because of the nature of this integration this option is not available with the Ipsotek device. You still have all the other CathexisVision Action options, which are detailed extensively in the Main Setup Manual.

5 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