



FSK Integration

Contents¹

1	Introduction	2
a.	License Requirements.....	2
a.	Integration components	2
b.	CatVision specific FSK setup	3
2	Device Addition and Configuration	4
a.	Introduction.....	4
b.	Devices Section (Add a new device)	4
c.	Configuration Section (Tabs)	4
3	Database.....	8
a.	Navigate to the database	8
b.	Database interface.....	8
4	Events.....	10
a.	Introduction.....	10
b.	Triggers	10
c.	Actions	12

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

The FSK Multi Decoder is a radio and/or GSM based decoder for all FSK radio and GSM networks. It can be used as a stand-alone base station (utilizing its liquid crystal display and printer port) or in conjunction with monitoring software in a control room.

This document will serve to explain the integration of the FSK device with CatVision. Its focus will be to explain how the device is integrated with the CatVision GUI, and Events Setup.

Note:

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

a. License Requirements

Alarm panel integration license (CALM-2000)

This license will allow CatVision to communicate with the FSK device.

a. Integration components

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

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

Messages and Object Types

The following device event messages, and objects/object types, will be represented in the CatVision integration, after installation and configuration, of the FSK hardware. They will be visible in the Site → Setup Tab → Configure Servers → Integration devices.

1. Device Events

- a. Zone event**
- b. General event**
- c. Informational**
- d. Keyholder event**

2. Object property

The FSK system has two Objects

- a. Controller**
- b. Zone**

b. CatVision specific FSK setup

The following CatVision specific configuration, on the FSK Multi Dec is necessary, in order to get the integration working.

Serial connection settings

The alarm panel is connected via a serial port:

Baud	1200
Data	bits 8
Parity	None
Stop bits	1

FSK settings

The panel provides users with different options for the RS232 format:

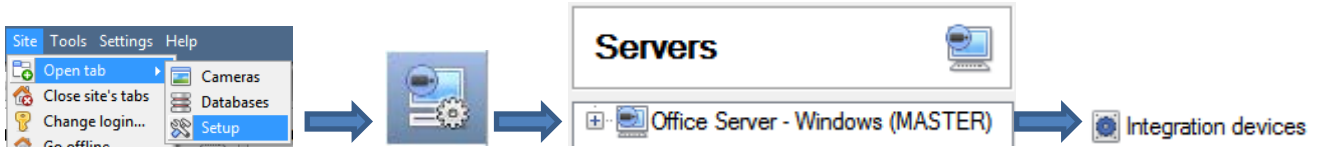
FSK Standard;
FSK Extended; and
FSK7 (Contact ID)

In order for it to work with CatVision, the **RS232** format must be configured as "FSK Extended".

2 Device Addition and Configuration

a. Introduction


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:



You will notice two sections in the Integration Panel:

1. The **devices** list, which will list the integration devices that are attached to your integration database.
2. The **Configuration** section which enables you to edit/review, the device which you have selected in the **devices** section.

b. Devices Section (Add a new device)

1. Once in the Integration Panel, in the devices section, click on . This will open the addition window.
2. Select **FSK** from the list.

Name

Connection

Use

Connect using an ESP at on port

Baud

Data bits

Parity

Stop bits

Give your device a descriptive **name**.

The **connection** may be done via a direct serial port, or through an ESP. (The ESP is a Cathexis product that gives devices, which use serial connections, access to the network.)

Note: the ESP can take 4 serial connections (represented as 'port' here). So make sure that you have selected the correct port number.

The default **baud rate**, **data bits**, **parity**, and **stop bits** should all be correct.

c. Configuration Section (Tabs)


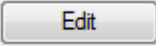

The configuration section is divided up into a number of Tabs. The available tabs are: **Object configuration**, **Object properties**, **Device events**, **Groups**, **General**.

Object configuration tab

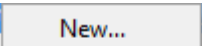
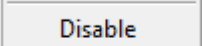
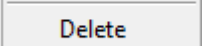
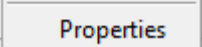
The object configuration tab is the tab where you may view all the individual objects that comprise the integration. The **FSK** integration has the following objects: **controller** and **zone**.

Note: there are 33 preloaded zones (logically assigned), and 1 preloaded controller.

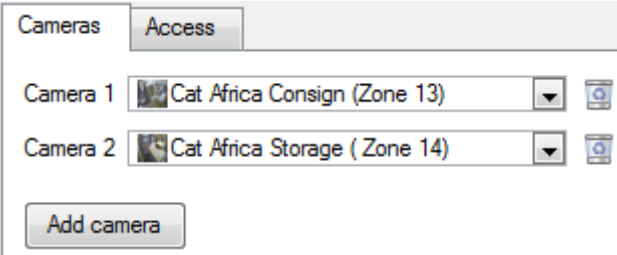
• *Object configuration buttons*

-  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 CatVision 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



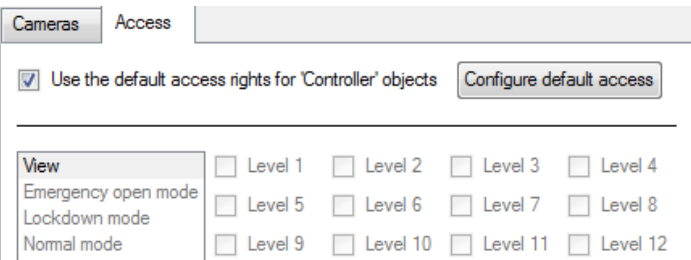
Adding a camera to an object will mean that, whenever there is an event on that object, the recording from that camera will be related to the time and date of the object event, in the Integration database.

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

To delete a camera click on .

Note: If you do not have **continuous recording** setup, on associated cameras, you will run the risk of zones (object) 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 levels users 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.

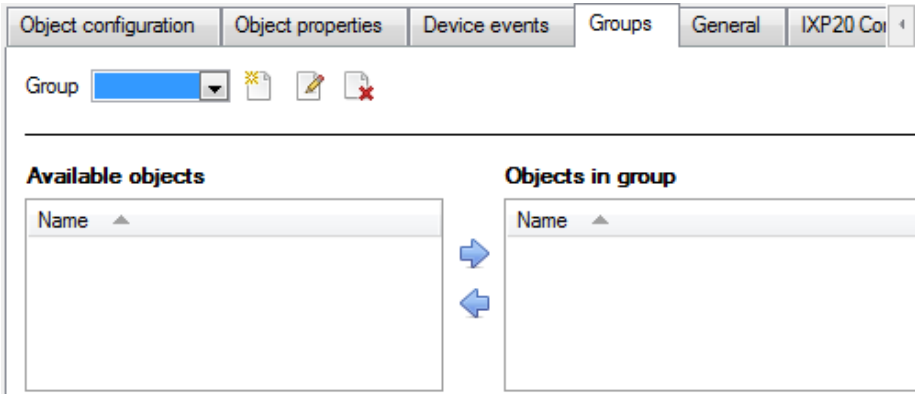
Objects properties tab

The Object properties tab allows you to view the objects, sorted by type. In the case of the FSK device you will have the options of viewing by **Controller**, or **Zone**.

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.



Groups tab

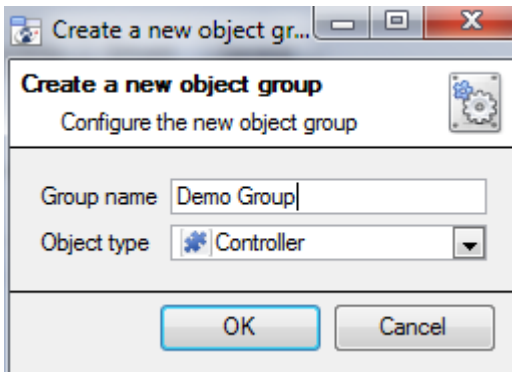


You can create groups of the same type of object.

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 zones/partitions in that group is triggered.)

• *Create a Group*

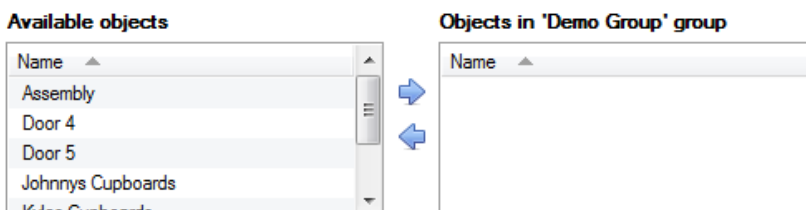
To create/edit a group click on  / . (**Note:** Once a group has been created, you may not edit the object type of the group.)





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

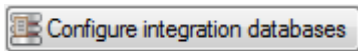
General tab

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.

- **Select an Integration database**

Integration database  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**

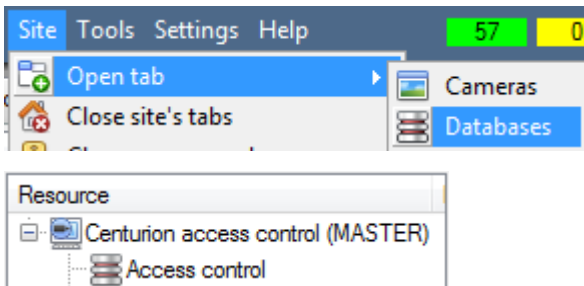


If there is no database created yet, clicking on this button will take you to the integration database setup.

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

3 Database

a. Navigate to the database

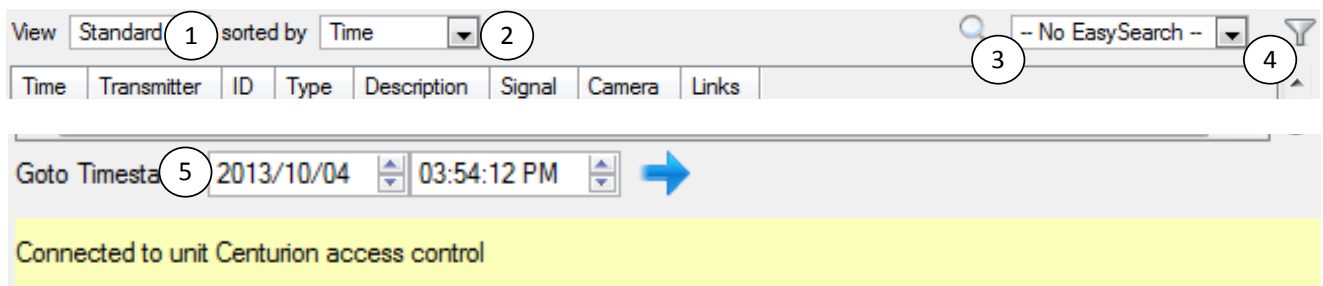







You may view the information stored in the Integration database, by following the path you see to the left.


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.

b. Database interface



① View	You may change the way that your database is presented. Some integration databases have multiple view options. The FSK database only has the standard option .
② Sorted By	You may sort the Events based on the following parameters: Time, Transmitter, or ID, Type, or Description .
③ Easy Search	The easy search option allows you to quickly search the database within one of the following options: ID, Description, and Signal .
④ Filter 	<p>Filter offers a more advanced manner of sorting information in the Integration Database table.</p> <p>You are able to filter based on the following parameters: Time, Transmitter, ID, and Type.</p> <p>Once you have the filters dialogue open you will have the following options:</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 . <p>The filter icon  will change to  when filters are active.</p> <ol style="list-style-type: none"> To delete an added filter click on . <p>Note:</p> <ol style="list-style-type: none"> You may run multiple filters simultaneously. And you may even filter 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.)
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 have set these cameras up to record continuously, each Integration database entry will have a corresponding recording. To view a databased event's recording double click it. A floating replay window will appear, from which you may review and archive video content.



will give you the view to the left.



will break down the image into 4 sequential frame viewers.

4 Events

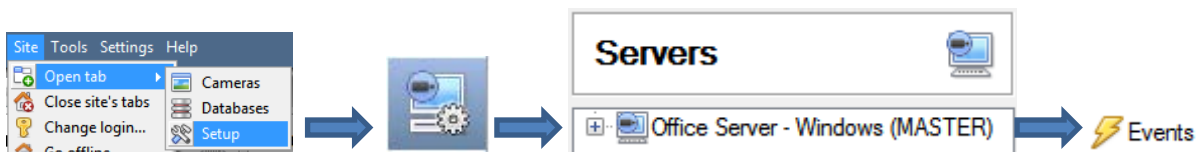
a. Introduction

A CatVision event has a trigger, which causes an action. You may set integrated devices to act at triggers or actions. This document will detail the FSK specific aspects of Events. There is a comprehensive guide to CatVision Events in the main setup manual.

Most of the data that CatVision 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.

Events

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



1. Once in Events management click on . 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 FSK device that you want to trigger the event with.

• *While/When and Any/All*

When triggering on a door 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 set-off an event.

Trigger using [Door 3](#)
[Perform actions while any](#) of the properties meet the following criteria

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

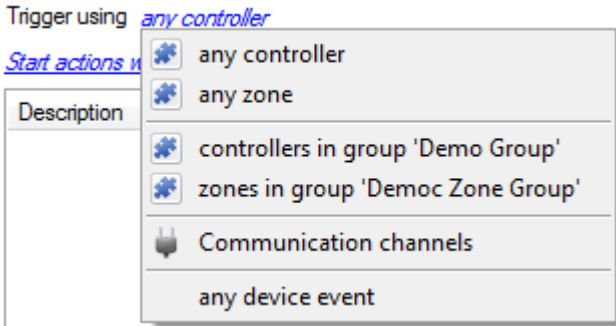
b. Triggers

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

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 FSK device, click on the hyperlink, and select the relevant device name from the dropdown menu.

• **Trigger types**



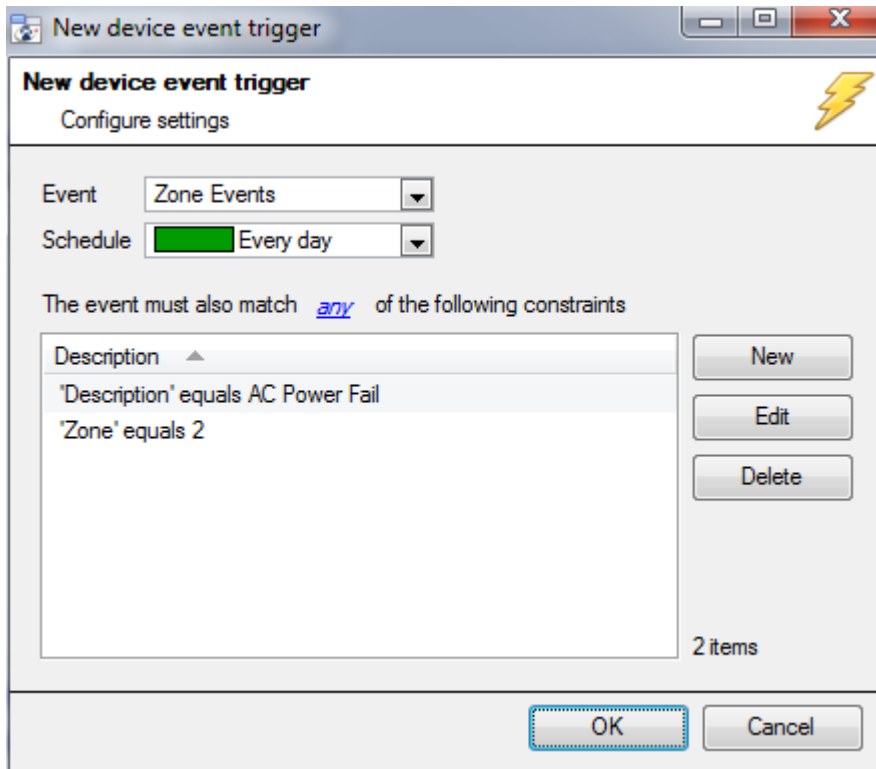
Any controller will allow you to use any of the events relating to the main device as a trigger.
Any zone will trigger if anything happens in a specific zone
Controllers/zones in group... if you have created an object group, it will appear in this drop-down list, and may be selected as a trigger.
Any device event will trigger when any trigger occurs on the FSK device.

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 "Door Name" along with the name of the *door object* that triggered the event:

Description

Device Events

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:



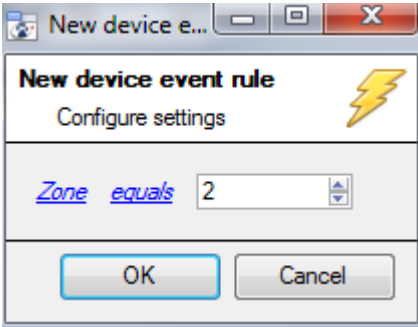
For example within the [any device event](#) option you may choose what type of device **Event** will be your trigger. Choose from the drop-down menu. FSK offers Zone Events, General Events, and Keyholder Events.

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

Note: You may set multiple constraints, choosing if [any](#), or [all](#) constraints need to be fulfilled to set off a trigger. Here there are two Events, either of which will trigger the event.

If you set no constraints, every device event will trigger this. Once you set constraints only the constraints chosen will trigger the event. Once you have selected the type of device event that will be the trigger, you may add a new **device event rule**. To do this, click on .

- **Any Device Event**



To change the constraint click on the hyperlink (in this case [Zone](#)), 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.



When all available options are known to CatVision 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 CatVision from the FSK device, see the FSK settings for the strings needed here.

c. Actions

Once you have defined the triggers that are going to initiate your event, you will need to define some Actions. One of the available actions will be to *control* a FSK device.

- **Open Actions Tab and Select the FSK Device**

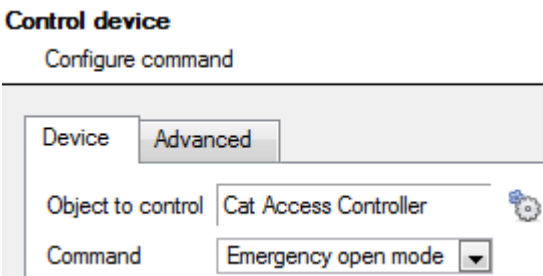


To get started left-click on the tab titled “Actions”, and click on [New](#). A menu will drop down containing all the available action types. The device action type is represented by this icon: . It will say “Control ...” and the name of your FSK device. E.g.  Control FSK Demo... .

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**



To select an **Object** click on the  icon. This will give you a selection of all the Objects available on the FSK device.

The **command** drop down will change to represent the commands available to that Object.

Note: you may only take a global action here, and global actions may only apply to **controllers**. For example you may not control **communication channels**, or **door nodes**, as part of an event action. If you select one of these objects you will have no options in the *Command* menu.



- *Advanced*

Device Advanced

Perform action at the

Repeat action every

Don't run action again until have passed

Schedule  

You may choose 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 Cathexis schedule, which you may apply to the actions.

5 Conclusion

Please remember that this appnote was designed to deal specifically with this integration. For further information about CatVision please consult the main manual.

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