

# Keri Access Control Integration App-note



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# 1. Introduction

This document will detail the integration of the Keri Access Control Device, with CathexisVision software. Functionally, this integration will entail the triggering of standard CathexisVision Events, based on the triggers from the Keri panel.

## 1.1 Requirements

#### 1.1.1 Software

- CathexisVision 2020.2 and later
- Win 10¬ 64bit and later, Win Server 2008 R2 and later.

#### Note:

For information regarding the regular operation of a Keri device, please consult the relevant Keri documentation.

There is a General Integration section in the main CathexisVision manual. It contains information on creating an integration database, as well as a general introduction to the Integration Panel. **Read over this section.** 

The Keri device cannot be detected if the Controller or Communications channel has lost connection when using the Serial Port.

## 1.1.2 Licensing

License Name	Description
CKRI-1001	Keri access control reader
CKRI-2000	Keri access control device
CKRI-3000	Keri Access control bundle

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



#### A NOTE ON CAMERA CHANNELS

The CathexisVision software packages have **limits on camera channels**. A multi-head camera is physically a single device (camera) but it requires a camera channel for each one of the internal cameras. The same applies to an encoder: a 16-channel encoder will account for 16 camera channels on the 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.

## 1.2 CathexisVision GUI control of Keri Objects

- Clear
- Pulse
- Set
- Card Only
- Lock
- Temporary Unlock
- Unlock

## 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.

#### **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 and Configuration

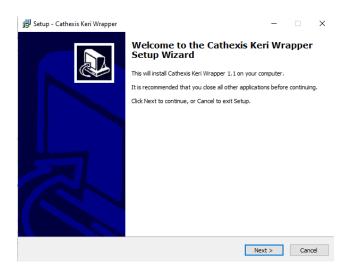
This section will detail the procedure for setting up the two systems to effectively communicate with each other.

## 2.1 Wrapper Management

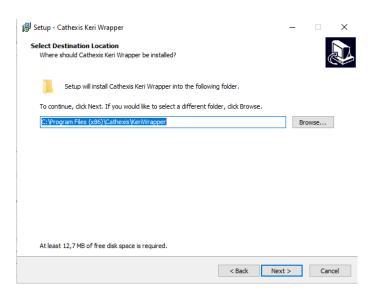
The integration requires a wrapper to be installed on the same system as Doors.net, and the Keri unit sends information to Doors.net. The wrapper is available to **download** from the Cathexis website: https://cathexisvideo.com/

The wrapper needs to be installed manually and is done so in three steps:

1. Enter the Cathexis Keri Wrapper Setup Wizard:

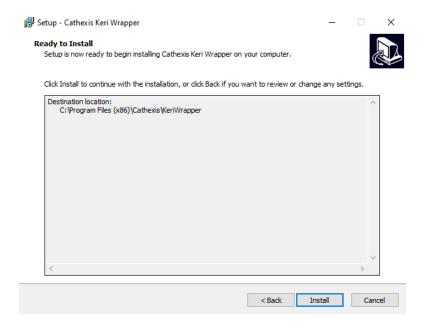


2. Select the **directory** to install the wrapper in:





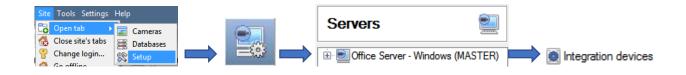
#### 3. Click Install:



## 2.2 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:

## 2.2.1 The Integration Panel



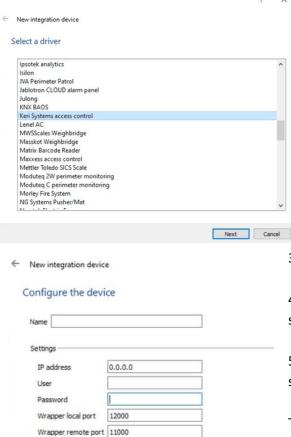
There are two sections in the Integration Panel:

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



#### 2.2.1.1 Device Addition

1. Once in the Integration Panel, in the devices section, click on New device. This will open the addition window.



3. Give the device a descriptive **name**.

4. Enter the IP address of the Unit that the Keri software is installed on: doors.net.

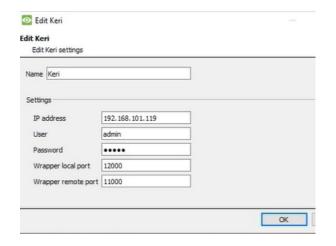
2. Select Keri Systems access control from the list.

5. Enter the **Username and Password** for the software

This is the default **Wrapper local port** number: 12000

This is the default **Wrapper remote port** number: 11000

**Note:** The wrapper needs to be installed on the computer where the doors.net software is installed.



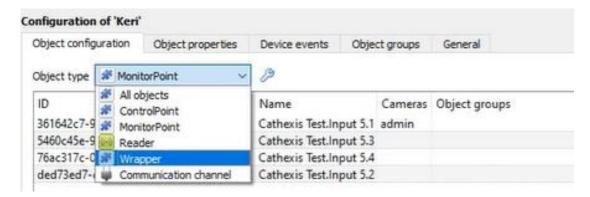


## 2.3 Configuration Section (Tabs)

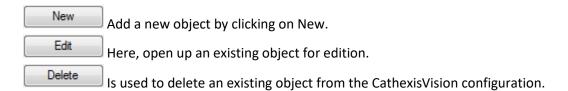
The configuration section is divided up into a number of tabs. These tabs are: **Object configuration, Object properties, Device events, Groups,** and **General.** 

## 2.3.1 Object Configuration Tab

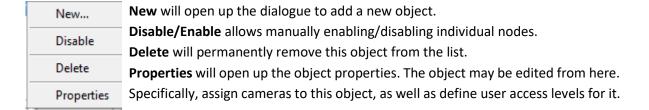
The object configuration tab is the tab where all the individual objects that comprise the integration may be viewed.



#### 2.3.1.1 Object Configuration Buttons



#### 2.3.1.2 Object Configuration Right-click Options



#### **Properties: Camera**





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 .

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

#### **Properties: Access**



**Access** allows protecting sensitive objects, by only allowing certain user levels access to them.

There will be a list of objects, whose access level may be set.

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

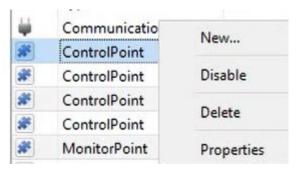
## 2.3.2 Configure Overlays

Overlays may be configured globally for all objects, or individually for selected objects. The path to follow for opening the configuration window for global vs individual overlays is different, however the overlay configuration is the same. Overlays may be configured individually for selected objects: **ControlPoint, MonitorPoint,** and **Reader.** 

#### 2.3.2.1 Configure Global Overlays

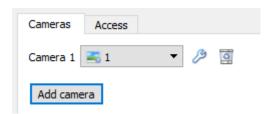
Global overlays may be configured for "reader" or any of the other options except for "All objects".

## 2.3.2.2 Configure Individual Overlays



Right-click object and select **Properties** to edit the object.



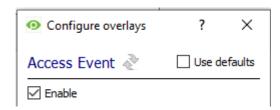


Add a camera to the object, and then click the settings icon that appears next to the camera

name.

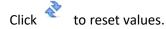
**Note**: This option only appears for Door objects.

#### **Global/Individual Options**

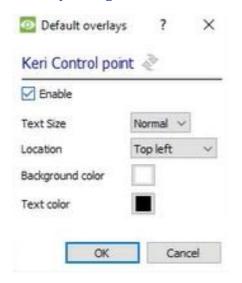


**Use Defaults**: This option is only available when editing individual overlays. Check this box to use the global configurations. Uncheck to edit overlays for the specific object.

**Enable**: This option is available in global and individual overlay configuration. In both cases, check the box to enable overlay configuration.



## **Overlay Configuration for Individual**



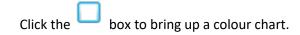
Select **Text Size** options from the drop-down menu.

Define the **Location** of the overlay panel.

Define the **Background Colour** of the overlay stream: Set the panel appearance to default; remove the border or remove the panel entirely (so that only the overlay text appears). Adjust the opacity as required.

Choose Text Colour.

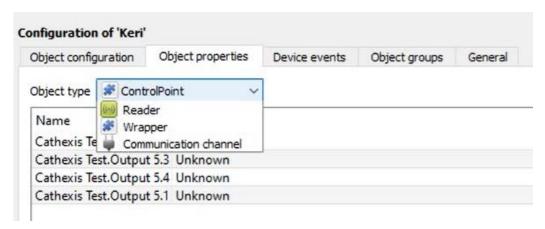
To set a custom panel colour, uncheck **Use Default** background colour.





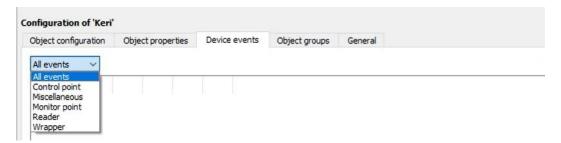
## 2.3.3 Objects Properties Tab

The Object properties tab allows viewing objects, sorted by type. In the case of the Keri device, there is the option of viewing by **ControlPoint**, **Reader**, **Wrapper**, and **Communication channel**.



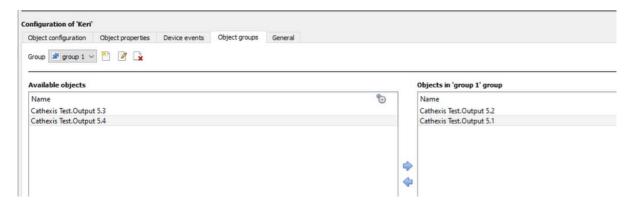
#### 2.3.4 Device Events Tab

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.



## 2.3.5 Groups Tab

Groups of the same type of object can be created.



**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.)



#### 2.3.3.4 Create a Group

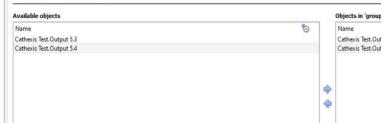
To create/edit a group click on  $^{\text{\tilde{1}}}$ /  $^{\text{\tilde{2}}}$ .

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

Give the group a descriptive Group name.

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

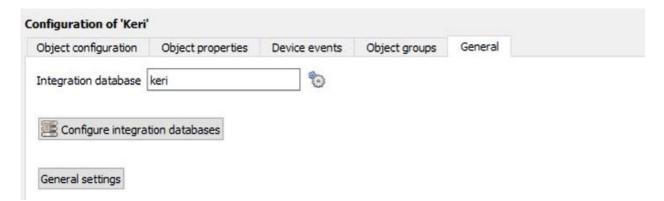
Note: Once a group has been created, the object type of the group may not be edited.



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

## 2.3.4 General Tab

Currently, the general tab deals with the integration database. Here, select a pre-created database, or configure a new database.



## 2.3.4.1 Select an Integration Database

Integration database Access To select a database, click, and select the relevant database. Only databases which relate to the device being added should appear.

## 2.3.4.2 Configure a New Database



If there is no database created yet, clicking on this button will navigate 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 *CathexisVision Setup Manual*.





# 3. Camera Table Overlay Setup

Once all the relevant settings have been configured, the access control overlay can be pulled through over the appropriate camera feed.



**Note:** Cameras must have already been added to Door objects, and overlays must have already been configured.

# 3.1 Video Feed Options Panel

To bring up the overlay, click the arrow to the left of the screen, to pop out the Video feed options panel. The Video feed options panel will present a number of options specific to the settings configured for that video feed.

## 3.1.1 Select the Overlay



Clicking this icon will bring up the overlay options for this video feed.

Select the overlay and it will appear over the video feed, as above.

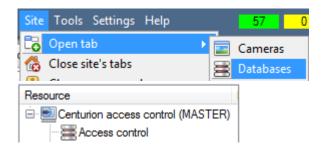


## 4. Database

The database tab allows navigating to 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, this recording can be launched from within the database tab.

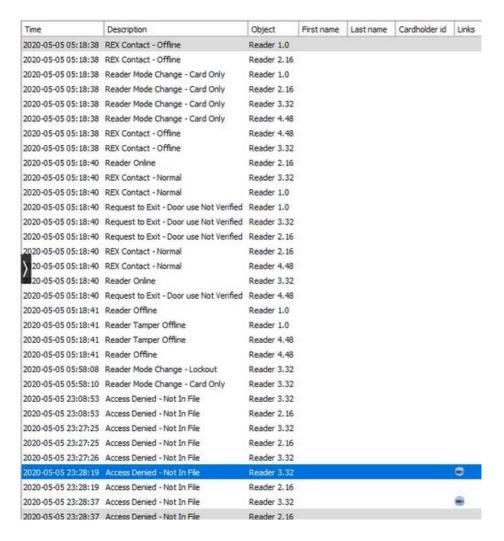
Most integrations will have a different database presentation, and unique filters, due to the different parameters sent to CathexisVision by the integrated device.

## 4.1 Navigate to the Database



View information stored in the Integration database, by following the path seen to the left. This will navigate to the Database Tab.

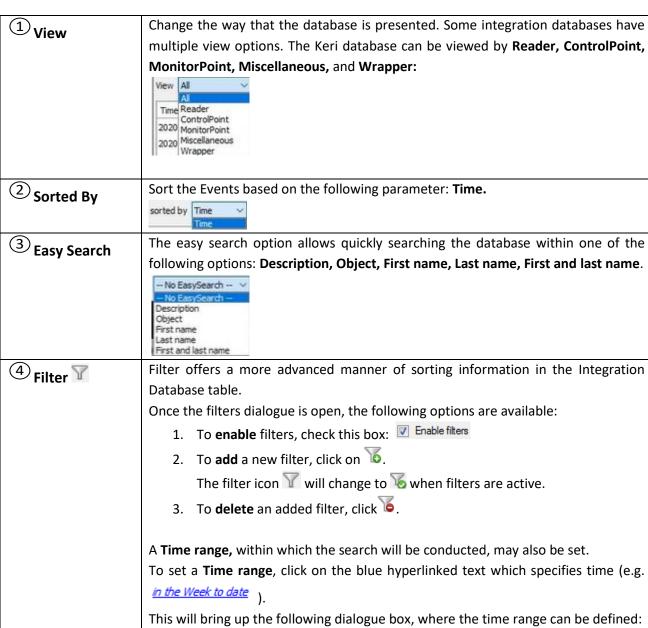
Once in the databases tab, select the relevant integration database. The databases are ordered under the NVRs that they are attached to. Below, is an image of a Keri database:



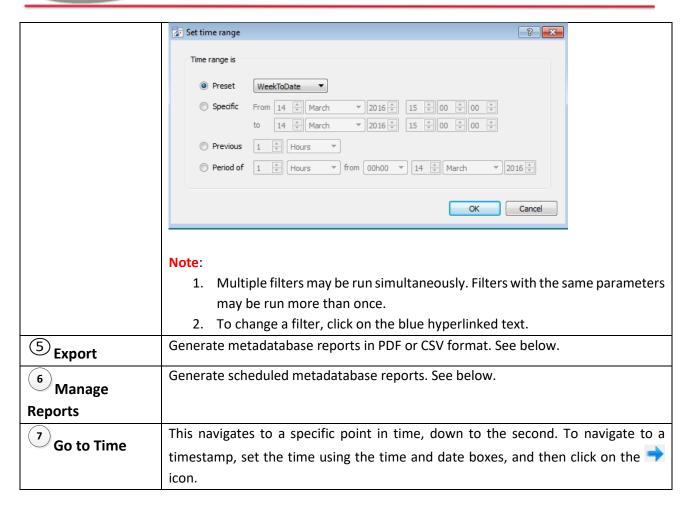


## 4.2 Database Interface



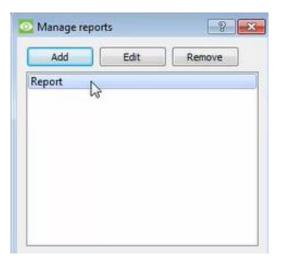






## 4.2.1 Scheduled Metadatabase Reports

Click the icon to open the scheduled report window.



All created reports will be listed here.

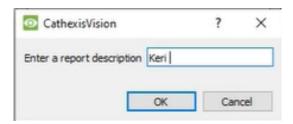
First, click **Add** to create a report. Then **edit** to define the reporting schedule. See below for more detail.

To create, edit, or delete a report, select the entry and click on the corresponding button.



#### 4.2.1.1 New Scheduled Report

Click **Add** and give the report a description:



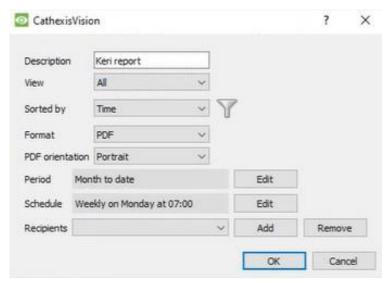
Click OK when done.

Once the new report is listed with the other reports, select it for editing to define the reporting schedule.

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

Schedule

.



Edit the **description** if needed.

Edit Viewing options.

Select the **Sorted by** option.

Select the Format.

Select the **orientation** of the Format.

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

Define the **Schedule** for the report.

Add/remove recipients to whom reports will be sent.

Add Click Add and enter the email address of the recipient. Multiple recipients may be

recipient: added. All will receive emails.

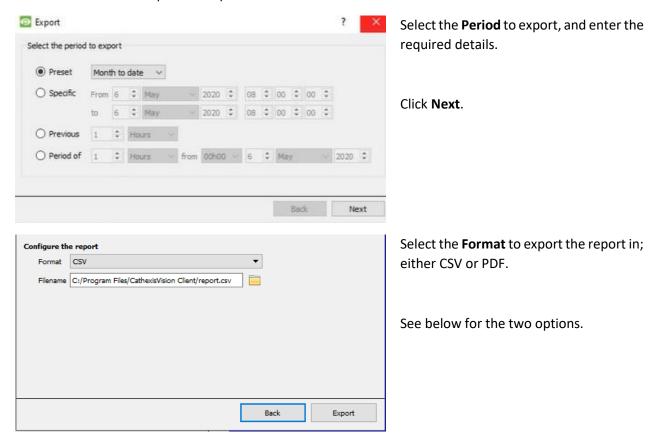
**Remove** Select the recipient from the dropdown menu and click **Remove**.

recipient:



## 4.2.2 Generate Metadatabase Reports

Click the icon to open the Export window.



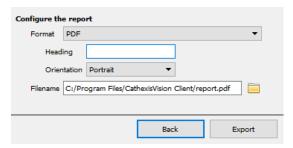
#### **4.2.2.1 Export CSV**



Select CSV Format.

Edit the **Filename** by either entering it straight into text field (replacing **report.csv**), or click the to choose a new save folder and filename.

## **4.2.2.2 Export PDF**



Select PDF Format.

Give the PDF a **Heading**.

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

Edit the Filename by either entering it straight into text

field (replacing **report.csv**), or click the to choose a new save folder and filename.



## 4.2.3 Metadata

Event type Reader

Description Access Denied - Not In File

Object Reader 3.32

First name
Last name
Cardholder id

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

## 4.2.4 Viewing an Entry's Associated Recording

If cameras are attached to device objects in the Integration setup, and these cameras are set 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 video content may be archived and reviewed.



will present the view to the left.

will break down the image into 4 sequential frame viewers.

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## 5. Events

A CathexisVision event has a trigger, which causes an action. Set integrated devices to act as triggers, or as actions. This document will detail the Keri 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* as an event trigger, or action.

## **5.1 Creating an Event**

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



- 1. Once in Events management area, click on New . This will open up the New Event window.
- 2. Once in this window, select the Triggers tab and click on the hyperlink titled, standard triggers.
  - a. From the drop-down menu, left-click the Keri device with which to trigger the event.

## 5.1.1 While/When and Any/All

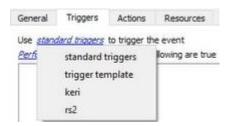
When triggering on a door, there is the option to trigger while/when a trigger is active. Also select multiple triggers, and define whether all/any of the triggers need to be active to set-off an event.

Trigger using <u>any controlpoint</u> <u>Start actions when any of the following device events occur</u> As usual, to change these settings, click on the related, blue, hyperlinks.

## **5.2 Triggers**

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

## 5.2.1 Set the Device as the Trigger



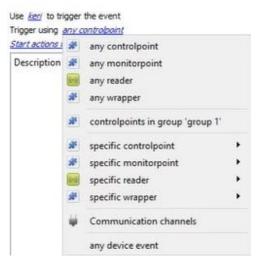
When creating a new event, the trigger type will default to:

Use <u>standard triggers</u>. To define which device should trigger the event, click on the hyperlink after "use". To set it as the Keri device, click on the hyperlink, and select the relevant device name from the dropdown menu.



## 5.2.2 Trigger Types (Trigger Using)

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



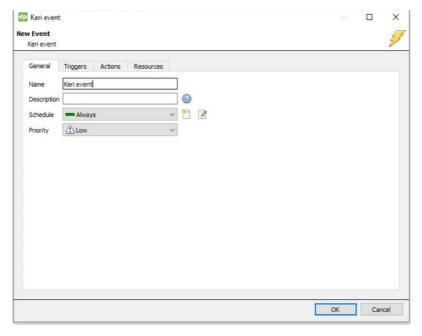
**Any door** will trigger if anything happens on any of the doors. **Specific door...**will trigger on the specific door chosen.

**Any device event** will trigger, initially, when any event occurs on the device. Within the "any device event" setup, "device event rules" may be set, which will constrain the events that prompt triggers.

Note for group triggers: For this 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 ② to see a list of available descriptions.

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

## 5.2.2.1 Any Device Event



For example, within the any device event option, choose the type of device Event that will be the trigger. Choose from the drop-down menu.

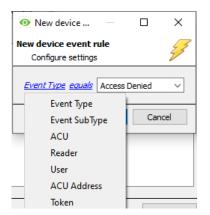
The Keri device offers

- any controlpoint,
- any monitorpoint,
- any reader,
- any wrapper,
- controlpoints in a specific group,
- specific controlpoint,
- specific monitorpoint,
- specific reader,
- specific wrapper,
- communication channels,
- any device events.



**Note**: Set multiple constraints, and choose if <u>any</u>, or <u>a</u> constraints need to be fulfilled to set off a trigger. If a constraint is not defined, every single device event will send off a trigger.

To add/edit/delete a rule (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 display the rules options.

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

#### 5.2.2.2 Any Group

Triggers that are not of the **Any Device Event** type, have a slightly different setup window. In these instances, constraints need not be set, since they are being added one at a time. This option is better if a few triggers have been selected to use.

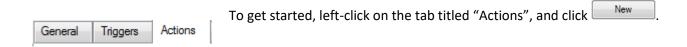
Since only one type of object is being used to trigger the event in this instance, the dialogue will appear as the **New Device Event Rule** window did previously.

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

## 5.3 Actions

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

## 5.3.1 Open Actions Tab and Select the Keri Device



A menu will drop down containing all the available action types. The device action type is represented by this icon: .

It will state "Control ..." and the name of the Action device e.g.





#### 5.3.1.1 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.

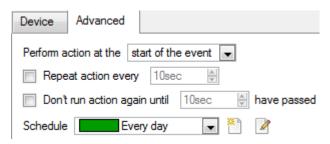
#### **Device**



To select an **Object**, click on the icon. This provides a selection of all the Objects available on the Keri device.

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

#### **Advanced**



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 may be applied to the actions.

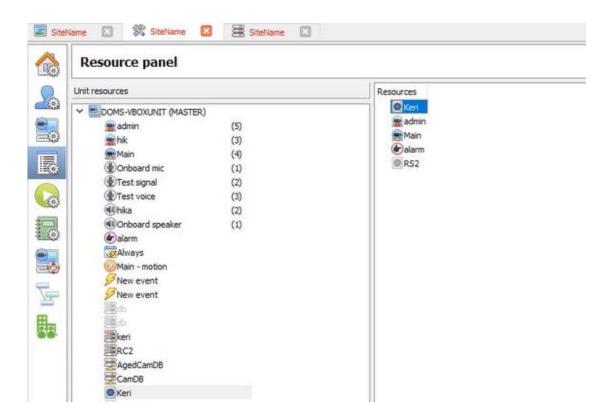


## 6. Maps

It is possible to add the Keri device to a site map, which will allow for a number of action options when zones/partitions 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 Keri 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 Keri Drive as a Resource



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

#### 6.1.1 Add the Device in the Resource Panel

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



## 6.2 Add the Device in Map Editor

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

## **6.2.1 Adding Device Objects**

Drag the Keri 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 Keri device onto the map area to bring up this option.

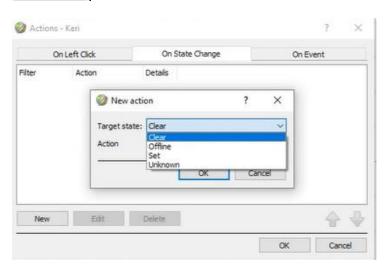
## 6.2.1.1 Adding Device Actions

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

## 6.2.1.2 Action Options

New

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



#### Action options:





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

Once finished, save the map.

**NB**: The map <u>must not be saved</u> in the Work folder of the installation directory.

## 6.3 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

Please remember that this app-note was designed to deal specifically with this integration. For further information about the CathexisVision software, consult the main manual (<a href="http://cathexisvideo.com/">http://cathexisvideo.com/</a>).

For support, email <a href="mailto:support@cat.co.za">support@cat.co.za</a>