



# Impro Access Portal Pro Integration White Paper



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## 1. Introduction

This document indicates the features/abilities of the Impro Access Portal Pro system when integrated with CathexisVision. The Impro Access Portal Pro access control system consists of Impro network door controllers and connected equipment such as doors and readers.

For a detailed guide on the installation and configuration of the Impro Access Portal Pro device with CathexisVision, please refer to the **CathexisVision Impro Access Portal Pro Integration App-note**, available on the Cathexis website (<http://cathexisvideo.com/>).

### 1.1 Integration Purpose

The CathexisVision integration with Impro Access Portal Pro allows CathexisVision to communicate with the Impro Access Portal Pro software. Doors can be opened, emergency unlocked, and locked down from the CathexisVision interface. Device objects can be linked to cameras, providing operators with the associated footage. Events are databased and can be searched according to various filters. Operators can configure the device to trigger standard CathexisVision events, allowing for a range of actions. The CathexisVision Impro Access Portal Pro integration supports the use of the CathexisVision Map Editor.

### 1.2 Requirements

#### 1.2.1 General Requirements

- CathexisVision 2020.4 and later.
- Windows only: the integration was tested on Windows 10.
- The integration works with encryption enabled *or* disabled: the driver supports encryption on Windows however it must be disabled for a Linux Ubuntu installation.
- Users who wish to disable encryption may consult instructions on the website or the app-note.

#### 1.2.2 Model and Firmware

**Note:** Cathexis makes a best attempt to ensure that the equipment and license requirements of third-party equipment are adequately specified. However, it is possible that the requirements of third-party equipment may change over time, including the interface hardware/firmware and licensing. The user is advised to clarify the latest requirements directly with the third-party equipment supplier.

Hardware name	Impro
Third-party software name	Impro AP Pro
Third-party software version	This integration supports Impro V4.1



### 1.2.3 CathexisVision License Requirements

The CathexisVision Impro Access Portal Pro integration license requirements are as follows:

License	License Description
CIMP-1001	This will license doors associated with the device. Each door requires a license.
CIMP-2000	This licenses the Impro AP Pro device.
CIMP-3000	This bundle includes licenses for the Impro device as well as for unlimited doors.

**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-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.

## 1.3 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. Features and Abilities

This section indicates the features/abilities of the Impro Access Portal Pro software when integrated with CathexisVision.

### 2.1 General Device Features

CathexisVision communicates with the Impro Access Portal Pro software via a TCP connection using the IP address. Integrations are added on a server-by-server basis.

### 2.2 Device Objects

Device objects populate automatically once communication is established.

Object Type		Abilities
<b>General</b>		<ul style="list-style-type: none"> <li>• This integration has Terminal and Communication Channel objects.</li> <li>• Objects are automatically created as soon as communication between the CathexisVision unit and device is established.</li> <li>• Terminal objects can be commanded as an action of a CathexisVision system event.</li> <li>• Terminal objects support overlays, which display the state of the object.</li> <li>• Objects may be linked to cameras to associate device events with video footage.</li> </ul>
<b>Terminal</b>	<b>Object Properties</b>	<ul style="list-style-type: none"> <li>• Name</li> <li>• ID</li> <li>• Description</li> <li>• Serial</li> <li>• Door position</li> <li>• Controller ID</li> <li>• Licensed</li> <li>• Unlocked</li> <li>• Lockdown</li> <li>• Emergency</li> </ul>
	<b>Commands</b>	<ul style="list-style-type: none"> <li>• Open door</li> <li>• Lockdown</li> <li>• Emergency unlock</li> </ul>



Communication channel	Object Properties	<ul style="list-style-type: none"> <li>• Name</li> <li>• ID</li> <li>• Channel status</li> <li>• Details</li> <li>• Creation type</li> <li>• Creation time</li> <li>• Idle time (min)</li> </ul>
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### 2.3 Device Events

The CathexisVision Impro Access Portal Pro integration generates Access, Door and Communication Status events, which are triggered on the device and reflected in CathexisVision.

Event Element		Features/Abilities
Device Event Types	General	<ul style="list-style-type: none"> <li>• Events triggered on the device are sent to CathexisVision.</li> <li>• Device event types are Input and Output.</li> </ul>
	Access event	<ul style="list-style-type: none"> <li>• Allowed normal in</li> <li>• Allowed normal out</li> <li>• Door unlocked by operator</li> </ul>
	Door unlocked by operator	<ul style="list-style-type: none"> <li>• Door closed</li> <li>• Door open</li> <li>• Door forced open</li> </ul>
Communication status		<ul style="list-style-type: none"> <li>• Established communication with Impro AP Pro</li> <li>• Successfully logged into Impro AP Pro</li> <li>• Lost communication with Impro AP Pro</li> </ul>



## 2.4 Metadatabase

A unique metadatabase is created on the CathexisVision 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"> <li>All device events are databased.</li> <li>Database entries include the footage from cameras linked to device objects.</li> <li>Multiple cameras may be linked to multiple objects.</li> <li>Device event metadata is displayed where applicable.</li> <li>Databased device events may be viewed in the embedded video player, which includes the usual CathexisVision video review tools.</li> </ul>
View Options	<ul style="list-style-type: none"> <li>Access event</li> <li>Door event</li> <li>Communication status.</li> </ul>
Sort Options	<ul style="list-style-type: none"> <li>Events can be sorted based on the parameter of <b>time</b>.</li> </ul>
Easy Search	<ul style="list-style-type: none"> <li>Description</li> <li>Terminal name</li> <li>Zone name</li> <li>User ID</li> <li>Terminal ID</li> <li>Direction</li> <li>Tag ID</li> </ul>
Filter	<ul style="list-style-type: none"> <li>Timestamp</li> <li>Event type</li> <li>Reader ID</li> <li>Terminal ID</li> <li>Terminal name</li> <li>Door name</li> <li>Tag code</li> <li>User name</li> <li>User ID</li> <li>Door number</li> </ul>
Export	Database entries may be exported in CSV and PDF format.



## 2.5 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
<b>General</b>	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.
<b>Map Action Triggers</b>	<ul style="list-style-type: none"> <li>• All device objects may be set to trigger a map action if the user left-clicks on map.</li> <li>• Some device objects may be set to trigger a map action if a state change message is received from the device.</li> <li>• All device objects may be set to perform a map action if <i>any</i> event occurs on the device.</li> <li>• 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.</li> </ul>
<b>Map Actions Options</b>	When triggered (see above), objects may perform the following map actions (where applicable): <ul style="list-style-type: none"> <li>• Connect to a site</li> <li>• Perform an animation</li> <li>• Go to a camera preset</li> <li>• Load a map</li> <li>• Set a PTZ relay output</li> <li>• Show a popup menu</li> <li>• Set a relay output</li> <li>• Show an HTML block</li> <li>• Show a block of text</li> <li>• Show a device popup menu</li> <li>• Show a device event notification.</li> </ul>





## 3. Conclusion

This document was designed to deal specifically with this integration. For further information about the CathexisVision software, consult the **CathexisVision Setup Manual** (<http://cathexisvideo.com/>).

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