Urmet IPassan Integration

White Paper

Contents

1. Introduction

This document indicates the features/abilities of the Urmet IPassan Access Control solution when integrated with CathexisVision. Functionally, this integration will include the triggering of standard CathexisVision system events, based on information received from the device.

For instructions on installation or configuration of the integration, please consult the ***Urmet IPassan Integration App-note***, available on the Cathexis website, and/or the ***CathexisVision Setup Manual***.

1.1 Integration Purpose

IPassan is a cloud-based IP access control system ideal for large, multi-dwelling residential sites that require the management of many access control points. Urmet IPassan facilitates local or off-site events management. The CathexisVision integration driver communicates with the IPassan software application. Events on the software can be used to trigger CathexisVision events, and data can be sent to the CathexisVision system.

1.2 Requirements

1.2.1 General Requirements

- CathexisVision 2022.2 and later
- Windows 10 Pro or Linux
- Cathexis 64-bit version supported

Note: For information regarding the regular operation of Urmet IPassan, please consult the relevant Urmet manufacturer's documentation.

1.2.2 License Requirements

License	Name	Description
CURM-2000	Urmet Access Control Device	This license is the "base" license to integrate with an access control system. It is applied to the server to which the access control device is connected. It will allow for the connection of a single Urmet controller.
CURM-1001	Urmet Access Control Door	These licenses apply to the doors in the access control system. The **CCCR-1001** will license a single door, and may be added on a door-by-door basis.
CURM-3000	Urmet Access Control Bundle	This license includes the **CURM-2000** Urmet device license, and also provides support for unlimited **CURM-1001** door licenses.

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

1.3 Specifications

This integration was tested on:

Hardware name	Urmet IPassan 4-Door Base Controller
Hardware model number	FD-125-002
Additional Hardware required (eg. USB to serial converter)	Additional IPassan hardware as required. Doors etc. may be added.
Firmware as tested	Controller FW: fv1123
Third-party software name	IPassan Manager
Third-party software version	v01.16.05
Third party software license/s required	Does not require licencing

1.4 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.

2. Features and Abilities

This section indicates the features/abilities of the Urmet IPassan AC system when integrated with CathexisVision.

2.1 General Device Features

- CathexisVision receives event messages from the IPassan software.
- Device event messages can be used to trigger a CathexisVision system event.

2.2 Device Objects

Objects are populated automatically as soon as communication between IPassan AC software and CathexisVision is established.

Object Type		Abilities
General		- This integration has System, Door, and Communication channel objects. - Objects are automatically created as soon as communication between the CathexisVision unit and device is established. - Door objects can be commanded as an action of a CathexisVision system event. - Door objects support overlays. - Events on the software can be used to trigger CathexisVision system and map events. - Objects may be linked to cameras to associate device events with video footage.
System	Object Properties	- FW version - Manufacturer - Model
Door	Object Properties	- Description - Door physical state - Lock physical state - Alarm state - Door mode - Licensed
	Door Physical States	- Closed - Open - Unknown - Fault
	Lock Physical States	Locked

		• Accessed
	Alarm States	• Normal
		• Door forced open
		• Door open too long
	Commands	• Lock door
		• Unlock door
Communication Channel	**Object Properties**	• Name
		• Channel status
		• Creation type
		• Creation time
		• Idle time

2.3 Device Events

The CathexisVision Urmet IPassan integration generates Door and General Events, which are triggered on the device and reflected in CathexisVision.

Event Element		Features/Abilities
General		• Events triggered on the device are sent to CathexisVision. • Device event types are Door and General.
Device Event Types (Door events)	**Access by single credential**	• This event is sent when a user opens a door with a valid pass on a connected reader.
	Relay activated	• This event is sent when a relay activates to open a door.
	Access denied (unknown credential)	• This event is sent when a user tries to open a door with a pass that is not registered to the system / does not have access to the specific door.
	Door forced open by the controller	• This event is sent when the controller unlocks manually a door indefinitely. This is done through the IPassan software.
	Door forced closed by the controller	• This event is sent when the controller manually locks a door. This is done through the IPassan software.
	Opening of the door	• This event is sent when a door is opened if a door contact is setup.
	Closing of the door	• This event is sent when a door is closed, if a door contact is setup.
	Forced door	• This event is sent when a door is forced open, if a door contact is setup.

Door open too long	• This event is sent when a door is left open for longer than the time specified in the IPassan software, if a door contact is setup.
CathexisVision Event Actions	A door object may be controlled via a CathexisVision event action to perform one of the following commands: • Lock • Unlock **Note**: There is no option to "pulse" the lock, it will stay either locked or unlocked until further commands are sent to it. Events generated by the device are reflected in CathexisVision, and can be used to create CathexisVision system events.

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	• All device events are databased. • 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 CathexisVision video review tools.
View Options	• All
Sort Options	• Time
Easy Search	• Time • Reader • Description • Information • Priority
Filter	• Time • Reader • Description • Information • Priority
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
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	- 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. - Door 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	When triggered (see above), objects may perform the following map actions (where applicable): - 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.

3. Conclusion

This document was designed to deal specifically with this integration. For further information about the CathexisVision software, consult the main manual (http://cathexisvideo.com/).

For support, email support@cat.co.za.

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*