Paradox V2 Integration White Paper

Contents

1 Introduction

This document indicates the features/abilities of the Paradox V2 Alarm Panel when integrated with CathexisVision.[1]

a. Integration Purpose

The CathexisVision integration of the Paradox V2 Alarm Panel allows for local and remote monitoring and operation from within the CathexisVision interface. All device objects may be linked to cameras, allowing associated footage to be databased according to the configuration of CathexisVision events and alarms, which trigger on information received from the device. All messages from the device are also databased. Operators with sufficient access rights, are able to issue certain commands to the device, such as allowing arming and disarming areas, and bypassing zones.

b. Requirements

General Requirements

- CathexisVision SP 2018.2 and later.
- Integration only supported for Windows.

CathexisVision License Requirements

License	License Name	Description
CPDX -2000	Paradox Device License (v2).	This licenses the Paradox V2 device in CathexisVision.
CPDX-1001	Paradox Alarm Panel License (v2).	This licenses a single Paradox V2 alarm panel in CathexisVision.

Paradox Requirements

- An IP150 Internet Module (v1.39 or later) is required when using an Ethernet connection.
- A Paradox CV4USB RS-485/RS-232 Converter Kit and an available USB slot is required when using a serial connection.

- ***Supported Panels***

This integration is able to connect to the following alarm panels:

- SP4000
- SP5500
- SP6000
- SP7000
- SP65
- MG5000
- MG5050

[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.

2 Features and Abilities

This section indicates the features/abilities of the Paradox V2 software when integrated with CathexisVision.

a. General Device Features

- CathexisVision communicates with the Paradox V2 device via either TCP or serial connection.
- This integration only runs on Windows units.
- Zone objects support overlays which display zone state, partition state, and the zone name.

b. Device Objects

Device objects populate automatically once communication is established. As the panel supports many expansion modules, the objects displayed in CathexisVision will vary depending on the objects that are configured on the panel.

Object Type		Abilities
General		• This integration has Panel, Zone, Area, and PGM objects. • Objects are automatically created as soon as communication between the CathexisVision unit and device is established. • Zone, Area, and PGM objects are able to be commanded as an action of a CathexisVision system event. • Zone objects support overlays, which display zone state, partition state, and the zone name. • Objects may be linked to cameras to associate device events with video footage.
Panel	**Object Properties**	• Name. • Connection status. • Description. • Product ID. • Serial Number. • Version. • Revision. • Area count. • Zone count. • PGM count. • Door count. • License.
	Connection Status	Some examples of Connection Status values: • Connected. • Connecting. • Disconnected.
Zone	**Object Properties**	• Name. • Zone enabled. • State. • Status. • Zone serial number. • Zone input number. • Zone partition. • Zone definition. • Zone alarm type.

	Command	• Bypass. • Unbypass.
	States	• Alarm. • Entry Delay. • Bypassed. • Tampered. • Opened. • Closed. • Unknown.
	Overlays	• The Zone object supports overlays in the camera feed. • Overlays display time (before disappearing) is configurable. • Overlay location, text size, text colour, and background colour are configurable. • Overlays display Zone state, partition state, and the zone name.
Area	**Object Properties**	• Name. • Area enabled. • State. • Status.
	Command	• Arm. • Disarm. • Instant arm. • Stay arm.
	States	• Ready. • Armed. • Alarm. • Entry Delay. • Exit Delay. • Bypasssed. • Unknown.
PGM	**Object Properties**	• Name. • Status. • Label. • Serial Number. • Input number.
	Command	• Off. • On.
	States	Please consult the manufacturer for PGM state information.

c. Device Events

The CathexisVision Paradox V2 integration generates the Zone, Partition, PGM, and General device 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 Zone, Partition, PGM, and General.
Device Event Types	Zone	• Zone in Alarm. • Zone Restore Alarm, etc.

	Partition	• Entry/Exit Delay started. • Area Arm/Disarm. • Strobe Alarm. • Steady Alarm. • Alarm Stopped, etc.
	General	• Squawk on/off. • Arming with User. • Arming with Trouble. • Fail to communicate IP Receiver 1. • Bell On/Off. • Bell Squawk Arm/Disarm. • Cancel Alarm with User Code #. • Disarm after Alarm with User Code #. • Disarm with User Code #, etc.
CathexisVision System Events		Area, PGM, and Zone objects may be controlled as a result of a CathexisVision system event: • Area object → Arm, Disarm, Instant arm, Stay arm. • PGM object → Off, On. • Zone object → Bypasss, Unbypass.

d. 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. • General. • Partition. • Zone. • PGM.
Sort Options	• Device event time.
Easy Search	• Event type. • Label. • Description. • User.
Filter	• Event type. • Label. • Serial no. • Description. • Additional info. • User label.

Export	Database entries may be exported in CSV and PDF format.

e. 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. • All device 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. • Show a device event notification.

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.