



Detnov CAD-150 Fire Panel Integration White Paper

Contents

1. Introduction.....	3
1.1 Integration Purpose.....	3
1.2 Requirements	3
1.2.1 General Requirements.....	3
1.2.2 License Requirements	3
1.3 Specifications.....	3
1.4 Integration Components	4
2. Features and Abilities	4
2.1 General Device Features.....	5
2.2 Device Objects	5
2.3 Device Events.....	6
2.4 Metadatabase.....	7
2.5 Maps	7
3. Conclusion	9

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1. Introduction

This document indicates the features/abilities of the Detnov CAD-150 fire panel solution when integrated with CathesisVision. Functionally, this integration will include the triggering of standard CathesisVision system events, based on information received from the device.

For instructions on installation or configuration of the integration, please consult the **Detnov CAD-150 Fire Panel Integration App-note**, available on the Cathesis website.

1.1 Integration Purpose

Detnov CAD-150 fire panel is an addressable fire alarm control panel with 8 loops and up to 250 detectors. Loops can be connected to detectors, modules, sounders or manual call points. Triggered fire alarms appear on the CathesisVision software as events. The control panel features a USB communications port which allows connection with a PC and working with the Detnov CAD-150 configuration software.

1.2 Requirements

1.2.1 General Requirements

- CathesisVision 2023.2 or later
- Cathesis NVR 64-bit
- Windows 10 Pro
- Ubuntu 16.04 LTS and 20.04 LTS

Note: For information regarding the regular operation of the Detnov system, please consult the relevant Detnov manufacturer’s documentation.

1.2.2 License Requirements

The CathesisVision Detnov CAD-150 Fire Panel Integration license requirements are as follows:

License No.	Name	License Description
CDNV-2000	Detnov Fire Panel	This license is the “base” license to integrate with the alarm panel system. It is applied to the server to which the Detnov Fire Panel is connected. This licence will allow for the connection of a single integration device

Note: In this integration, a single license will cover multiple linked devices.

1.3 Specifications

This integration was tested on an entry level model of the Detnov CAD Fire Panel, which only supports 2 loops. It is not a panel specifically designed for CathesisVision.

Third-party hardware name	Panel/Loop
Additional hardware required	FTDI or supported serial interface cable.
Firmware as tested	313 (Panel version)
Third-party software version	V2.32
Third-party software license required	No Detnov license required

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.

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 Detnov CAD-150 fire panel solution when integrated with CathesisVision.

2.1 General Device Features

CathesisVision receives event messages from the Detnov CAD-150 device which can be used to trigger a CathesisVision system event.

2.2 Device Objects

Object Type		Abilities
General		<ul style="list-style-type: none"> This integration has Device, Loop, Panel, Zone, and Communication Channel objects. Device, Panel, and Zone objects can be commanded as an action of a CathesisVision system event. Only Device and Zone objects support overlays. Objects may be linked to cameras to associate device events with video footage.
	Device	<ul style="list-style-type: none"> Name Type Mode Fault Analogue value 1 Analogue value 2 State
	Commands	<ul style="list-style-type: none"> Enable/Disable
Loop	Object Properties	<ul style="list-style-type: none"> Name Open/Shorted Comms Fault Alarm count Fault count Active
	Commands	<ul style="list-style-type: none"> N/A
Panel	Object Properties	<ul style="list-style-type: none"> State Max Loops Version Alarm Version

		<ul style="list-style-type: none"> • Alarm • Fault • Alarm count • Fault count • Muted • Has a Zone in test • Has a disabled Zone • Outputs disabled • Sounders disabled • Sounders delayed • Sounders on • Sounders silenced
	Commands	<ul style="list-style-type: none"> • Reset • Sounders on • Silence Sounders
Zone	Object Properties	<ul style="list-style-type: none"> • Mode • Alarm
	Commands	<ul style="list-style-type: none"> • Enable/Disable
Communication Channel	Object Properties	<ul style="list-style-type: none"> • ID • Name • Channel Status • Details • Creation Type • Creation Time • Idle time (min)

2.3 Device Events

The CathesisVision Detnov CAD-150 Fire Panel integration generates Device events (logs), which are triggered on the device and reflected in CathesisVision.

Event Element		Features/Abilities
General		<ul style="list-style-type: none"> • Changes on the device are detected by CathesisVision, which then generates an event. • Event types are: Device, Panel, Zone • Events generated from integration device changes can be configured to trigger system actions and notifications, and map events.
Device Event Types	Device	<ul style="list-style-type: none"> • Time (includes date) • Device • Description • Zone
	Panel	<ul style="list-style-type: none"> • Time (includes date) • Description

Zone	<ul style="list-style-type: none"> • Time (includes date) • Zone • Description
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2.4 Metadatabase

A unique metadatabase is created on the CathesisVision 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"> • 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 CathesisVision video review tools.
View Options	<ul style="list-style-type: none"> • All • Device • Zone • Panel
Sort Options	<ul style="list-style-type: none"> • Time
Easy Search	<ul style="list-style-type: none"> • Device • Zone • Description
Filter	<ul style="list-style-type: none"> • Time • Event type • Device • Zone • Description
Export	Database entries may be exported in CSV and PDF format.

2.5 Maps

The CathesisVision 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	<ul style="list-style-type: none"> • Device objects may be set to trigger a map action if the user left-clicks on map or 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 CathesisVision events, may also be set to perform a map action when specific CathesisVision 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 CathesisVision software, consult the **CathesisVision Setup Manual** (<https://cathesisvideo.com/>).

For support, email support@cathesisvideo.com.

USEFUL LINKS

To view **tutorial videos** on CathesisVision setup, visit <https://cathesisvideo.com/resources/videos>

Find answers to Cathesis **Frequently Asked Questions**: <https://cathesis.crisp.help/en/?1557129162258>