



Lenel OnGuard Access Control Integration White Paper

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1 Introduction

This document indicates the features/abilities of the Lenel OnGuard Access Control system when integrated with CathexisVision.¹ For instructions on setting up the Lenel integration, please consult the Lenel OnGuard Access Control Integration Guide, and the CathexisVision Setup Manual.

a. Integration Purpose

This integration communicates with the Lenel OnGuard Access Control software through a Cathexis wrapper that runs on the same unit as the OnGuard software, and allows for local and remote monitoring and operation from within the CathexisVision interface. 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 software. Access, Security and Informational messages received from the device are databased. Operators with sufficient access rights are able to issue certain commands to the device, such as opening doors or setting reader modes, for example.

Note: For information regarding the regular operation of a Lenel device, please consult the relevant documentation.

b. Requirements

General Requirements

- CathexisVision 2018.2 or later.
- CathexisWmiWrapper must be installed on the same Windows PC as the OnGuard software.

The CathexisWMIWrapper comes bundled with the Lenel Access Control Integration Guide, which is downloaded from the CathexisVision website.

Lenel OnGuard Requirements

The following were used in this integration:

- OnGuard version 7.3 Service Pack 1 (**7.3.345.54**)
- **LNL-2210 panel**
- **HID iClass** reader.
- Lenel DataConduIT license required (**SWG-1140**).

CathexisVision License Requirements

License No.	License Name	Description
CLEN-2000	Lenel Device License.	This licenses the Lenel OnGuard software in CathexisVision.
CLEN-1001	Single reader license.	Licenses a single reader. Required per reader.
CLEN-3000	Bundle License.	Bundle with device license and unlimited reader licenses.

Note:

1. Either purchase the bundle license, or **both the device and reader license**.
2. All readers must be licensed individually.

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.

c. CathexisVision 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 object.

2 Features and Abilities

This section details the main features of the integration, and the associated abilities.

a. General Integration Features

Connection

- CathexisVision communicates with Lenel’s access control software, OnGuard, aided by a wrapper running on the same unit as the OnGuard software.
- OnGuard users are linked to Windows user accounts.
- The OnGuard user permissions of the linked Windows user running the wrapper are also applied in CathexisVision.

OnGuard Messages

- All device messages are databased as Access events, security events and information event messages.

CathexisVision Integration Objects

- Reader objects support overlays indicating door status, access granted/denied, cardholder photo, and request to exit messages, among others.
- Device objects can be used to trigger events, and reader objects can be controlled as event actions

b. Device Objects

Device objects populate automatically once communication is established.

Object Type	Abilities
General	<ul style="list-style-type: none"> • The Panel, Reader, and Wrapper objects are automatically created as soon as communication between the CathexisVision unit and the CathexisWMIWrapper is established. • Only reader objects may be commanded. • Only reader objects support overlays. • Objects may be linked to cameras to associate device events with video footage.
Panel	<p>Following Panel object properties are indicated in CathexisVision:</p> <ul style="list-style-type: none"> • Name of panel, • Type of panel, • Connection status, • Segment ID. • Workstation panel is connected to. <p>Panel changes to Offline/online when:</p> <ul style="list-style-type: none"> ○ CathexisWMIWrapper service stops/starts, ○ Access control panel is disconnected.
	<p>Object Properties</p>
	<p>Connection Status</p>

Reader	<p>Following Panel object properties are indicated in CathexisVision:</p> <ul style="list-style-type: none"> • Name of reader, • ID of panel reader belongs to, • Usage of reader. E.g. Entrance reader, • Mode of reader. E.g. Card only, • License indication.
	<ul style="list-style-type: none"> • Open Door. • Set Mode: <ul style="list-style-type: none"> ○ Locked, ○ Card only, ○ Pin or Card, ○ Pin and Card, ○ Unlocked, ○ Faculty Code Only, ○ Cypherlock, ○ Automatic.
	<ul style="list-style-type: none"> • The reader object supports overlays in the camera feed. • Overlays display time (before disappearing) is configurable. • Older overlays are replaced with newer ones for urgent messages such as: <ul style="list-style-type: none"> ○ Door forced. ○ New transaction occurs. ○ Request to exit message received. • Some examples of details included in the overlays are: <ul style="list-style-type: none"> ○ Photo of cardholder. ○ Access granted/denied. ○ Door used. ○ Door left open. ○ Door left open is closed. ○ Door forced. ○ Request to exit.
Wrapper	<ul style="list-style-type: none"> • Wrapper object automatically created when communication between CathexisVision unit and wrapper is established. • Users running the wrapper must have the correct permissions in OnGuard in order to be subscribed to event information (see object properties).
	<p>Following Wrapper object properties are indicated in CathexisVision:</p> <ul style="list-style-type: none"> • Name of wrapper, • Connection Status, • Namespace, • Indication of subscription to Access and Security Events.

Connection Status

Wrapper changes to Online/Offline when Connected/Disconnected from OnGuard.

c. Events

The CathexisVision Lenel OnGuard integration generates the Access, Security, and Informational device events which are triggered in the Lenel Alarm Monitoring application.

Event Element	Features/Abilities
General	<ul style="list-style-type: none"> • Events triggered in Lenel’s Alarm Monitoring application are sent to CathexisVision. • Device event types are Access, Security, and Informational. • A message is displayed when communication to the panel is lost or restored.
Device Event Types	<p>Access</p> <p>Most door-related events will reflect as Access events, including:</p> <ul style="list-style-type: none"> • Access Denied: <ul style="list-style-type: none"> ○ Invalid Badge, ○ Reader Locked, ○ Reader Unlock • Access Granted: <ul style="list-style-type: none"> ○ No Entry Made, ○ Open Door Command Issued – Door Not Used, ○ Access Granted on Facility Code, ○ Reader Unlocked, ○ No Entry Made, etc.
	<p>Security</p> <p>This integration generates Security events which reflect security concerns about the system as well as the access events. Examples of security events generated by this device include:</p> <ul style="list-style-type: none"> • Relay Contact Deactivated, • Reader Mode Card Only, • Door Forced Open, • Door Held Open, • Access Granted: No Entry Made, • Access Denied: Reader Locked.
	<p>Informational</p> <p>Informational events reflect important information about the state of the integration and its components. Informational events include:</p> <ul style="list-style-type: none"> • Hardware offline/online, • Communication with wrapper established/lost, etc.
CathexisVision Event Actions	<p>Events triggered in Lenel’s Alarm Monitoring application are reflected in CathexisVision, and can be used to create CathexisVision system events which may control one of the device objects as an action of the system event.</p> <p>Only reader objects may be controlled via a CathexisVision system event action, to perform an action:</p> <ul style="list-style-type: none"> • Control reader object → Open Door, • Control reader object → Set Mode:

- Locked,
- Card only,
- Pin or Card,
- Pin and Card,
- Unlocked,
- Faculty Code Only,
- Cypherlock.

d. Meta Database

A unique meta-database 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"> ● All device events are databased as access, security, and informational event messages. ● Database entries include the footage from cameras linked to device objects. ● Multiple cameras may be linked to multiple objects. ● Device event meta-data 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	<p>The meta-database may be viewed by the following options:</p> <ul style="list-style-type: none"> ● Access, ● Security, ● Informational, ● All.
Sort Options	<p>The meta-database may be sorted by:</p> <ul style="list-style-type: none"> ● Device event time.
Easy Search	<p>The meta-database may be searched specifically for:</p> <ul style="list-style-type: none"> ● Reader ID, ● Description, ● Type, ● Firstname, ● Lastname, ● Cardnumber, ● Is Card Readable, ● Reader Name.
Filter	<p>The meta-database may be filtered according to:</p> <ul style="list-style-type: none"> ● Time, ● Reader ID, ● Reader Name, ● Description, ● Type, ● Firstname,

- Lastname,
- Cardnumber,
- Is Card Readable.

Export

Database entries may be exported in CSV and PDF format.

3 Conclusion

Please remember that this document was designed to deal specifically with this aspect of the software. For further information about the CathexisVision software please consult the main manual (<http://cathexisvideo.com/>).

For support please contact support@cat.co.za