Lenel OnGuard Access Control Integration White Paper

Contents

1. Introduction

This document indicates the features/abilities of the Lenel OnGuard Access Control system 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 ***Lenel OnGuard Integration App-note***, available on the Cathexis website, and/or the ***CathexisVision Setup Manual***.

1.1 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.

1.2 Requirements

1.2.1 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.

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

1.2.2 CathexisVision License Requirements

License No.	License Name	Description
CLEN-2000	**Lenel Device License.**	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 controller.

CLEN-1001	**Single reader license.**	These licenses apply to the readers, in an access control system. The **CLEN-1001** will license a single reader, and may be added on a reader-by-reader basis.
CLEN-3000	**Bundle License.**	This license includes the **CLEN-2000** access control device license, and also provides support for unlimited **CLEN-1001** reader licenses.

Note:

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

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.

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.

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 Lenel OnGuard software when integrated with CathexisVision.

2.1 General Device Features

2.1.1 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.

2.1.2 OnGuard Messages

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

2.1.3 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

2.2 Device Objects

Device objects populate automatically once communication is established.

Object Type		Abilities
General		• 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	**Object Properties**	Following Panel object properties are indicated in CathexisVision:

		• Name of panel • Type of panel • Connection status • Segment ID • Workstation panel is connected to
	Connection Status	• Panel changes to Offline/online when: ○ CathexisWMIWrapper service stops/starts, ○ Access control panel is disconnected.
Reader	**Object Properties**	Following Panel object properties are indicated in CathexisVision: • 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
	Command	• Open Door. • Set Mode: ○ Locked ○ Card only ○ Pin or Card ○ Pin and Card ○ Unlocked ○ Faculty Code Only ○ Cypherlock ○ Automatic
	Overlays	• 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: ○ Door forced ○ New transaction occurs ○ Request to exit message received • Some examples of details included in the overlays are: ○ Photo of cardholder ○ Access granted/denied ○ Door used ○ Door left open ○ Door left open is closed ○ Door forced

		○ Request to exit.
Wrapper	**General**	• 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).
	Object Properties	Following Wrapper object properties are indicated in CathexisVision: • 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.

2.3 Device 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		• 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	**Access**	Most door-related events will reflect as Access events, including: • Access Denied: ○ Invalid Badge ○ Reader Locked ○ Reader Unlock • Access Granted: ○ No Entry Made ○ Open Door Command Issued – Door Not Used ○ Access Granted on Facility Code ○ Reader Unlocked ○ No Entry Made, etc.

	Security	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: • Relay Contact Deactivated • Reader Mode Card Only • Door Forced Open • Door Held Open • Access Granted: No Entry Made • Access Denied: Reader Locked
	Informational	Informational events reflect important information about the state of the integration and its components. Informational events include: • Hardware offline/online • Communication with wrapper established/lost, etc.

CathexisVision Event Actions		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.
		Only reader objects may be controlled via a CathexisVision system event action, to perform an action:
		• Control reader object → Open Door
		• Control reader object → Set Mode:
		  ○ Locked
		  ○ Card only
		  ○ Pin or Card
		  ○ Pin and Card
		  ○ Unlocked
		  ○ Faculty Code Only
		  ○ Cypherlock

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 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	The meta-database may be viewed by the following options: • Access • Security • Informational • All
Sort Options	The metadatabase may be sorted by: • Device event time.
Easy Search	The metadatabase may be searched specifically for: • Reader ID • Description • Type • Firstname • Lastname • Cardnumber • Is Card Readable • Reader Name • SSNO (JDE ID)
Filter	The metadatabase may be filtered according to: • Time • Reader ID • Reader Name • Description • Type • Firstname • Lastname • Cardnumber • Is Card Readable • SSNO (JDE ID)
Export	Database entries may be exported in CSV and PDF format.

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.

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