WIN-PAK Access Control Integration White Paper

Contents

1. Introduction

This document indicates the features/abilities of the Honeywell WIN-PAK Access Control software solution when integrated with CathexisVision.

For a detailed guide on the installation and configuration of the Win-Pak device with CathexisVision please refer to the ***CathexisVision Win-Pak App-note,*** available on the Cathexis website.

1.1 Integration Purpose

Functionally this integration will entail the triggering of standard CathexisVision Events, based on the triggers from the WIN-PAK device.

1.2 Requirements

1.2.1 General Requirements

- CathexisVision software:
  - CathexisVision 2019.2 and later releases.

- WIN-PAK software/hardware:
  - Tested using WIN-PAK PE Release 4.7 (Build 1070.4).
  - Ensure that the WIN-PAK software is licensed to use the WIN-PAK API.
  - Tested the Honeywell NetAXS Access Control unit, model number NX4S1E using v30625 firmware.

Note:

1. For information regarding the regular operation of a WIN-PAK Control device, please consult the relevant WIN-PAK documentation.
2. There is a General Integration section in the main CathexisVision Setup manual. It has vital information about creating an integration database, as well as a general introduction to the Integration Panel. **Read over this section**.
3. If CathexisVision is 2019 Service Pack 2 and later, the new Cathexis WIN-PAK Service must be installed on the WIN-Pak server.
4. To check the WIN-PAK License contact the WIN-PAK supplier.

1.2.2 CathexisVision License Requirements

License	License Name	Description
CWPK-2000	WIN-PAK access control device license	FEATURE_DEV_AC_WIN-PAK

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

1.2 Limitations

- Only one integration device can make a TCP connection to the WIN-PAK server at any given time. Multiple simultaneous connections are not supported.
- Devices that are added, or renamed in WIN-PAK after the objects have been populated in CathexisVision may only populate after the WIN-PAK server is restarted.
- If the WIN-PAK server has a separate network connection directly to the panel and this network adapter is disabled, the WIN-PAK software will change the panel and its component states to unknown, but the state change will not be forwarded to CathexisVision. CathexisVision will only receive the new states when the network adapter is re-enabled.

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.

2. Features and Abilities

This section indicates the features/abilities of the Honeywell WIN-PAK Access Control software when integrated with CathexisVision.

2.1 General Device Features

- The CathexisVision WIN-PAK access control integration communicates via TCP socket (port number 34500) with the Cathexis Win-Pak Service installed on the server running the WIN-PAK Communication Server.
- The Cathexis WIN-PAK Service communicates with the WIN-PAK Communication Server using the Windows Component Object Model.
- There is two-way communication between the Cathexis WIN-PAK Service and the WIN-PAK Communication Server. CathexisVision does not communicate with the WIN-PAK hardware.
- All device events are received as Device updates and Logs.
- All events are databased.
- Camera overlays are supported for all Device events.
- Object states and Device events can be used to trigger events and commands can be issued to objects from the event actions.

2.2 Device Objects

Objects are populated automatically as soon as communication between the WIN-Pak Device and CathexisVision is established.

Object Type		Abilities
General		• This integration has Device objects which consist of all the WIN-PAK hardware types, for example Panel, Input, Output, Entrance. • Objects are automatically created as soon as communication between the CathexisVision unit, the Cathexis WIN-PAK Service and the WIN-PAK Communication Server is established. • Device objects are displayed with Name, Type and State. • The WIN-PAK software specifies which commands can be issued to Device type objects. • The communication channel will always be up and must not be used to trigger events.
Device	**Object Properties**	• Name. • Type. • State.
	States	• Alarm.

- AUX Port Panel Alarms.
- AUX Port Panel OK.
- AUX Port Panel Unknown.
- Door Ajar.
- Entrance Alarm.
- Entrance OK.
- Entrance Trouble.
- Entrance Unknown.
- Entry in Progress.
- Exit in Progress.
- Ext 5V Panel Alarms.
- Ext 5V Panel OK.
- Ext 5V Panel Unknown.
- Ground Fault Panel Alarms.
- Ground Fault Panel OK.
- Ground Fault Panel Unknown.
- Input Alarm.
- Input Normal.
- Input Trouble.
- Input Trouble Cut.
- Input Trouble Short.
- Input Unknown.
- Login Pending.
- Loop Alarm.
- Loop OK.
- Loop Unknown.
- Low Voltage Panel Alarms.
- Low Voltage Panel OK.
- Low Voltage Panel Unknown.
- NULL.
- NX4 Device Normal.
- NX4 Device Trouble.
- NX4 Device Unknown.
- OK.
- Output Deenergized.
- Output Energized.
- Output Trouble.

- Output Unknown.
- Panel Alarms.
- Panel Comm Panel Alarms.
- Panel Comm Panel OK.
- Panel Comm Panel Unknown.
- Panel OK.
- Panel Tamper Panel Alarms.
- Panel Tamper Panel OK.
- Panel Tamper Panel Unknown.
- Panel Unknown.
- Poll Response Panel Alarms.
- Poll Response Panel OK.
- Poll Response Panel Unknown.
- Primary Power Panel Alarms.
- Primary Power Panel OK.
- Primary Power Panel Unknown.
- Remote Panel Alarms.
- Remote Panel OK.
- Remote Panel Unknown.
- Restart Pending.
- Server OK.
- Server Trouble.
- Server Unknown.
- Shunted Door Ajar.
- Shunted Entrance Alarm.
- Shunted Entrance OK.
- Shunted Entrance Trouble.
- Shunted Entrance Unknown.
- Shunted Entry in Progress.
- Shunted Exit in Progress.
- Shunted Input Alarm.
- Shunted Input Normal.
- Shunted Input Trouble.
- Shunted Input Trouble Cut.
- Shunted Input Trouble Short.
- Shunted Input Unknown.
- Shunted NULL.

		• TCP Connection Down. • Unknown.
	Commands	• Shunt. • Unshunt. • Energize. • Deenergize. • Lock. • Unlock. • Pulse. • Timed Pulse.
Communication Channel	**Object Properties**	• Name. • Channel status. • Details. • Creation type. • Creation time. • Idle time (min).
	States	• Up. • Down.

2.3 Device Events

The CathexisVision WIN-PAK integration generates Device Update and Log 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 Device Update and Log
Device Event Types	Device Update	• Device Type. • Time. • HID. • Device Name. • Status.
	Log	• Log Type. • Device Type. • CommSrvID. • Account. • Reader Point.

	• Prio. • Time. • Notification. • Status. • EventID. • Point. • Site. • Card Number. • Full Name.
CathexisVision Event Actions	The WIN-PAK software specifies which commands can be issued to Device type objects. The following commands are available: • Shunt. • Unshunt. • Energize. • Deenergize. • Lock. • Unlock. • Pulse. • Timed Pulse.

2.3 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. Reports can be generated from the filtered metadatabase and emailed out on a schedule basis.

Database Element	Features/Abilities
General	• All device events are databased. • Database entries include the footage from up to four 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. • Device. • Event. • Alarm.
Sort Options	• Device event time.
Easy Search	• HID. • Device Name. • Status. • CommSrvId. • Account. • Reader Point. • Prio. • EventID. • Site. • Card number. • Full name.
Filter	• Time. • Log Type. • Type. • HID. • Device Name. • Status. • CommSrvID. • Account. • Reader Point. • Prio. • Notification. • EventID. • Point. • Site. • Card Number. • Full Name.
Export	Database entries may be exported in CSV and PDF format or emailed out on a schedule.

2.4 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 a specific, or 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 states, or events are triggered. • Commands that can be issued to Device objects in the integration section can also be issued to the same Device objects on the map.
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.

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*