CathexisVision 2022.1

Release Notes

Contents

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.

1. General Notices

Types	Feature (Addition)	Modification (Change)	Fix (Problem fix)	Deprecated (Removed)

Note:

I. Further information on the cameras listed in these Release Notes should be found here:
http://integrations.cathexisvideo.com/supported-i-p-cameras

II. Further information on integrated devices listed in these Release Notes should be found here:
http://www.cathexisintegrations.com/supported-integrations

1. CathexisVision 2016 is the last major release to support the viewing of wavelet video (and VOM2x10 cards). CathexisVision 2016 software does not support wavelet hardware, but it does allow users to connect to and view wavelet video from earlier versions that do support it, subject to the usual restrictions on backward compatibility.

2. The multisite user interface has been discontinued from 2016 onwards.

3. AVM3000 framegrabbers and SAM1000 encoders are not supported from CathexisVision 2016 onwards.

4. From CathexisVision 2017, the concept of unit groups for a user is no longer supported. Unit groups will be supported for connections to sites running earlier software versions.

5. CathexisVision 2018 is the last release to support the Linux Fedora 16 operating system.

6. From CathexisVision 2018, the user interface may connect to previous versions of CathexisVision Server software, but with a loss of functionality. It is recommended that the viewing software and the recording software be of the same major version.

7. Support for Windows Vista and Windows Server 2008 has been dropped from CathexisVision 2018.3 and onwards.

8. The ID process used for licensing a system running on a virtual machine changed in CathexisVision 2018.

9. 2020 is the last release to support Ubuntu 12.04.

10. CathexisVision 2021 is the last release with a 32-bit installer for Windows. For guidelines on converting 32-bit software to 64-bit, see the relevant document, ***Converting 32-bit Software to 64-bit Software App-note***.

11. The Carbon user interface is supported from CathexisVision 2022 onwards.

12. The new CathexisVision mobile app is supported from CathexisVision 2022 onwards.

13. CathexisVision 2021 is the last release to support Windows 7, Windows 8, Windows 8.1 and Windows Server 2008 R2.

14. The CathexisVision 2022 software can only connect to sites running CathexisVision 2018 and above.

2. Critical Changes for 2022.1

2.1 Features

	Key area	Software Change
1	Analytics	People proximity. Added "classify on minimum motion". Added human pose models. Internally, classifications will run in async mode when possible.
2	Analytics	Addition of analytics models, human pose fp32 v1 and common objects v3. Option to show overlay with only objects appearing in the classification lists selected in the triggers.
3	Analytics	Added option to overlay algorithm settings on reference images.
4	Analytics	Local flare suppression and local noise suppression in object tracker algorithm.
5	Analytics	Framerate option added in object tracking analytics and basic object classifier.
6	API	Added HTTP connections and HTML stats to API server.
7	Archive Viewer	Added multi-language support to Archive Viewer 2.
8	CathexisVision Mobile	The new CathexisVision mobile app is available from CathexisVision 2022 and later releases.
9	Core	Carbon, a new user interface that is sleek and intuitive, is available from CathexisVision 2022 and later releases.
10	Core	Added CatObserver support for Ubuntu 20.04
11	Integration	CathexisVision now integrates with the following: • Nedap Access Control • Titan Weighbridge
12	Network cameras	Dahua. Reworked Dahua PTZ, and also added "Area zoom" PTZ feature.
13	Network cameras	Added Huawei driver derived from the ONVIFv2 driver.
14	Videowall	Implemented pre-spooling of live video for salvos and sequences to improve the time to first frame when the feeds are switched. **Note**: this is for the new accelerated videowall. Pre-spooling is already supported in the old videowall.

3. General Changes for 2022.1

3.1 Features

	Key area	Software Change
1	Analytics	Added classifier model description translations.
2	Analytics	Improved certain classifier algorithms' post-processing. Only show selected occupancy metric in overlay (basic object classifier occupancy). Added person attributes to basic object classifier.
3	Analytics	Still object algorithm. Added trigger to still object algorithm, when still object is removed.
4	Carbon	Added support for a login notice which the user has to acknowledge when logging in using the Carbon UI.

3.2 Modifications

	Key area	Software Change
1	Analytics	Updated human pose v1 model that is faster and less resource-intensive.
2	Analytics	Updated to neural network engines, allowing the use of newer Nvidia cards and more recent OpenVINO models.
3	Analytics	Still object. Replaced "still object is moved" trigger with level still object trigger.
4	Analytics	AI model name changes and addition of model description to assist in model selection during setup.
5	API	Improved transcoded API transmission of MXPEG video in low bandwidth conditions.
6	API	Added frame drop stats to API. Increased TCP transmit buffer size.
7	API	Increased the maximum simultaneous allowed HTTP connections to the API from 32 to 128. This setting is now also configurable in system.ini. For example, to set the max to 200: [api] max_http_connections 200 **Note** that the allowed range is 32 to 256.
8	Carbon	Added speed control to Carbon Archive Viewer to match the operation in the Enterprise user interface.
9	Carbon Mobile	Support "Snap Search" on Carbon Mobile. This change fixes issues with pulling frames when the mobile app attempts to do Snap Search on a sparse (event-based) recording.
10	Core	CathexisVision Site. Increased the maximum supported length of resource names within the site configuration to 127 characters. Earlier versions (CathexisVision 2021 and before) are limited to 29.

8		**Note**: to avoid problems, all servers on a site running CathexisVision 2022 need to be running this release or later. Mixing with an earlier release will not work. In addition, the client software needs to be RC25 or later to connect to systems running this change.
11	Failover	The "failover" technical alarm will now also include an alarm when a hotspare actively fails over a server.
12	General	Email. Added detailed log of emails sent by system.
13	General	Email. The length of email addresses in site contacts has been increased from 40 to 127.
14	Integration	Impro Portal Pro. The Impro Portal Pro integration now supports states for use on the map.
15	Integration	Quido I/O. The Quido I/O integration metadatabase now supports multiple camera links.
16	Network cameras	Mobotix V2. Added display modes support in the MobotixV2 driver for fisheye cameras.
17	Network cameras	Added support for "camera_name" variable for camera technical alarms.
18	Video format	Set media file export time overlay size based on video size.
19	Video format	Changed MPEG4 packet transmission size from 4KB to 1400 bytes as requested by WG Global.
20	Videowall	Delayed videowall startup by 10 seconds to allow Windows time to initialise screens.
21	Videowall	Videowall 2. Made high DPI scaling configurable. High DPI scaling will default to "On". This is to address the text size on 4K monitors.

3.3 Fixes

	Key area	**Software Change**
1	Analytics	Event snapshots now created for all algorithms.
2	Analytics	Basic object classifier. Fixed basic object classifier in area rule, to trigger only on recent object in area.
3	Analytics	Basic object classifier. Fixed bug in colour extractor.
4	Analytics	Object tracker. Fixed bug in flare suppression.
5	Analytics	Basic object classifier. Improved fg/bg tracking in basic object classifier.
6	Analytics	Clear Nvidia resources per nvr_server when no longer in use.
7	Analytics	Event snapshots now created for all algorithms.
8	API	Fixed issue to prevent API pulling down transcoded live streams when the source video is corrupt.

9	Archive Viewer	Fixed issue in which export of an archive to MP4 was broken even if the archive had the exportable flag.
10	Carbon	Implemented PTZ wash/wipe support for Carbon user interfaces.
11	Database	Check included for corrupt database partition state header.
12	Email	Added SMTP connection timeout for Windows.
13	Integration	Commend Intercom V2. A second version of the Commend Intercom integration has been added, to address shortcomings in the original version, while maintaining backwards compatibility.
14	Integration	Herta. - Fixed an issue when an invalid IP address is entered. - Fixed an issue so that the name, surname, photo and score are retained when an identification event changes to a detection event.
15	Integration	Impro Portal Pro. The metadatabase quick filter for the username in the Impro Portal integration has been changed from a dropdown list to a partial match text input.
16	Integration	SWM Intrepid. Fixed an issue that could cause the inputs on an Alarm Input Module to display the incorrect state.
17	Network cameras	Milesight. Added H265 support for Milesight models ending in A, C, and D.
18	Network cameras	Samsung SNV-7080 audio settings. Removed "Gain", split source into separate command.
19	Security	Apache security patch. Apache server and modules updated to v2.4.51 to fix security vulnerabilities.
20	General	Fixed potential crash in CathexisVision UI when site updates arrive while handling alarm.