



CathexisVision 2021.1

Release Notes

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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)
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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 2018 is the last release to support the Linux Fedora 16 operating system.
 2. 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.
 3. Support for Windows Vista and Window Server 2008 has been dropped from CathexisVision 2018.3 and onwards. Support for Windows Server 2008 R2 remains.
 4. The ID process used for licensing a system running on a virtual machine changed in CathexisVision 2018.
 5. 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.
 6. The multisite user interface has been discontinued from 2016 onwards.
 7. 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.
 8. AVM3000 framegrabbers and SAM1000 encoders are not supported from CathexisVision 2016 onwards.
 9. 2020 is the last release to support Ubuntu 12.04.
 10. Windows 32-bit of CathexisVision is not available from CathexisVision 2021. For guidelines on converting 32-bit software to 64-bit, see the relevant document, **Converting 32-bit Software to 64-bit App-note**.

A NOTE ON CAMERA CHANNELS

The CathexisVision software packages have **limits on camera channels**. A multi-head 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. Critical changes for 2021.1

#	Key area	Software Change	Type
1.	Analytics	Basic object classifier. Added occupancy trigger option in the “in area rule” in Basic object classifier algorithm with an option to export this information to a third-party system.	Feature
2.	Analytics	Mask detection. Added mask detector algorithm to analytics options.	Feature
3.	Analytics	People proximity. Added people proximity algorithm to analytics options.	Feature
4.	Analytics	Still object detection. Added option to trigger on appeared or disappeared objects.	Feature
5.	Analytics	Thermal face temperature. Added thermal face temperature algorithm to analytics options.	Feature
6.	General	Translation. Added Russian translation to CathexisVision software.	Feature
7.	General	Translation. Added support for Croatian language translation.	Feature
8.	Integration	ANPR. The ANPR system now has the ability to trigger an event based on a license plate not exiting an area in a given time period.	Feature
9.	Integration	ANPR. The ANPR system now has the ability to trigger an event based on the average speed between two locations.	Feature
10.	General	CathexisVision 2021.1 is the last release with a 32-bit installer for Windows. 32-bit installations will need to change to using the 64-bit software.	Modification
11.	General	CathexisVision 2021 will not connect to CathexisVision 2016 and earlier.	Modification

3. Feature changes for 2021.1

#	Key area	Software Change	Type
1.	Analytics	Basic object classifier. Thumbnails API. This is the ability to identify and extract thumbnail pictures of people’s faces and export these to a third party.	Feature
2.	Analytics	Basic object classifier. Occupancy overlay is now persistent and changes colour when a trigger occurs.	Feature
3.	Analytics	Basic object classifier. Added multiple models to basic object classifier to optimise for accuracy or processing cost.	Feature
4.	Analytics	Basic object classifier. Basic object classifier algorithm now has “Preferred backend” option (such as GPU_CUDA) to run AI on. The basic object classifier (depending on the nature of the classification) may be able to run on the PC processor, a plug-in Nvidia graphics controller, or an onboard Intel graphics controller. This allows the user to operate more algorithms on the system simultaneously.	Feature
5.	Analytics	Basic object classifier. Added feature to send thumbnail of classified objects to http(s) server.	Feature
6.	Analytics	Mask detection. Added an alternative face detector to run on Nvidia GPUs and added an option to select preferred backend.	Feature
7.	Analytics	Mask detection. Added option to change overlay text size and position, and to decrease and increase outer face ellipse.	Feature
8.	Analytics	Nvidia cards. Determined Nvidia compute capability to detect supported Nvidia cards. Setting to merge classified bounding boxes are close to each other, thereby reducing double counts. Setting to adjust maximum distance to track objects.	Feature
9.	Analytics	Object detector. Changed to classify only when there is motion, unless still objects are to be classified.	Feature
10.	Analytics	Object tracking. Object tracker algorithm now has “Preferred backend” option (such as GPU_CUDA) to run AI on.	Feature
11.	Analytics	Object tracking. Added repetitive noise suppression option to object tracker.	Feature
12.	Analytics	Still object. Improved still object algorithm and added a refresh background setting (time to keep an object as foreground after it has triggered).	Feature
13.	Analytics	Thermal face temperature. Added option to change overlay text size and position, and to decrease and increase outer face ellipse.	Feature
14.	Analytics	Thermal face temperature. Model and backend options added to thermal face temperature algorithm.	Feature

15.	API	Added API video export function.	Feature
16.	Archive Viewer	Added option to the archive viewer to redact faces, when exporting an existing archive to mp4.	Feature
17.	General	Email. Added STARTTLS connection support for emails.	Feature
18.	General	Technical alarm. Added stalled feed technical alarm.	Feature
19.	Integration	Axis. CathexisVision now integrates with Axis I/O.	Feature
20.	Integration	Durban Sugar Terminal weighbridge. CathexisVision now integrates with the Durban Sugar Terminal weighbridge.	Feature
21.	Integration	Grekkom Ngarno. CathexisVision now integrates with Grekkom Ngarno analytics.	Feature
22.	Integration	Mettler UC3 scale. CathexisVision now integrates with Mettler UC3 scale.	Feature
23.	Integration	Moxa I/O. CathexisVision now integrates with Moxa I/O.	Feature
24.	Integration	OnDis. CathexisVision now integrates with the OnDis Gateway.	Feature
25.	Integration	Sasco Natal weighbridge. CathexisVision now integrates with Sasco Natal weighbridge.	Feature
26.	Integration	SentryWay Railcams. Added support in ONVIFv2 driver for SentryWay Railcams.	Feature
27.	Integration	Stentofon intercom. CathexisVision now integrates with the Stentofon intercom system to track when calls occur.	Feature
28.	Network cameras	FFGroup LPR. The FFGroup LPR camera plugin is now supported on Axis and Mobotix cameras.	Feature
29.	Network cameras	Milesight. Added audio out support for Milesight cameras. The driver now supports both G711a and G711u audio codecs.	Feature
30.	Network cameras	Mobotix. A new "Mobotix ONVIF" driver was added. This is the normal ONVIF driver with the addition of support for the FFGroup LPR plugin on Mobotix cameras.	Feature
31.	Network cameras	Mobotix. Added advanced settings to Mobotix thermal driver.	Feature
32.	Network cameras	Mobotix. Added support for new Mobotix API changes from firmware 5.2.	Feature
33.	Network cameras	Network cameras. Added Fully Qualified Domain Names (FQDN) support for the address of the camera.	Feature

34.	Network cameras	NVR database. CathexisVision can now insert missing recordings from the camera's storage into the NVR's database.	Feature
35.	Video wall	Video wall. Added a video wall replacement for the old video wall with improved performance. Review not supported.	Feature
36.	Analytics	Advanced analytics. Added spider exclusion to the object filters found in the advanced object tracker trigger rules.	Modification
37.	Analytics	Openvino library. Use Openvino library to determine hardware support for Intel AI models.	Modification
38.	Analytics	Still object. Reduced false positives when still objects leave the scene.	Modification
39.	Analytics	Still object detection. Improved still object algorithm to hold off updating "old bg" while there is motion in the capture area.	Modification
40.	Analytics	Thermal face temperature. Changed to classify when there is motion.	Modification
41.	API	Added associated camera to an encoder input in the API resource monitor query.	Modification
42.	API	Added associated cameras to output for API.	Modification
43.	Core	CathexisVision 2020 is the last release to support Ubuntu 12.04	Modification
44.	Core	Ubuntu 20.04 will not support IO cards or plug-in video cards.	Modification
45.	Core	Re-added support for VMX monitors.	Modification
46.	Core	Added an option to get streaming video (sv2) to output scaled RGB.	Modification
47.	General	Translation. Updated the following translations: <ul style="list-style-type: none"> • Spanish • Italian • German 	Modification
48.	Installation	Added exclusions for Windows Defender to CathexisVision Performance Wizard.	Modification
49.	Integration	ANPR. Added ANPR push notification stats, added timeout to HTTP ops, and checked server response code.	Modification
50.	Integration	Database. Added button on integration database video controls to go to end of transaction.	Modification
51.	Integration	Edeka. The "EasySearch" filters for the Edeka POS and Edeka Waage integration metadatabase has been modified to support partial, case-insensitive searches on some fields.	Modification

52.	Integration	Herta. Overlay has been moved down to prevent it overlapping with text.	Modification
53.	Integration	Herta. Modifications to Herta overlay – maximum image size has been increased, text size has been increased, and a bug that caused a delay was fixed.	Modification
54.	Integration	Impro. The Impro Portal integration driver now supports encryption on Windows.	Modification
55.	Integration	Videoguard. Formatted the mac address so that it matches what Videoguard expects.	Modification
56.	Integration	Woolworths POS V2. The store code will now be displayed in the Woolworths V2 overlay.	Modification
57.	Integration	Fixed GalaxyV2 driver to also query zones 257 to 512.	Modification
58.	Network cameras	Dahua. The Dahua edge review no longer starts reviewing from the earliest recording when it fails to find a recording for the requested time.	Modification
59.	Network cameras	Mobotix. The sound files played by the Mobotix thermal camera's outputs are now configurable.	Modification
60.	User interface	Added aspect ratio of video feed to resolution drop-down in video feed setup.	Modification
61.	Analytics	Basic object classifier. Fixed crash when detected objects are extremely small.	Fix
62.	API	Fixed choppy and delayed audio when using the API to transmit audio to a network speaker.	Fix
63.	API	Fixed an issue where the API NVR service could run out of memory when the client streams a recorded stream and pauses the video on the browser.	Fix
64.	CatObserver	Fixed the flickering that can occur at some resolutions when using the CatObserver v2 driver.	Fix
65.	Core	Removed the option for the multi-camera archive viewer to copy the viewer when doing a sub-archive.	Fix
66.	Core	Reject external drops (files) into multi-camera archive viewer.	Fix
67.	Core	Fixed issue when trying to delete reference images.	Fix
68.	Core	Prevented neural net algorithms from running on the unsupported Nvidia GeForce GT 1030 card.	Fix
69.	Core	Dealt with crash when Openvino is run on unsupported hardware.	Fix
70.	Core	Fixed crash in relay encoder destructor.	Fix

71.	Core	Fixed a rare review streaming/archiving issue that can occur when failover footage has been copied back to the main NVR database, and overlapping partitions contain duplicate items.	Fix
72.	Failover	Fixed a rare review/archiving issue in which failover footage was copied back to the main NVR database.	Fix
73.	General	Fixed retrieval of Sherlocks on Windows.	Fix
74.	Hardware	Fixed issue with the first generation of CNVRs in which the power over ethernet would not switch on when a camera was unplugged and then plugged back in.	Fix
75.	Integration	Quido. Fixed possible memory leak. Fixed issue when an integration failed to communicate with the Quido device for several hours.	Fix
76.	Integration	Sasco Natal weighbridge. Prevented repeated event spam.	Fix
77.	Integration	SWM Intrepid. Fixed an issue where the SWM Intrepid integration drive window would become unresponsive.	Fix
78.	Integration	Woolworths POS V2. Fixed the text overlay header to not incorrectly appear at the end of the transaction. Added support for some items.	Fix
79.	Network cameras	Fixed an issue in which the edge review of the ONVIF driver would fail without presenting a warning.	Fix
80.	Network cameras	Fixed tearing in merged image in thermal camera overlay.	Fix
81.	System monitoring	Prevented database configuration alarm/alert notification on server running as failover hotspare.	Fix
82.	Video wall	Fixed potential crash in video wall under extreme load.	Fix