



CathexisVision 2018.1 Release Notes

Contents

1	Critical Changes for 2018.1	2
2	Feature Changes for 2018.1	5

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

- I. 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.
- II. Further information on cameras listed in these Release Notes should be sought here: <http://integrations.cathexisvideo.com/supported-i-p-cameras/>
- III. Further information on integrated devices listed in these Release Notes should be sought here: <http://www.cathexisintegrations.com/supported-integrations/>

Critical Update Notices

- 1. The CathexisVision 2018 user interface may connect to previous CathexisVision servers, but with a loss of functionality. It is recommended that the viewing software and the recording software be of the same major version.
- 2. The ID used for licensing a system running on a virtual machine changed in CathexisVision 2018. From 2018, CathexisVision will be aware of running in a Virtual Machine, and will have knowledge of the underlying hardware.
- 3. CathexisVision 2018 does not support the viewing of wavelet video, whether in live, review or archives.
- 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. The multisite user interface has been discontinued from 2016 onwards.
- 6. 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.
- 7. AVM3000 framegrabbers and SAM1000 encoders are not supported from CathexisVision 2016 onwards.

1 Critical Changes for 2018.1

#	Key area	Software Change	Type
1.	ANPR	License plate shapes and prefixes have been added to ANPR detection. The availability of these features is subject to the ANPR engine.	Feature
2.	ANPR	<p>Added classification for Arabic plates. This classification includes:</p> <ul style="list-style-type: none"> • Shape • Prefix • Tags (taxi, government etc.) <p>This has been done, with varying degrees of support, for the following countries:</p> <ul style="list-style-type: none"> • UAE • Bahrain • Jordan • Kuwait • Lebanon • Oman • Qatar • Saudi Arabia • Syria • Yemen <p>The classification of plates is an ongoing process. If the shape, prefix or tags for a license plate are incorrect please send a sample image to Cathexis for analysis</p>	Feature
3.	ANPR	<p>There is now a single base license for LPR (CLPR-2000), with per-detector licenses (CLPR-1001). These licenses must be applied to the server that the LPR integration device is configured on.</p> <p>The CLFF-2000 (freeflow dongle), CLPK-2000 (parking dongle) and CLDT-1001 (lane license) license have been deprecated. The CLFF-2000 and CLPK-2000 will be considered a CLPR-2000 license, and the CLDT-1001 will be considered a CLPR-1001 license so that existing sites continue to function.</p> <p>Existing sites will continue working after an upgrade to 2018 as long as the integration device was configured on the same server as the LPR algorithms.</p>	Modification
4.	General	There are no firmware changes for the SAM3104 and SAM3101. It is recommended that these devices remain using 5043bx firmware.	Modification

5.	Integration	<p>CathexisVision now supports the BACnet protocol. Functionality includes:</p> <ul style="list-style-type: none"> • Device and object discovery. • Receiving events. 	Feature
6.	Integration	<p>Events were time-stamped using a second resolution, which meant the video and the event may not have been accurately synchronised. The time-stamp resolution has now been increased to millisecond resolution.</p> <p>The time zone used for marking events may be incorrectly specified, resulting in the affected drivers (below) not working correctly in other time zones. This has been corrected.</p> <p>Drivers affected:</p> <ul style="list-style-type: none"> • ACT access control • Caddx alarm panel • Design International CCTV • DSC IT100 alarm panel • FSK alarm panel • FFT perimeter monitoring • Galaxy alarm panel • Impro IXP20 • Impro IXP220 • Impro IXP400 • Matrix barcode reader • Moduteq 2W perimeter monitoring • Moduteq C perimeter monitoring • Paradox EVO192 alarm panel • SACO access control • SAFLEC access control • SkyNet • SoftCon access control • Technoswitch fire panel • Texecom Elite alarm panel • Texecom Premier alarm panel • Trek scale • WBX weighbridge 	Fix
7.	Licensing	<p>The ID used for licensing a system running on a virtual machine has changed. From 2018 onwards, CathexisVision is aware of running in a Virtual Machine, and has knowledge of the underlying hardware.</p>	Feature
8.	Licensing	<p>Changes to the software licensing scheme have been implemented. Consult the 2018 Product Description and License Document.</p>	Feature
9.	Licensing	<p>Added the CVGA-2001 license which allows unlimited video-walls on a site.</p>	Feature

10.	Network Cameras	<p>Added the HikVision V2 integration driver, as some more recent HikVision products only support this newer protocol. Using the V2 driver (instead of V1) is recommended if camera firmware is issued from 2015 onwards.</p> <p>Note: Please consult manufacturer for firmware and protocol information.</p>	Feature
11.	User Interface	<p>Manuals are now included in the software. They can be accessed via Help Menu → Manuals.</p>	Feature

2 Feature Changes for 2018.1

#	Key area	Software Change	Type
1.	Alarm	Fixed an issue with the stand-alone alarm handling feature, where alarms were received to clients but not to the base-station.	Fix
2.	Alarm	Fixed a potential alarm server crash that could occur when delivering alarms to an alarm gateway.	Fix
3.	Analytics	Increased the number of algorithms a server can handle.	Feature
4.	Analytics	Added the following search tools in review mode: <ul style="list-style-type: none"> • Activity Trails. • Motion Area Search. • Review timeline thumbnail snapshots. 	Feature
5.	Analytics	Updated the Still Object algorithm in Analytics: The user may now choose between the 'Legacy' (pre-existing) algorithm, and the new 'background model' algorithm.	Feature
6.	Analytics	Added a sensitivity parameter and shadow strength parameter to the Colour Top Down Tracker analytics settings. When configuring the algorithm and pressing the play button to test the settings, different debug images are now available in the advanced tab.	Modification
7.	Analytics	Modified the Tamper analytics rules so that a tamper must now persist for at least 60 seconds before it is considered a true tamper.	Fix
8.	ANPR	Added traffic analysis rules to ANPR integration device.	Feature
9.	ANPR	The use of HikVision cameras as a source of ANPR information is now supported.	Feature
10.	ANPR	The time to process a frame is now shown when analysing configuration in ANPR setup.	Modification
11.	ANPR	ANPR detectors that use a trigger are now called 'Triggered detectors' instead of 'Parking detectors.'	Modification
12.	API	Added support for the 'Range' field in RTSP PLAY command for review playback commands. Previously the API only supported a time specified in the URL. Note: <ul style="list-style-type: none"> • Only the 'clock' time units are supported. • Only the start time is used. 	Feature
13.	API	Fixed an issue with API transmission of MJPEG frames from certain cameras.	Fix
14.	APR	If multiple ARH ANPR engines are installed on a system, the CathexisVision software will now pick the latest engine that matches the region. Previously the first engine that matched the region was picked.	Modification
15.	Archiving	CathexisVision now supports archiving and viewing of files containing non-ASCII characters (e.g. Arabic characters).	Modification

16.	Archiving	Bit-rate text size has been increased in the Archive window.	Modification
17.	Archiving	Before archiving begins, a check will be run and a popup error will be displayed if archive filename already exists.	Modification
18.	Archiving	Fixed an archive-to-USB device problem on Ubuntu where physically pulling out the USB device too soon could cause corruption in the archive or Archive Viewer.	Modification
19.	Archiving	A warning will now be shown when a user attempts to archive a camera with no recordings.	Fix
20.	Archiving	Video will now archive to a default path if the last archive path is no longer present.	Fix
21.	Archiving	The error message indicating that an error has occurred during archiving has been clarified. Previously, the popup window would indicate the archive had completed, but below that a sub-message would indicate that none of the archives completed.	Fix
22.	CatObserver	Support for CatObserver has been added to Ubuntu 16.	Feature
23.	CatObserver	Added the option to modify catObserver bitrate.	Modification
24.	Configuration	In the Cameras panel of Configure Servers in the Setup Tab, cameras are now sorted numerically when sorted by Address.	Feature
25.	Configuration	The camera name can now be set without opening the camera edit window. This allows the name to be set for offline cameras.	Feature
26.	Configuration	The primary IP address for NIC's with aliased addresses on Windows will now be used.	Fix
27.	Configuration	Fixed a crash in the GUI which occurred when a dialog window (e.g., Edit Camera) is open and the connection to the site drops.	Fix
28.	Core	Saving network camera settings has been optimised to improve performance on systems with a large number of camera (more than 1000).	Fix
29.	Database	Added the ability to manage Windows network shares from CathexisVision. Previously this was done using a text file.	Feature
30.	Database	Added a warning notification when cameras are set to record to a database that doesn't exist.	Modification
31.	Database	Added a warning when detaching either disks or network shares from storage management when they contain databases in use by the NVR.	Modification
32.	Database	Database alarm has been added for events which trigger but receive no video.	Modification
33.	Database	New databases will leave slightly more space on a disk to make the database system more robust if the file system becomes corrupt (typically on a hard power reboot or when there is underlying disk damage).	Modification
34.	Database	Fixed an issue where importing a database that contained missing partition files would degrade the database.	Fix
35.	Failover	Fixed a potential stall of failover data reinsertion.	Fix

36.	Gateway	A new graphing engine has been implemented which offers improved charts in gateway reports.	Feature
37.	Gateway	Fixed the adding and viewing of Alarm Gateway case attachments on a Windows client.	Fix
38.	General	<p>USB device management has been added to Linux units:</p> <ul style="list-style-type: none"> • The low-cost NVR now supports auto-mounting of USB devices in kiosk mode. • All Linux units are provided with the mechanism to eject mounted USB devices. <p>When removable USB devices are present and mounted, an icon will appear in the top right-hand side of the screen. Clicking the icon offers a menu with devices that can be unmounted (ejected).</p>	Feature
39.	Integration	Added the BioAccess access control software.	Feature
40.	Integration	Added Commend Intercom integration.	Feature
41.	Integration	CathexisVision can now present hardware monitoring data from the ISILON system.	Feature
42.	Integration	Added the Paradox V2 integration which uses the Paradox APU V2.18 to communicate with Paradox SP and MG panels.	Feature
43.	Integration	The integration framework has been modified to allow multiple objects, of any type, to be linked to a message type. This allows transactions in the integration database to be linked to cameras from multiple objects.	Modification
44.	Integration	<p>A heartbeat has been added to the Optex REDWALL integration:</p> <ul style="list-style-type: none"> • The sensor object's state will now display 'Offline' when no communication has been detected for 20 seconds. • A status event will also be generated. • The REDWALL firmware must now be at least 1.2.0. 	Modification
45.	Integration	The interval at which Impro IXP400 controllers are polled for their states has been increased from 2s to 30s.	Modification
46.	Integration	Fixed a naming and camera linking issue with the Zeag parking Station integration driver.	Fix
47.	Interview	Added support for Cathexis Interview encoder.	Feature
48.	Keyboard	A PTZ 'Access Denied' error will be displayed when the user attempts to pan/tilt/zoom a PTZ camera that the KBD-3000 does not have access rights for.	Modification
49.	Live Video	<p>Dynamic streams can now be enabled through the user interface.</p> <p>Note: Both the GUI and the Video Wall default to using dynamic streams. Users may want to change this default if they require monitoring over slow links and use transcoded feeds.</p>	Feature
50.	Live Video	Fixed a problem where overlays were not working in live view when a 64-bit client connected to a 32-bit server (and vice versa).	Fix

51.	Live Video	Improved live and review video play for cameras using RTP/L555UDP or RTP/L555TCP transport types.	Fix
52.	Logic	Added the 'Cathexis Events' meta-database. After it has been added, all system events are saved to this database. This allows sorting, filtering and exporting of events, even when there is no associated video.	Feature
53.	Logic	Added the option to set a filter period to discard short event triggers. When filter period is set, only trigger levels which remain high for the duration (or exceed) the filter period, will trigger an event.	Feature
54.	Logic	Added an event action which controls a virtual input when an event is triggered.	Feature
55.	Logic	Fixed an issue with starting recordings when more than 1000 cameras were running on a server.	Fix
56.	Map	Fixed the following Map issues: <ul style="list-style-type: none"> On some systems, the map device notifications were not displayed correctly. On Ubuntu 16 the polygon shapes and bitmaps were not displayed. 	Fix
57.	Network Cameras	The user may now configure H264 as a second stream in the Arecont driver. Previously H264 was limited to the first stream.	Modification
58.	Network Cameras	The functioning of Generic Encoder transport types has been modified: <ul style="list-style-type: none"> If the transport type is set to either RTP/L555UDP, RTP/L555TCP or RTP/L555UDP, CathexisVision will only use the selected transport type to stream. If the transport type is set to "Default", CathexisVision will switch between the above transport types until video frames are successfully received. 	Modification
59.	Network Cameras	Fixed an issue where multicast IP and port were not setup on Axis cameras.	Fix
60.	Network Cameras	Resolved a video streaming issue on the Dahua driver (which prevented streaming using 'default' transport type selected), by starting RTSP negotiation without authorization details.	Fix
61.	Network Cameras	Fixed an issue with FLIR cameras where streams may not be published if they had not been configured sequentially. E.g., if a FLIR camera had 4 streams, but only streams 1 and 3 were configured, only stream 1 would be published; stream 3 would be unavailable.	Fix
62.	Network Cameras	Resolved a sensitivity issue with PTZ controls on HikVision encoders. Controls panned/tilted more than expected.	Fix
63.	Network Cameras	Fixed an issue with Mobotix MxPEG inserting duplicate frames into the stream.	Fix

64.	Network Cameras	The following fixes have been made to the SAM3 drivers: <ul style="list-style-type: none"> Fixed an issue with the SAM3 driver where independent audio-in did not restart after going into the setup. Fixed an issue with SAM310x where raw audio did not restart when entering and exiting encoder configuration. 	Fix
65.	Network Cameras	Previously the Test3d camera wouldn't automatically recover streaming after being down for long periods of time. Now it will automatically resume streaming without having to manually enter the camera setup.	Fix
66.	Onvif	Added the live feed resolution and format in the API's camera page.	Modification
67.	Review	Added new recording review monitoring tool to periodically check recordings for failure. Can be enabled by configuring a 'Recording failure' technical alarm.	Feature
68.	System Monitoring	A technical alarm to monitor network connectivity has been added. The system works by pinging a list of IP address targets and generating a trigger if the target does not reply.	Feature
69.	User Interface	Added the ability to retain review time across different cameras in the same panel. If a camera is in review mode, and a new camera is then selected for that panel, that camera will go to the same review time as the original camera.	Feature
70.	User Interface	The status bar now shows a license warning for integration devices that are not properly licensed, either because the device is not licensed or because device objects are not licensed.	Feature
71.	User Interface	Number of forms (monitors) can now be configured in the software. Settings menu → General → Number of forms. Note: Editing the shortcut command line will override this setting.	Feature
72.	User Interface	Alarm gateway connection can now be configured in the software. Settings menu → General → Connect to alarm gateway. Note: Editing the shortcut command line will override this setting.	Feature
73.	User Interface	Cameras' web pages may now be loaded in the browser from the camera setup screen in CathexisVision. This is accessible via right-click on camera → Properties. This applies to all camera drivers.	Feature

74.	User Interface	<p>The following changes have been made to the SnapSearch Utility:</p> <ul style="list-style-type: none"> • Added SnapSearch shortcut to the Video Feed Options Panel. • The selected time period on the timeline will now be used as the default display period. • Added positive/negative sign on snap search 'zoom line' to indicate if the zoom period is before or ahead of the selected snapshot. • Added support for archiving in the SnapSearch embedded player. 	Modification
75.	User Interface	Fixed a problem where editing a camera and then cancelling the edit while the camera was being streamed remotely could result in a terminated message appearing, which would persist when the camera came online again.	Fix
76.	User Interface	Fixed a crash in the GUI which occurred when switching to Live mode from zoomed-in Review mode.	Fix
77.	User Interface	Fixed an issue where the Recall Layout menu item in the Cameras tab did not display new layouts if the Video Wall menu had been shown while there were no new layouts. Newly added layouts are now immediately visible.	Fix
78.	User Interface	H264 streams will now be restarted if the configuration parameters change without notice.	Fix
79.	User Interface	<p>The following modifications have been made to Adjacent Cameras:</p> <ul style="list-style-type: none"> • Increased the opacity of the arrows to increase their visibility when overlaid on dark images. • Arrow colours have changed to blue to avoid clashing with the Activity Trails overlay. • Fixed an issue where the Adjacent Camera links were missing when the GUI started up. 	Fix
80.	User Interface	Fixed timeline 'Future Shadow' position, where the client system did not match the time of the server.	Fix
81.	User Interface	In the Monitors tab in CathexisVision, cameras from sites other than the monitor site can now be dragged and dropped into place.	Fix
82.	User Interface	Fixed an occasional crash of the user interface which occurred when showing the analytics setup dialog. The crash would happen when moving the mouse over the 'Advanced Video Control' section heading. This was caused by event handling change in Qt5.	Fix
83.	User Interface	Fixed a crash that could occur when the source stream resolution changed between PAL and NTSC while streaming.	Fix