GANZ ZNS-AIBOX-STD Release Notes

GANZ AIBOX SOLUTIONS PLATFORM DENMEADE, BRIAN



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Firmware: 60310.1.103612.101 06/25/2024 - Changes in Release

New features

- LPR-Europe App Expansion
 - o Support for Belgium (BE), Spain (ES), and the Netherlands (NL) in the LPR-Europe app.

Improvements & Changes

- Multilingual Translation Quality Improvement
 - o Enhanced the translation quality for Polish, Czech, and Italian.
- Disarm Function Backward Compatibility
 - o Ensure Alarm IN linked Disarm settings set before the feature update continue to operate.
 - o Ensured Disarm event-action rules configured before the update will remain functional.
- Disarm Event-Action Rules
 - o Added target attributes allowing the creation of action rules for changes in Disarm status
 - o Changes specifically for Master, Channel, or System Events.
- Channel-specific Disarm API
 - o Introduced a channel-specific Disarm API available under System Document System API.
- Relay Action Handler Test Feature
 - o Added a test button in the settings UI to facilitate testing of the Relay action handlers.
- Zone Counting App Usability Enhancement
 - Added object count conditions to the Cycle events.
 - o Improved condition-specific event triggering help for Limits and Cycle types.

Bug Fixes

- Event Log Filter Missing System Events
 - Added missing system events to the event log filter, including Login, Tamper, and Network Error.

Firmware: 60310.1.103609.101 06/14/2024 - Changes in Release

New features

- Object Highlighting Option Added to Counter Apps
 - Option to highlight counted objects with a red bounding box (bbox).
 - Relevant apps: People Counting, Vehicle Counting, Vehicle Type Counting, Occupancy, Occupancy Car, Advanced Visitor Analysis, Staff Exclusion People Counting.





- Channel-specific Disarm
 - Introduced the ability to set arm/disarm configurations for specific channels according to schedules or based on alarm input status.
- Intrusion Detection and Loitering Detection apps now include an option to ignore people in vehicles.

Improvements & Changes

- WAN IP Address Display
 - o Enhanced the user interface to display the WAN IP address

Bug Fixes

- Issue where fw version 103604 caused an increase in false alarms.
- Event Logging Issue for Channel ALL in Tamper, Video Loss, Video Recovery
 - Resolved an issue where the involved channels were not being logged in the event logs when set to ALL.
- A problem preventing Viewer group users from viewing videos.
- An authentication error in the real-time reporting feature of the Counter app.
- Bug affecting eth1 WAN communications in some network environments when using eth2 DHCP.

Firmware: 60310.1.103604.101

05/30/2024 - Changes in Release

New features

- Dynamic View: Ability to configure event popup channels.
- Virtual Fence App: Ignoring interval option to prevent additional events from occurring for a specified number of seconds after an event.

Improvements & Changes

- Basic/Advanced Attribute Apps
 - o Enhanced recognition performance and on-screen display (OSD) visualization.
 - o Resolved issues with residual ghosting of object boxes on OSD when using the size filter.
- Basic/Advanced Attribute Apps: Data Format Changes
 - Updated detection target data formats
 - Additional or deleted details can be found in the "System Document Action Message Setting Guide" under the section on Object attributes information tokens.





- Changes in detection target formats have also led to modifications in the person attribute part of the ONVIF metadata.
- Camera Tamper Detection Improvement
 - o Addressed issues with unreliable detection in Camera Tamper Detection.
- Counting App Enhancements
 - o Improved object highlighting by implementing a red bounding box when objects are counted. This enhancement is repeated for emphasis on its importance.
- Safestar Action Handler
 - Changed the message format to include snapshots and event_type[en].
- Tamper Event Performance
 - Enhanced the performance of Tamper (video tampering) event detection.
- Virtual Fence App
 - o Improved user experience by separating advanced settings.

Bug Fixes

- RTSP Authentication Issue
 - Fixed a bug where including '%' in the password during device registration led to authentication failures and inability to connect.
- Drawing Control Issue
 - Resolved an issue where controls are lost when the mouse exits the screen area while drawing zones or lines.
- Action Handlers Attachment Issue
 - Fixed a problem where event post snapshots were not being attached when FTP, Email, or S3 action handlers are triggered.

Firmware: 60310.1.103524.101 05/14/2024 - Changes in Release

New features

- Event Recording Enhancements
 - Added Event ID to recordings, with an API for playback based on the Event ID.
- Forklift Detection App
 - Can be enabled per channel to detect forklift objects within the basic detection apps.
- Documentation Links Added for People Counting, Vehicle Counting, Vehicle Type Counting Apps



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ZN-AIBOX-STD Release Notes v103612

- Metadata Transmission Setting ON/OFF Removed
 - Operates as always ON, channel-specific settings make this unnecessary.
- ONVIF Action Transmission for Counter App
 - Counter app events can now be sent as ONVIF actions.
 - Refer to System Document ONVIF Integration Guide.
- Record Data Retention Setting
 - Automatically deletes data after the set number of days.
- Algorithm to Improve Misidentification of Animals as Humans
 - Configurable per channel under False Alarm Reduction Reducing False Detection menu.

Improvements & Changes

- Enhanced Detection Performance in Vehicle Type Counting App for Buses
- Disabling False Detection Improvement Feature on Channels Using Animal Detection, People Counting, and Zone Counting Apps
- Improved Misidentification of Humans in Thermal Intrusion App
- LPR EU App Performance Improvement (Enhanced license plate detection)
- UX Improvement for Arm/Disarm Indicator
 - Switch direction reversed (ON in Arm state, OFF in Disarm state).
- Action Handler Category for Alarm Panel Added
 - Satel INTEGRA alarm panel integration handlers are included in the alarm panel category.
- License Upload Process Improved
 - Deletes existing licenses of the same type before applying new requests.
- Stream Setting GOP Error Expression Improved
- Kronos Action Handler Enhancements
 - Renamed Alice / Kronos.
 - Changed Image key from snapshots to snapshot.
 - Added <timeUtc></timeUtc> to the payload message.
- Password Reset Questions Requirement Enhanced
 - All three questions must be registered at setup for improved security.
- UX Clarity Improved for Date and Time Setting Menu with NTP Synchronization
 - Added instructions for manual time setting.
 - Improved wording for Auto Time Sync settings option.
- UX Improvement for Zone Counting App
 - Added variable guidance text for Limits type values more than, fewer than.
 - Changed Report type to Periodic event type, removed range setting in Periodic events.





Bug Fixes

- Issue in Staff Exclusion People Counting App Where Non-Staff Were Not Being Counted Properly
- Discrepancy Between Screen Display Object Count and Num Objects in Zone Counting, Multi Zone Counting, Crowd Detection Apps
- Issue Where Widget Text Remained Visible When Widget Display Was Turned Off
- Inoperative Remote Support When Activated
- Intermittent Formatting Failure of NVMe Devices for Recording Reboot Required
- Removed Warning for Non-recommended GOP Settings in Stream Setup
- Issue Where Privacy Masking Reset When Changing Video Stream Settings
- Corrected Additional AI Cost Consumption Issue in Vehicle Type Detection App When Only Detecting Specific Vehicle Types
- Intermittent System Rebooting Issue When Using Low-Resolution Cameras, Especially at Resolutions of 640x320 and below.
- Issue Where Meta Tokens in Email Action Messages Were Not Replacing Event Metadata (since version 103503)
- Issue Where Time Setting Did Not Work When 12-Hour Display Setting Was Selected in Date and Time Setting Menu
- Issue in Zone Counting App's Event Type "Limits" Where Events Did Not Occur If the Value for More Than Was Less Than the Value for Fewer Than
- Potential Reboot Issue in 16-Channel Mode or When Dynamic View Was Activated (since version 103500)

Firmware: 60310.1.103505.101 03/22/2024 - Changes in Release

New features

• N/A

Improvements & Changes

• N/A

Bug Fixes

- Token parsing bug that has been traced back to firmware version 103503.
- Rebooting bug that has been traced back to firmware version 103500.

Firmware: 60310.1.103503.101

03/22/2024 - Changes in Release

New features

- Integration with SATEL INTEGRA Alarm Box Supported
 - o Action Handler Network SATEL INTEGRA Alarm Panel
- Count Reset Action Handler
 - o Register in event rules to reset the count value of a pre-specified counter.





- LPR App ONVIF Event Transmission Protocol
 - o Included ONVIF events, plate number, memo, group, country code, vehicle direction, vehicle direction label.
 - o Note: LPR-JP/KR, only the last 4 digits of the license plate number are transmitted in a separate field.
- Vehicle Type Detection App
 - o Activated per channel, allows setting target objects by Vehicle Type in basic detection apps (refer to UI guide).
 - o Basic detection apps include Intrusion, Loitering, Virtual Fence, Stay & Go, Zone Counting, Stopping.
 - o Activated objects include Truck, Bus, Car, Bike, Motorbike.

Improvements & Changes

- Crowd Detection App Performance Improved, now capable of counting to 200~300 people.
- Error Display in UI for Cameras Connected with GOP Longer Than FPS.
- Fire & Smoke Detection App Enhancements.
 - o Options for ignore duplicate, reminder duration, ignoring interval.
- Improved Disk Usage Calculation for Recording Feature to use fewer system resources.
- Increased Maximum Number of Detectable Objects per Frame in Intrusion/Loitering apps to 300 objects.
- Password Reset Questions
 - o Increased the maximum number of password reset questions to 3.
 - o Answers to password reset questions now case insensitive.

Recognition Performance for English Alphabets and Regional Characters in LPR JP App.

Thermal Intrusion App Detail Document Link Added

Bug Fixes

- Crowd Detection App Where Static Objects Were Not Counted correctly.
- Event Log Channel Filter Issue in 16-Channel Mode, which only displayed up to 8 channels.

Firmware: 60310.1.103404.101 02/26/2024 Hot Fix - Changes in Release

New features

- Kronos Action Handlers
- Sentinel Action Handler
- Safestar Action Handlers
- Staff Exclusion People Count App
- Occupancy Car Counting App
- Advanced Attribute App
 - Activated event action message property tokens.
 - o (Refer to the Action Message Setting Guide document's object attribute information token section attached to the device.)
 - o ONVIF metadata stream updated.
 - (Refer to the ONVIF Integration Guide document attached to the device.)
- Multi-zone Counting App
 - Like Zone Counting but allows setting multiple zones across channels and uses the aggregate count of configured zones for event settings.
 - API Added for Fetching All Counter Zone Settings at Once
 - o `/api/counter/zone/` API documentation provided in System Document System API Counter section





- Password Reset Feature
 - o Allows password reset through previously registered questions and answers, which can be re-registered in factory reset or during password reset.
- LPR-KR, LPR-JP Detection Policy
 - o Allows registration and detection of only the last 4 digits of a license plate number.

Improvements & Changes

- LPR (KR/JP/US/EU) App Online Documentation Link Added
- Violence Detection App Renamed to Aggressive Detection
- Multi-language Translation Files Applied
 - o Japanese multilingual translation file
 - o Italian multilingual translation file
 - o Polish multilingual translation file
- Multilingual Issue Fixed
 - o Initial password setup UI
 - o Performance usage information popup UI

Bug Fixes

- ONVIF Object Coordinate Setting Error Fixed
- Fixed Counter App Events Not Being Transmitted Over ONVIF
- Fixed 'No People' Option Selection Issue in Animal Detection When People Are Outside the Zone
- Resolved Issue Where HTTP Action Handler Would Not Properly Transmit with Attached Snapshot
- Fixed Format Error When Transmitting RTSP Metadata Stream in AI Events
- Corrected Widget Display Issues on the Right or Bottom of Video
- API Document link address error in Staff Exclusion People Counting app
- ONVIF events not being sent in Stay & Go, Fire & Smoke, and Hand & Foot Intrusion apps

Firmware: 60310.1.103114.101 01/17/2024 Hot Fix - Changes in Release

New features

• N/A

Improvements & Changes

- Accuracy in LPR and Attribute apps at certain resolutions (720p and 1080p)
 - The 'ignore static object' option in Intrusion and Loitering apps

Bug Fixes

- An issue where date and time frequently display as NaN.
- An issue in the HTTP action handler were using the TEST button with an attached snapshot only utilized the video from channel 1. (The system now uses a test image for this function)
- Using multiple apps on a single channel could result in incorrect object detection box coordinates (or key point coordinates).





Firmware: 60310.1.103112.101

01/08/2024 Changes in Release

New features

- API fetching zone information: Indicate whether a zone is closed (zone_closed)
- API to fetch event Zone settings (/api/event/zone/). (Documentation: System>Document>System API>Event Action)
- Metadata 'Human top color, bottom color' attributes. (Documentation: System>Document>ONVIF Integration Guide)
- New token for using only the last 4 digits of a license plate number: {{::OBJ[LP_4_DIGITS]}}
- Static Objects: Option to exclude from metadata transmission (via Display>Object Metadata>Ignore Static Objects)
- Token to transmit the event count displayed on Widgets {{EVENT COUNT}}

Improvements & Changes

- Default duration setting in Violence detection reduced from 6 seconds to 3 seconds.
- Illegal Dumping app: The algorithm to reduce false/missed detections.
- Improved ONVIF action Topic settings to allow the use of event meta tokens.
- LPR app's default event setting changed to "All License Plates" (from "License Plates in Group").
- Updated Illegal Dumping app guide.
- ONVIF Event Notify message format changes:
 - The value of Video Analytics Configuration Token is set to the Event UUID.
 - Basic event meta-information like channel, channel name, event type, etc., added to the Source item's Simple Item.
 - Added object Bounding Box location information to the object information item.
 - Updated System Document ONVIF Integration Guide document.
- Enhanced security for HTTPS connections by disallowing the use of lower-security 128-byte encryption algorithms
 - TLS 1.2 and 1.3. (Not applicable if 'Support for older TLS versions' is checked in System> Security menu)

Bug Fixes

- Camera password was exposed after login during camera search.
- Duplicate registrations with the same user ID.
- HTTP action handlers transmit as application/x-www-form-urlencoded instead of multipart/form-data.
- Layout issues in the PTZ Tracking app.
- Resolved format errors during the transmission of RTSP metadata streams in AI events.
- The disarm switch in the header did not revert to its original state when the popup modal was simply closed.
- The time display error when setting the DD/MM/YYYY time format.
- Widgets on the right or bottom of the video would draw on the left or break the top of the video.

Firmware: 60310.1.103102.101

12/08/2023 Changes in Release

New features

- Integration: Avigilon ACC VMS
- Integration: Genetec VMS
- LTE Communication Capability (Ganz HW)
- RS485 Action Handler
- RS232 Action Handler (Ganz HW)
- RTSP Log: Available under System System Management Technical Support
- Zone Counting app: Advanced Static Object Filter
- Animal Detection app: 'no human'





- Events occur only when no humans are in the event area.
- Basic Attribute app (Beta)
 - Includes person attribute filtering
 - Target apps: Intrusion, Loitering, Virtual Fence, Stay & Go, Zone Counting apps
- Counting type apps: A trust score threshold
 - Target apps: people, occupancy, vehicle, vehicle type, advanced visitor analysis
 - Support for Dynamic view (CH0 mosaic view)
- Loitering app: Minimum object count
 - Events are triggered only if the number of loitering objects exceeds the set value
- MQTT Publish action handler
 - Publishes action messages via a pre-configured broker.
- Object in Metadata is static: Indicate whether an object is static or not
 - Each item in the annotations list includes an 'is_static' field (for Live metadata integration development)
- Outbound API: Real-time count transmission in counter apps
 - Target apps: occupancy, people counting, vehicle counting, advanced visitor analysis, vehicle type counting
 - Functionality can be activated in each app's counter settings
- Threat app: Presence of Perpetrator
 - Events are triggered only when a Perpetrator is visible in the ROI area.

Improvements & Changes

- Email action: Changed to send emails in plain text instead of HTML
- Illegal Dumping app: Improved the probability of false alarms and non-functioning issues
- Illegal Dumping app: Added detailed links
- Imminent Threat app: Added detailed links
- Modified widgets to highlight the background when an event occurs
- Person Attribute Recognizer (Basic, Advanced): Performance improvements
- Support for video input resolution (320x240)
- Thermal intrusion app: Enhanced object detection performance
- Video Preview's Multiview: Display camera names
- Video Stream Source queries: Enhanced API response to include a list of apps used in each channel
- API: Added Network query
 - Query settings of eth0, eth1
 - Query Service port
- HTTP action handlers: Improved UX
 - Form fields: Added ability to set default values
 - Display examples when setting Header, Query string
 - Enhanced UI for clearer current setting visibility
- System Control APIs: Added and modified
 - Added Virtual Alarm IN status query and control API
 - Changed Relay control API to suit multiple relays

Bug Fixes

- Action Msg settings: Corrected incorrect example display in Web UI when using object attribute tokens
- Counter-type apps: Addressed occasional discrepancies between Combined Count values and Zone Count totals
- Counter app: Corrected response format errors in real-time count query API documentation





- DB import: Resolved file name dependent failures
- Email action handler: Addressed issues with domain validator
- Fixed Rule activation settings not functioning
- Fixed delay issues in displaying Multiview screens
- Missing Violence Events: Resolved Issues
- ONVIF metadata: Corrected incorrect event type data transmission
- Panasonic camera: Integration issues
- Stay & Go app: Fixed label setting issues
- Video Stream: Corrected layout issues in screens at certain resolutions
- Violence app: Corrected excessive AI Cost consumption (reduced from 504 to 300 per channel)
- Violence app: Resolved non-triggering events
- 16-channel mode: Corrected app display in the app card list
- 16-channel mode: Fixed issue where streams disconnect when mixing High Resolution and Low-Resolution channels

Firmware: 60310.1.102901.101

10/20/2023 Changes in Release

New features

- Video Preview Enhancements
 - Added the ability to check individual channel settings in video previews.
 - Review video type settings.
 - Verify event settings, minimum size filter, maximum size filter, and exclusion area configurations.
- ONVIF Metadata Stream Configuration
 - Added UI for setting the level of object metadata sent through ONVIF Metadata Stream.

Improvements & Changes

- Queue Management App Enhancements
 - Added an option for "Queue Object Recognition Time" to define how long an object should be recognized as being in the queue.
- Violence Detection App Tuning
 - Reduced false detections by triggering events only when there are more than two people in the vicinity.
- Privacy Masking App Adjustments
 - Improved the Privacy masking app to address issues where large objects could still be identifiable even when masked.
- Fall Detection App Enhancement
 - o Added a link to detailed documentation for the Fall Detection App.
- Enhanced Support for Fisheye Video Type in Apps
 - The following apps are now supported for Fisheye video types:
 - People Counting
 - Occupancy
 - Queue Management
 - Prolonged Stay
- Fire Detection App Tuning
 - o Improved the algorithm to reduce false detections caused by vehicle headlights and taillights being mistaken for fire.





- Enhancements in Intrusion and Loitering Apps
 - o Improved the false alarm filtering algorithm for better detection accuracy and to reduce false alarm.

Bug Fixes

- Fixed a rebooting issue when integrated with Genetec VMS (16ch mode).
- Fixed an issue where video playback would freeze, or the system would reboot in 16-channel mode with several low-resolution channel configurations.
- Fixed an authentication failure bug when linking specific Axis cameras via the "Camera Search" function in the video stream settings menu.
- Fixed an issue where the LPR app wouldn't recognize license plates (problem started from version 102805).
- Fixed a malfunction where the "Skip Consecutive Events (Re-trigger interval)" feature wasn't applied when "Ignore Static Object Filter" was turned on.
- Fixed an issue where the {{# OB OBJECTS}} message token was only correctly replaced in the Zone Occupancy app.
- Fixed a bug in the Privacy Masking app where masks weren't fully applied to person boxes at the edge of images.

Firmware: 60310.1.102806.101

10/06/2023 Changes in Release

New feature

- LPR Event Direction Attribute
 - Movement Direction Event Filter: License plate recognition events are triggered only for objects moving in the set direction.
 - Action Message Tokens:
 - ::OBJ[MOVEMENT_DIR]: In the action message, depending on the vehicle's movement direction, it will be replaced with 'A' or 'B'.
 - ::OBJ[MOVEMENT_DIR_NAME]: Replaced with the user-defined name corresponding to the vehicle's movement direction.

Improvement

- Counter App Report Adjustments
 - Fixed string components are now positioned at the end of the counter or zone name.
 - Example:
 - Previous: [count]-Counter Name-Zone Name
 - Updated: Counter Name-Zone Name-[count]
- Zone Setting Enhancements
 - When expanding to full screen in Zone settings, the entire area is now set without any margins on all sides.

- Resolved malfunctioning of the test button for the camera speaker action handler.
- Authentication failures when connecting to specific equipment in the video stream settings menu.
- Occasional non-triggering of events in the Intrusion and Loitering apps with the "Ignore Static Object" option on.





Firmware: 60310.1.102700.101

09/20/2023 Changes in Release

New feature

- GDPR Restricted View Introduced
 - Accessible only by Administrator group users via "System Security GDPR" menu.
 - o User group Manager: Identical Administrator permissions but cannot add/edit/remove Administrator group users.
 - Restricted View: Admin activated Manager group can't view videos, snapshots, and can't adjust app settings.
 - Unmask button: Admin can temporarily view the video for a set duration by clicking.
- Date/Time Inquiry and Setup API Added
 - o Refer to the API document at "System" "Document" "How to control the device".
 - Setting API won't work if Auto Time Sync is on
- Device-based Trial License Issuance
 - o License for each app per device valid for 90 days.
 - Cloud registration is not required.
- Advanced Heatmap App Added
 - o Define up to 5 zones per channel and collect zone-specific interest metrics.
 - o Interest metrics increase when an object is detected stationary near a defined zone for over 2 seconds.
 - Zone-specific interest is displayed numerically on widgets.
 - Zone-specific interest metrics inquiry API added.
 - o Reporting feature for zone-specific interest added.

Improvement

- Added "Min Duration for Alarm" option to the settings of the "Violence", "No PPE", and "Forklift No Helmet" apps.
- LPR (EU): Improved license plate recognition rate for Ukraine (UA).
- LPR (EU): Enhanced recognition performance for Motorbike LPR.
- Counter Report Enhancement:
 - Detailed data by Zone is now included in each app's report.
 - o Target apps: People Counting, Vehicle Counting, Occupancy Counting.
 - o Related documentation
- Counter Data Visualization Improvement:
 - Added a feature to view data by Zone in Counter's data view.
 - o Target apps: People Counting, Vehicle Counting, Occupancy Counting.
 - Zone-specific count data is now included in the CSV download.
- The Counter app API has been modified to operate based on the Counter UUID parameter.
 - Target apps: People Counting, Vehicle Counting, Occupancy, Advanced Visitor Analysis, Vehicle Type Counting, Queue Management.
 - While the existing Index-based API is marked as Deprecated, it still operates (may be removed in the future).
- The datetime item in the Counter app API will now be displayed according to the system's Date and Time format settings.
- Added strengthened password policy option:
 - Use a password with a minimum of 9 characters.
 - Cannot reuse the previously used password.
 - Sequential characters on the keyboard (e.g., "qwer") are not allowed.





- When specifying the file path for the Report, added tokens that can be used:
 - o Device Name
 - Report Name
 - Schedule Index (Index of the schedule added in Report settings, incrementing from 1)
 - o Counter Name
- When specifying the file path for the Report, the extension will automatically be set based on the data format (either .csv or .json) if not specified.
- From the list of file path templates for the Report, specific templates for csv and json have been removed and integrated into a single default file path.

Fix

- An issue in the Intentional Body Gaze app where labels disappear and the video breaks when the UI is operated in a specific sequence.
- Non-functioning issue of Enhanced Static Object Filter (With the Intrusion/Loitering apps, false alarms were repeatedly triggered from stationary objects).
- Corrected the operational error of the Test button in the Report action.
- Japanese notation error in the Heatmap app

Firmware: 60310.1.102404.101

08/29/2023 Changes in Release

New feature

- H264 1fps RTSP stream in 16ch mode
- Low-resolution cameras (below 640x360)
- Ukrainian license plate recognition (Included in LPR EU)(Beta Version)
- Advanced Heatmap App (Beta)
 - Set regions and collect data as heatmaps based on customer interest levels within that region
 - o e.g., when touching a product
- Queue Management App Enhancements
 - o Added Zone setup guide: Click on the help icon in the Zone setup screen for guidance
 - o Added Parallel service capacity: Applicable when operating multiple service counters
 - Queue counter reset feature added
- Zone Counting App Enhancements
 - When using over/under limit type events, a duration can be set
 - o Duration: Events only occur if the over/under state persists for the set duration
 - Recognition Persistence Filter: Any status change within the time specified by the Persistence Filter is ignored during Duration counting

Improvement

- Detection performance in Low Resolution Mode
- Enhanced detection capability in the Thermal Intrusion App
- Detection performance in Body Gaze App
- Detection performance in Hand/Foot Intrusion App
- Detection performance in Imminent Threat App
- System Document UX improved: Documents are grouped by function
- Added a "View Setup Example" feature in the event settings menu of the specific direction posture detection app





- Added API to control Onvif Object Metadata transmission by channel
 - o Options: Do not send, Only send event-triggered objects, Send all objects
 - o Please refer to the API documentation embedded in the device
 - System > Document > System API > Video output > AI Metadata

Fix

- AWS S3: Fixed an issue where files were not saved in the designated path and filename
- ONVIF: Fixed an event snapshot omission issue when using the action handler.
- Milestone VMS: Fixed an issue where web access became unavailable over time after linking with RTSP over HTTPS streaming

Firmware: 60310.1.102201.101

08/02/2023 Changes in Release

New feature

- OSD widget display: ON/OFF settings Function to differentiate between counter and event widgets in the counter app
- Option in the Fallen Person Detection app to trigger an event for motionless objects only
- Polish multilingual translation file delivered on version 2023.08.10

Improvement

- Allow settings without entering gateway/DNS during network configuration
- Login screen i18n applied
- Enhanced Cyber security: No TLS version supporting below 1.2 (v1.2 and below provided in compatibility mode)
- Time zone setting options: Poland(Warsaw), Italy(Rome), France(Paris), Spain(Madrid)
- Gmail action handlers, changed to send images as attachments instead of HTML tags
- Sunell Fisheye IPCAM H265 stream compatibility
- No PPE app: Speed of detecting the 'No PPE' event

Fix

- Intermittent issue where the background of downloaded heatmap images appeared white
- Issue in the hand and foot intrusion app where continuous events occurred even for the same person
- Issue where fisheye video type could not be set on channel 1 even with a PKG_ADVANCED license
- Issue where changes to the HTTPS port in the service port menu were not reflected in the device management tool

Firmware: 60310.1.102104.101

08/02/2023 Changes in Release

New feature

- Basic Heatmap app
- Loitering Person Detection app: Addition of vehicle and two-wheeler detection
- Static object filter setting option: Intrusion Detection, Loitering Person, Thermal Intrusion Detection, DPC apps
- PTZ Auto-Tracking app
- Support for Fisheve (License required)
 - o Option to select Fisheye image type in Video Stream settings
 - When Fisheye image type is selected, some apps may be limited or not function properly on that channel





Improvement

- Occupancy app: added function to invert direction through a direction switch button
- Added UI for entering a confirmation password when setting the initial password
- Latest Polish multi-language table (2023-07-14)
- Latest Italian multi-language table
- In Video Stream settings, conditions for displaying warnings for unsupported resolutions changed from less than 720 pixels in vertical resolution to less than 705 pixels
- When searching for ONVIF Camera, a list sorted by IP address is displayed
- Changes to minimum password length when Enhanced Password OFF setting is on (From a minimum of 2 characters to a minimum of 8 characters)
- Improved default value for ExtraText in Immix action handler
- Added the ability to select hand/foot events in Hand & Foot Intrusion app

Bug Fix

- Decoding not occurring and device slowing down when connecting to 720p / H.265 stream of Dahua recorder
- Where password ** is not hidden when deleting all licenses
- AI resource usage display error in Fire & Smoke Detection APP
- Where some item labels in the event settings popup are displayed on two lines
- Where UI stops when clicking the Zone Import button in 16-channel mode
- Where Privacy Mask does not work when OSD option Bounding Box display is off
- Where event settings screen UI layout is broken when some languages are applied
- Where No PPE app is not displayed on the sidebar
- Where the number of apps displayed by category on the Explore AI Apps screen is displayed differently

Firmware: 60310.1.101709.101

07/12/2023 Changes in Release

New feature

- Spanish and Portuguese to languages
- Queue Management App (Beta)
- New option to "count only the first direction of passage"
 - Zone setting options of People Counting, Occupancy, and Advanced Visit Counting
 - o It prevents duplicate counts in situations where people are repeatedly counted near the boundary

Improvement

- Addition of delay operation option ranging from 0-10 seconds for HTTP Action Handler
- UI improvement of the IP Filter page Phrase changed for clarity.
 - o Notification added when a setting change request is made
- Improved to only select events applied with a license in the event action log
- Downloading data in CSV format from counter type apps, the counter name is now included in the filename
 - People Counting, Vehicle Counting, Occupancy, Advanced Visit Analysis, Vehicle Type Counting, Queue Management
- Display of warning when network connection error (DNS lookup failure) occurs (header, network settings)
- AI consumption guide UI added to the information area of each app
- The device's IP is now correctly displayed as an actual IPv4 address in the Search Camera menu of Video Stream after a search
- Improved compatibility with Immix (Alarm Monitoring system)





Fix

- Events not occurring in Hand & Foot Intrusion
- Issue were deleting the schedule setting of the event action rule malfunctions
- Changes to the Track Reference Point by channel are now applied immediately without needing a reboot
- Where logging in does not work in the Search Camera menu of Video Stream after a search, particularly when the camera was set to a past time
- AI resource usage notation error of the Fire & Smoke detection APP

Firmware: 60310.1.101704.101

06/28/2023 Changes in Release

New feature

- A feature in device name settings that allows you to set the tab name of the browser
- Smoke detection feature in the Fire detection app
- Action message tokens that are displayed based on conditions (IF ~ ENDIF)
 - IF DISARM EVENT[Arm]
 - IF DISARM EVENT[Disarm]
 - IF EVENT TYPE[TYPE]
 - END IF
- Action message tokens that are replaced with English event types
 - EVENT TYPE[EN]
- Attachment of a guide document for writing Action Messages
 - System API Document Action Message Setting Guide

Improvement

- Performance improvements related to the Advanced Visit Analysis (Gender Counting) app
- Near-distance alarm improvement for specific direction posture detection app
- Fire detection app improvement
 - Enhanced detection performance

Fix

- AIBOX-STD RTSP encrypted stream couldn't connect
- Authentication failure when connecting to Digital Watchdog NVR

Firmware: 60310.1.101500.101

06/16/2023 Changes in Release

New feature

- Track Reference Point setting feature
 - Channel-specific Tracking Point setting function
 - Some apps set tracking points for each individual zone (Virtual Fence, Stay & Go, and Counter apps)
 - If the tracking point set for the zone differs from the tracking point of the channel, the zone setting is applied first

Improvement

• Accuracy of the Counting App





Fix

- Issue in version 101301 where only one APP would work when multiple APPs were assigned per channel
- Error where a lower FPS than actual appears when connecting an H264 camera to VSource

Firmware: 60310.1.101301.101

05/26/2023 Changes in Release

New feature

- RTSP over HTTPS transmission functionality
- Low-resolution mode support 640x360, 1280x720
 - Function to set video type by channel (normal / low resolution)
 - In low-resolution mode, only the BASIC app runs

Improvement

- Event meta-token to indicate Disarm Status
- Changed the apps that always increment count are set not to support over/under type
 - People Counting, Vehicle Counting, Advanced Visit Counting, Vehicle Type Counting
- Model name change function to Distributor customizing feature
 - A hidden UI is provided at /#/pages/dist address
- UI readability when setting events
 - Display divided into basic settings and advanced settings
- In [CBC] Sequrinet, the action name is listed as GANZ for CBC vendors

Fix

- Default setting bug for Remote Support On/Off
- Time zone setting error when DST is turned off
- Authentication issue with accounts other than "admin" when connecting to AIBOX 2nd Gen via Onvif
- Resource Limit error is shown then not shown in VSource menu
- RTSP streams in VLC would not play

Firmware: 60310.1.101002.101

05/26/2023 Changes in Release

New feature

• N/A

Improvement

N/A

- Remote support on/off default setting error
- Could not be authenticated with an account other than "admin" when connecting to AIBridge with Onvif
- Resource Limit error was displayed in the VSource menu and then not displayed





Firmware: 60310.1.101200.101

05/26/2023 Changes in Release

New feature

• N/A

Improvement

- Cortrol Global VMS support
- Cannot add/remove licenses in 16-channel mode
- Multilingual table (Italian, 5.24)

Fixes

- {{CH}} token substitution error in events where CH cannot be specified (Eg. Disarm)
- Webpage Title display model name error

Firmware: 60310.1.101000.101

05/23/2023 Changes in Release

New feature

- Confidence Score Threshold settings to apps for each Event Action type
- New Setup Wizard
 - set language, time zone, and password at first boot
- New PPE App
 - Detection of not wearing Helmet and Vest together
 - No Helmet, No Vest app removed

Improvement

- Abandoned object representation when displaying illegal dumping app events
- Fallen Person Detector accuracy
- Illegal dumping APP accuracy and performance
- Loitering APP performance
- Separate Generic Event of Sequrinet Action and POS transmission function
- Poland, Italy multilingual translation applied

- System malfunction when running new ppe / violence / thermal app with LPR app
- Segurinet NVR/DVR Generic Event error
- Event does not occur when using Illegal Dumping and Loitering / Intrusion
- Event does not occur when the dwell time is more than 10 seconds in Stopping Trigger
- Advanced Max Size Filter setting error
- Operation error when setting Normal Max Size Filter





Firmware: 60310.1.100204.101

05/12/2023 Changes in Release

New feature

• License loading function during production process

Improvement

• Remove cloud services page

Fixes

N/A

Firmware: 60310.1.100200.101

04/21/2023 Changes in Release

New feature

- Vehicle Type Counting App
- Periodic counter reporting
 - Available in Occupancy, People Counting, Vehicle Counting and Advanced Visitor Analysis apps
 - o Can be uploaded to FTP, Email, AWS S3 in csv or json file format
- Advanced visitor analytics app rule setting function
 - Event action rules can be created based on the combined count value
 - o Added Sureview Alarm Action function

Improvement

- Simplified setup of Human Prolonged Stay app, default tuning
- Remove Fallen Person Detection App beta tag
- Add action token
 - o Combined count (Sum count value of Occupancy, People Counting, and Vehicle Counting)
 - o Object Direction Label (the setting value of the event object moving direction label in the Virtual Fenced app)
- Improved Email Action feature
 - o Set example phrases and snapshot test available
 - o Template message available

Fixes

- DB initialization problem when DB Importing failed
- Advanced Visitor Analysis widget display error
- Advanced Visitor Analysis data CSV could not be downloaded
- The Privacy Masking app was always displayed in the sidebar
 - o Only displayed when more than one channel was set

Firmware: 60310.1.100159.101

04/21/2023 Changes in Release





New feature

• N/A

Improvement

• Updated language table: Polish, Italian

Fixes

• N/A

Firmware: 60310.1.100156.101

04/17/2023 Changes in Release

New feature

• IP Filter Functionality

Improvement

• N/A

Fixes

- Sidebar activated when the Video Preview modal was triggered
- The registered LP information reset every time the cloud registered device rebooted
- The Nx VMS abnormally terminated when sending Nx VMS "Test Event"

Firmware: 60310.1.100154.101

04/11/2023 Changes in Release

New feature

- Hand & Foot Intrusion App
- Intentional Body Gaze Detector app
- Counter App Event
 - Occupancy, People Counting, and Vehicle Counting apps can use counter values to set events and create action rules
- Note: The Human Prolonged Stay application key is changed
 - The existing settings are deleted when updating the firmware
 - Also deleted Suspicious Person settings and apps





Improvement

- In the app list, project-specific apps are displayed only when a license is registered
- Default value of widget event count initialization time is set to midnight (00:00) when rule event is set
- For humans, the tracking reference point is changed to the lower midpoint (feet) of the bounding box.
- Improved action handler performance
- Label text can be set in Occupancy, People Counting, and Vehicle Counting apps
- Suspicious Behavior app has been removed
- UTF8 characters can be set when setting the trigger widget
- Suspicious Person app renamed -> Human Prolonged Stay
- Improved Animal Detection app settings UI
 - o Changed Dwell Time default value to 3 seconds
 - o Simplify settings by removing complex settings
- Add metadata to event log
 - Metadata includes different event information for each app
 - o In the case of LPR, the detected vehicle number and included group name
- Improved performance by changing the event log batch recording method (bulk insert)
 - o It may take up to 5 seconds for the event log to be recorded after the action is performed

Fixes

- API address errors when registering LPs in batches and resetting LP lists in the LPR app
- Breadcrumbs were not displayed on the LP management screen in the LPR app
- OSD flickering problem when setting Normal Max Size Filter
- Masking could not be done when using the Dynamic Privacy Masking app and setting event only in the OSD option
- Afterimage of the undetected object box remains when using the Min/Max Size Filter
- Real-time FPS was incorrectly displayed in the Video Stream menu

Firmware: 60310.1.100150.101

03/31/2023 Changes in Release

New feature

- Action preset edit function in Event Rule Map
 - Action handlers registered before reorganization in the preset method, must be modified on the App Rules page.
- Provide LP Management API and API Document in LPR App
- Action preset batch setting function added
 - Function support in the Action Preset tab of the Event Rule Map menu
- Breadcrumbs
 - Show the current location on each page of the UI
- Dynamic Privacy Masking app
 - Operates only in the BASIC Package
 - Operates only in 8-channel mode





Improvement

- Added a warning in the header when over setting AI performance.
- Max Size Filter also supports Interpolation method (Advanced)
- Advanced False Alarm Filter applied to Fallen Person (reduce false detection)
 - o In the previous version Fallen improvements were not applied. It will be applied from this F/W.)

Fixes

- The registered license is deleted every reboot when adding LPR license
- New line could not be set in the body when setting the Email action

Firmware: 60310.1.100144.101

03/28/2023 Changes in Release

New feature

• N/A

Improvement

• N/A

Fixes

- Reboot due to memory leak
- Cloud action handler not working

Firmware: 60310.1.100144.101

03/27/2023 Changes in Release

New feature

• ADVANCED package license support

Improvement

- Advanced False Alarm Filter applied to Fallen Person (reduce false detection)
- 30% reduction in CPU usage
- UI/UX improvement through usability test
 - o (1) Improved navigation on the Source
 - Video Stream setting screen
 - Discovery and Batch Setting buttons can be placed on layer 1 to enter at once
 - Navigate to the app by clicking on the app icon set for each channel
 - Support navigation to move to Application list to add new AI App settings
 - Add Event Rule Map
 - Rules set for each app and entire event history can be checked and modified





- Sidebar visibility improvement
 - Improved the display color of the current location item to stand out
 - Improved so that only apps for which rules are set are displayed in the sidebar
 - Supports folding/expanding the App list displayed in the sidebar
- o Application Rule setting screen improvement
 - Improved UX so that multiple channel events can be set at once in the event setting pop-up
 - Improved structure so that all action settings can be reused in other apps or rule settings
- o Placing frequently used functions in the header area
 - Video Preview
 - Arm/Disarm settings

Fixes

- Many Person objects were mis detected when using Fallen Person with other APPs
- Abandon (Illegal Dumping sensitivity adjustment)
- Setting changes are discarded when moving to another screen without saving rule settings
- System malfunction due to offline CORTROL VMS
- Booting failed randomly during booting
- Malfunction and rebooting problem when using multiple APPs simultaneously in one channel
 - o However, LPR needs to be used alone

Firmware: 60310.1.100137.101

03/17/2023 Changes in Release

New feature

- NVR/DVR(Sequrinet) action handler
- Milestone XProtect Expert VMS integration
- Plugin for NX VMS integration: Document Guide
- LPR US, EU, JP, KR App
 - o Vehicle number management, group management
 - Support group matching events
 - o Support group unregistered next number event

Improvement

- Animal detection app detection dwell time added
- CORTROL VMS integration added event text editing function
- UI and added performance limit wording when changing 16-channel mode
- 16-channel mode (CPU optimization issue remains)
- LPR test apps removed (US, EU, JP)

- Fixed a bug that randomly applied when changing the RTSP port in the service port menu
- Fixed a bug where the counting value increases by 2 when using Counting APP
- DB and license are not initialized when changing 16-channel mode
- When running 16-channel mode, apps other than BASIC license are not run
- Attempting to set algorithm of unsupported app when using 16-channel mode fixed





Firmware: 60310.1.100134.101

03/06/2023 Changes in Release

New feature

- Adding or editing event action settings: Guidance UI to click the Submit button
- Stay & Go App: An event occurs when leaving the zone after staying for a certain period or less

Improvement

- Save rule name and event name in Event Log
- System Log search, filter, and csv download
- Zone setting even while loading video
- Behavioral Recognition App AI Cost Change
- Exception handling when the IPCAM sends a broken or lost stream
- Same object distinction added
 - o Intrusion detection options: Loitering detection, and Animal detection apps
 - o When an object leaves and re-enters the event area, the event can be set to re-trigger

Fixes

- Event Log / System Log CSV download failure
- Web server shutdown problem when changing time

Firmware: 60310.1.100130.101

02/16/2023 Changes in Release

New feature

- Stopping Detection App
 - Detect a person or vehicle that has been stationary for a designated amount of time or longer
- Vehicle Counting App
- TCP Action handler available
 - Normal characters
 - Hex msg transmission available
- ONVIF Action handler available
 - o Custom topic name can be set

Improvement

- Search function of app name and description in the app list
- Rule option that runs even in Disarm state in event action type apps
- Action Msg token
 - Object score, object bounding box geometry
- Action Msg template
 - o kronos, kronos_tcp, immix, sentinel, safestart_http
- Provide advanced visitor analysis app Inbound API and UI API Document





- Provide people counting app Inbound API and UI API Document
- Suspicious Behavior Body Direction Accuracy
- IP Camera compatibility (exception handling of contents length header)
- Ganz CORTROL VMS compatibility

Fixes

- Web page access problem (from version 100114)
- Video Stream Bulk Setup

Firmware: 60310.1.100124.101

02/16/2023 Changes in Release

New feature

- Function to control Disarm status using alarm input
- API Document and working on API backwards compatibility
- Basic Authentication when calling API

Improvement

- Sidebar menu tree improvements
- "Zone Occupancy App" renamed to Zone Counting

Fixes

• Fixed an issue where the detection policy UI was not displayed in the intrusion detection app

Firmware: 60310.1.100123.101

02/15/2023 Changes in Release

New feature

• LPR-EU App

Improvement

- Over HTTP and over HTTPS options to the video streaming method
- Detection policy setting when setting event in intrusion detection app
 - o Fast detection, accurate detection

- Channel display error "In Use status" in People Counting App
- HTTPs service port change issue
- Onvif service not responding issue
- Debug log and DB export failed on some devices
- Suspicious Behavior App label setting error
- No events occurred in the LPR-US Test App





Firmware: 60310.1.100116.101

02/02/2023 Changes in Release

New feature

- Advanced minimum size filter using perspective interpolation
- 'Kicking' behavior to 'Suspicious Behavior Detection' app
- 'Fire Detection' app
- 'Zone Occupancy' app
- Car and bike classes to 'Virtual Fence' app

Improvement

- Reduce false alarms in 'Imminent Threat' app
- Reduction of false alarms by static objects

Fixes

N/A

Firmware: 60310.1.100114.100

01/20/2023 Changes in Release

New Features

- Violence detection app
- LPR-US test app
- Multi-screen feature in live Preview
- Suspicious behavior app
 - o Detection of the action of looking at the security area for a certain amount of time
 - O Detection of the action of reaching hands toward the secure area
- Imminent threat app
 - o Detection of the action of a threatened person with both hands raised by the threat
- Support Cortrol integration I will share a separate guide document for this next week.
 - o Send metadata and events separately from the video stream
- (IPCAM original stream can be recorded)
 - o Display of Bounding box and object information during live/playback from metadata

Improved

• Intrusion application - Person, car, bike can be detected

Fixes

N/A

Firmware: 60310.1.100104.100

12/14/2022 Changes in Release





New Features

• N/A

Improved

N/A

Fixes

- Hotfix version (100104) due to packaging error of firmware release100103
- A reboot or upgrade issue in firmware release 100103 during operation
- Improvement and bug fix made in 100103 is applied to 100104

Firmware: 60310.1.100103.100

12/09/2022 Changes in Release

New Features

- Live Apply fight algorithm
- Option to display object bounding box annotation only for trigger objects Default disabled

Improved

• N/A

- Could not be connected when entering a domain address in the VSource menu
- Could not be connected to VCAM from NVR
- Drop-in GOP units when there is an error in the Ref order of the H265 stream
- LPR recognition performance degradation bug
- Web Live Multiview could not be updated





09/30/2022 Changes in Release Firmware: 60310.1.100100.100

New Features

- Live Multiview feature (1FPS)
- HTTP action sub-URL
- When setting the secondary URL, If the request fails, the request is sent to the secondary URL once more
- Virtual alarm input function that can be added as a condition to an action rule
- State of virtual alarm can be controlled via API
- Individual action rules can be arm/disarmed via virtual alarm API

Improved

• N/A

Fixes

- Issue where you had to go to the Prev page to cancel the action preset setup wizard
- User can undo the action from any page in the wizard
- Where RTSP Metadata could not be transmitted (Bbox display, object search when Built-in AIBRIDGE Driver in CORTROL is used)

09/14/2022 Changes in Release Firmware: 60310.1.100024.100

New Features

- Buffering Settings/Audio Backchannel Settings to Video Source menu
- GANZ OEM logo and model name applied for evaluation samples
- License import
- Request a separate session connection in the camera settings when using the camera speaker
- Trial Algorithm
- Video buffering settings

Improved

- Static Filter
- Intrusion false alarm
- Flickering when connecting to video for the first time
- Video clicking phenomenon due to side scrollbar creation when changing live channels

- Display loading screen when network is disconnected while watching video
- If you press and hold the Reset button for more than 5 seconds, the device will reboot after factory reset.
- No more passing password text from capability API
- Reboots the device when the Reset button is pressed (less than 5 seconds)
- Updates are displayed immediately on the Video Source scree

