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HTW Network Camera Version 1.32

This document describes the new and changed features of Hanwha Techwin network camera version 1.32.

Released on September 29, 2020

Common Features

[New Features]

- Added encryption setting function to use SD card after password authentication when saving video to SD card. [1.32.00, PNM-7000VD, PNM-9000VD, PNM-9000VQ, PNM-9080VQ, PNM-9081VQ, PNM-9320VQP, PNM-9321VQP]

[Improvements]

- Improved the speed of registering camera with Genetec products. [1.32.00, PNM-7000VD, PNM-9000VD, PNM-9000VQ, PNM-9080VQ, PNM-9081VQ, PNM-9320VQP, PNM-9321VQP]

- Changed the Moscow time zone from UTC+4 to UTC+3. [1.32.00, PNM-7000VD, PNM-9000VD, PNM-9000VQ, PNM-9080VQ, PNM-9081VQ, PNM-9320VQP, PNM-9321VQP]

- Modified to reboot all channels when changing Hallway view settings [1.32.01, PNM-9080VQ, PNM-9081VQ, PNM-9000VD, PNM-7000VD, PNM-9000VQ, PNM-9320VP]

Protocol Improvements

- Supports ONVIF Profile T (with ONVIF protocol to delete the default video profile). [1.32.00, PNM-7000VD, PNM-9000VD, PNM-9000VQ, PNM-9080VQ, PNM-9081VQ, PNM-9320VQP, PNM-9321VQP]

- Fixed the problem that ONVIF SetUser command did not work properly. [1.32.01, PNM-9080VQ, PNM-9081VQ, PNM-9000VD, PNM-7000VD, PNM-9000VQ, PNM-9320VP]

- Fixed the problem that ONVIF SetNetworkInterfaces command did not work properly.
Affected Products

Table 3. Product Family Based On Version 1.32

<table>
<thead>
<tr>
<th>Major Model</th>
<th>Model Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNM-7000VD</td>
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</tbody>
</table>
HTW Network Camera Version 1.31

This document describes the new and changed features of Hanwha Techwin network camera version 1.31.

Released on April 22, 2020

Common Features

[Improvements]

- Fixed the problem in which software cannot be upgraded when the camera access log is accumulated to some extent. [v1.31.01, PNM-9084QZ]
- Fixed the problem in which the camera does not move to a preset position at a certain position. v1.31.01, PNM-9084QZ]
- Improved the speed of registering camera with Genetec products. [v1.31.02, PNM-9084QZ, PNM-9084RQZ]
- Fixed the issue where audio could not be set for each channel with SUNAPI protocol in Genetec products. [v1.31.02, PNM-9084QZ, PNM-9084RQZ]
- Fixed the issue where audio could not be heard upon using the mic button on the camera registered with Genetec products. [v1.31.02, PNM-9084QZ, PNM-9084RQZ]
- Fixed the issue of video stuttering when video has been transferring for 25 days or longer over RTP/RTSP. [v1.31.02, PNM-9084QZ, PNM-9084RQZ]
## Affected Products

### Table 3. Product Family Based On Version 1.31

<table>
<thead>
<tr>
<th>Major Model</th>
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</tbody>
</table>
HTW Network Camera Version 1.20

This document describes the new and changed features of Hanwha Techwin network camera version 1.20.

Released on January 04, 2019

Common Features

[New Features]

- Added a function called Frame Lock to always maintain the number of frames/sec (fps) of one user selected profile when multi profiles are used.
- Added a function to configure the codec of profiles 1, 2 and 3.
- Added a hostname function.
- Supported LLDP as a steady-state power device.
- Added a function to configure overlay box for detected objects in motion detection, IVA, and face detection.
- Added a function to configure minimum/maximum object size in motion detection.
- Added a function to configure minimum duration in motion detection and Intrusion detection (up to 5 s).
- Added a function to configure home position and execute auto run (optical zoom cameras).
- Added queue management, heatmap, people counting (Mobile cameras).
- Added an option of new P-IRIS Tamron lens (P-IRIS supported cameras).
- Added a function to control pan/tilt, area zoom by mouse drag and control zoom by mouse wheel scroll in web viewer (optical zoom cameras and PTZ cameras).
- Added a shock detection function. [XNV-6085, XND-6085, XND-6085V, XNP-6120H, XNP-6320H, XNP-6371RH]
[Improvements]

- Shortened the booting time by reducing LLDP power consumption negotiation time.
- Improved a function to configure pan/tilt control speed (PTZ cameras).
  - Increased proportional PT mode options to 8 stages and setting is applied at 1x zoom ratio.
- Changed the factory defaults values of UPnP, Bonjour, and Link-Local IPv4 address to disable.
- Improved a function to configure all image parameters other than sensor mode for predefined image preset mode and added 2 UserPreset options.
  - After upgrading firmware from prior to 1.2 version, the previous UserPreset configuration will be applied to UserPreset1 and all schedule configurations will be reset.
- Improved the schedule configuration.
  - Expressed day of the week instead of date.
  - Changed the image preset schedule configuration to same as other schedule configuration.
- Improved indoor representation of WDR low and middle levels.
- Changed the default value of minimum shutter speed to provide optimized value to keep framerate.
- Improved day/night switching timing (Built-in IR LED models).

[Bug fixes]

- Fixed an issue that anti flicker configuration in UserPreset mode is not be applied after reboot.
- Fixed an issue that a certain key data does not work correctly in 802.1x certificate.
- Fixed an issue that the focus does not work correctly via Pelco-D protocol. (External RS-485 control supported models.)
- Fixed an issue that AF operation does not work due to Gyro sensor (PTZ cameras having Gyro sensor).
- Improved the camera operation when a few channels have a problem, the rest of channels work properly.
- Fixed an issue where in some cases, a camera disconnected due to Instability of RTSP
streaming.

- Improved ONVIF request packet response performance. Addressed an issue in which the camera unexpectedly responds to the Bad Response Error when the request packet is excessive.
- Added a video source token in tns1:VideoSource/MotionAlarm event to distinguish each channel via ONVIF.
- Fixed an issue where the HTTP session disconnected in case of no event status change for longer than 6 minutes in the command eventstatus.cgi?action=monitordiff through SUNAPI.
- Fixed an issue where WDR mode of camera registered with ONVIF protocol is not displayed in Genetec VMS. [v1.20.01]
- Fixed an issue where running the area zoom feature causes the live view image to defocus. [v1.20.01]
- Fixes an issue where the new RTSP connection with CASD VMS is lost after network has been broken and recovered. [v1.20.01]
- Fixed an issue where ONVIF SetUser command does not work properly. [v1.20.01]

Security Improvements

- Removed Active-X/NPAPI plug-ins from the web viewer.
- Removed the PHP module from the web viewer.

Protocol Improvements

- Improved ONVIF features.
  - Supported motion area configuration in VideoAnalytics service.
  - Supported VideoSourceModes in Media service.
  - Supported UTF-8 format OSD control in Media service.
  - Supported PTZ PresetTour in PTZ service.
  - Supported firmware upgrade.
  - Supported “tns1: VideoSource/MotionAlarm” event.
- Applied the unified SNMP MIB. (Keep backward compatibility, the previous MIB files can be used.)
- Added the likelihood data of sound classification via metadata streaming.

Affected Products

Table 3. Product Family Based On Version 1.20

<table>
<thead>
<tr>
<th>Major Model</th>
<th>Model Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PNM-9080VQ</td>
<td>PNM-9080VQ</td>
</tr>
<tr>
<td></td>
<td>PNM-9081VQ</td>
</tr>
</tbody>
</table>
Attachment A. HTW camera version management

This describes the Hanwha Techwin network camera version rule. A camera version is updated when new features are added or bugs are fixed, and there are the following two categories:

- Platform change: Version update due to changes in the software platform structure and major feature changes
- Product change: Version update to fix reported bugs and solve potential problems

Camera Version Management Procedure

The firmware of Hanwha Techwin camera products are being developed based on the common platform, and this is developed across all camera product development. Any features developed for a product firmware will be consolidated into the common platform and applied to new camera products accordingly.
Camera Version Rules

The camera version is structured as below and it is generated using the following rules.

\[ \text{<PlatformMajor>.<PlatformMinor>.<ProductMajor>.<ProductMinor>} \]

Platform: Specifies the release version of the common platform
- Major: Reflects any changes in platform structure and major feature changes.
- Minor: Reflects upgrade with new features and consolidated changes that apply to all models.

Product: Specifies the product release version
- Major: Reflects the addition of major product features and changes.
- Minor: Reflects firmware changes for minor fixes that solve reported bugs and potential problems

Each firmware release is displayed using a unique number given to each release type and is a combination of a platform version and a product version. The following examples explain the version rules.

**1.20.00**

Version 1.20.00 indicates the combination of platform version 1.2 and product version 0.00. It represents the first product that is applied with the common platform version 1.2.

**1.22.10**

Version 1.22.10 indicates the combination of platform version 1.2 and product version 2.10. It represents a product that is applied with the common platform version 1.2 and updated twice.