Evolution 180 Camera series
Release Notes

This document describes the enhancements and major fixes for Evolution 180 Camera series firmware. Review each section to determine if an upgrade is warranted for your installation.

For additional information on the unit (including the latest updates to documentation, product specifications, and software downloads), visit the Oncam web site at: www.oncamgrandeye.com

Support

For technical issues, contact Oncam Technical Support at:

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Visit support.oncamgrandeye.com for the latest FAQs and Downloads, and how to upgrade camera firmware.

Contents

1.8.0-603 Release   (April-2022)

This release applies to all Evolution 180 cameras.

This firmware has been tested to be Profile S conformant with v21.12 (rev. 7225) of the ONVIF Device Test Tool.

Enhancements

First time access – Password and Username Setting

To connect to the camera for the first time, a Username and Password will need to be set for the Primary Administrator. For enhanced security, default usernames and passwords are not supported.

The username can be 4 – 32 characters in length and can consist of uppercase letters (A-Z), lowercase letters (a-z) and numbers (0-9). Special characters are not supported.

For passwords, the minimum supported characters is 5 with a maximum 32 and can consist of uppercase letters (A-Z), lowercase letters (a-z) and numbers (0-9). Special characters are also supported
Ref: 2187

User level access

In addition to administrator, operator and user levels can now be created in the Camera Web UI.
Ref: 2181

Fixes

Motion Detection

VMS specific issue related to failure in motion detection fixed.
Ref: 2480

RTSP command handling

Customer use case specific fix for issue relating to closing client connection sockets after RTSP TEARDOWN command.
Ref: 2265

Motion Events

Motion Events causing internal memory leak issue has now been fixed.
Ref: 1611

Camera Web interface

Network page now accepts all appropriate port numbers.
Ref: 2309

Usernames & Passwords

Usernames & Passwords can now be set to up to 32 characters for all users.
Ref: 2187

Motion detected outside polygons after reboot

Motion detection regions operate correctly after they are configured, but the polygons are ignored after the camera is rebooted.

Ref: 1340

MJPEG Stream resolution

For optimal Camera performance MJPEG Stream resolution supports a maximum of 0.4 MP

Ref:2191

Live 555 library update

Streaming library upgraded and modified for improved steaming performance. Improved camera debug logging capabilities.

Ref: 2195,2196

Streaming watchdog

Camera video streaming service is monitored by internal watchdog mechanism to maintain health of the steaming service.

Ref:2221

Camera Web interface: Network Port Restriction

Range of port numbers supported has been increased.

Ref:2227

Known Issues

Streaming in Fixed Quality Mode

Video Stream may experience disconnection in low light conditions when the fixed quality setting is applied.

Ref: 1872, 2534

VCam lowest resolution label incorrect in UI

0.25MP VCam resolution option in UI, Admin> Video Set up, streams an image of 640x480 i.e. 0.31MP. Text in UI is incorrect.

Ref: 2537

Fisheye Stream 3 incorrect reference in UI

Fisheye Stream 3 is incorrectly labelled in the UI as "Fisheye Snapshot.

Ref: 2537

Limitation

Discovery

VMS specific issue, some VMS systems may have problem discovering camera when only fisheye stream is selected

ref 2490

SD Card recording of Fisheye 1 not supported

Recording Fisheye 1 images overwrites the previous recording, when there is still space on the SD Card for more recordings. Only the Panoramic stream, Pano 1, may be recorded in this version.

Ref: 1356

Brightness & contrast settings don't work on panoramic stream via ONVIF

Brightness and Contrast settings programmed via ONVIF are not applied correctly if sent to a Panoramic stream.

Ref: 1303, 1362

VCam stream settings in high-speed sensor mode do not show correct ranges

The range of resolutions and frame rates available for the VCam streams is incorrect when the camera is in High-speed sensor mode.

Ref: 1339

ONVIF frame rate settings are 0.5 FPS lower than expected for 1 FPS and 2FPS

Very low frame rate settings applied via ONVIF can result in slightly lower rates than requested. This affects only the 1 FPS and 2 FPS settings.

Ref: 1440, 1398

Lowering the Bit Rate after reducing Frame Rate results in low readings

Lowering the bit rate after also reducing the frame rate results in a lower frame rate than expected, until the camera is rebooted.

Ref: 1442

Fisheye stream Dewarping

Specific VMS limitation where view cannot be dewarped or camera cannot be added when in Fisheye mode.

ref:2490

Username and password minimum character length

Minimum character limits are not enforced when credentials are created using ONVIF commands.

Ref: 2296

1.7.2-561 Release   (August-2019)

This release applies to all Evolution 180 cameras.

This firmware has been tested to be Profile S conformant with v18.12 (rev. 4782) of the ONVIF Device Test Tool.

Fixes

IR filter controller being affected when changing the stream settings:
The IR Cut filter was not switching from Day to Night mode when adding a Vcam or changing the quality settings of the stream. Ref: 1427

Out of memory error:
Resolves a memory issue when streaming multiple Fixed Quality streams simultaneously. Ref: 1583

Issue with WS-Addressing namespace in response:
EVO-180 is incorrectly responding that the wsa5 fields are 2004 namespace structures and not 2005. Ref: 1714

HTTP Port Tunneling:
Resolves an issue streaming RTSP over HTTP Ref: 1735

Inconsistent WS-SubscriptionPolicy capability response:
The response from the EVO-180 Device and Event Service were not always returning the expected results. Ref: 1743

WS-Discovery does not include link local address:
Only the assigned (DHCP or Static) address is provided during discovery, the Link Local address should have been provided as well. Ref: 1798

Metadata SetSynchronizationPoint:
Media Service SetSynchronizationPoint failed to emit all the current property states to the metadata subscriber. Ref: 1818

ONVIF Conformance:
Continued improvements to ONVIF stability and conformance. Ref: 1849, 1853

Unable to create motion detection regions:
Resolves an issue with the configuration and operation of motion detection regions on the EVO-180. Ref: 1871

Motion Region Normalization Issue:
Addresses the accuracy of the motion detection regions when drawn. Ref: 1887

PullPointSubscription inconsistent responses:
Resolve issue with Motion Alarms using the PullPointSubscription service not responding and timing out. Ref: 1908

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Ref: 1442

1.7.1-328 Release   (May-2018)

This release applies to all Evolution 180 cameras.

This firmware has been tested to be Profile S conformant with v17.12 of the ONVIF Device Test Tool.

Enhancements

Improved Compression Performance in Fixed Quality mode

A new compression rate control algorithm has been introduced in Fixed Quality mode that reduces bandwidth in lower light conditions, without impacting the perceived image quality. The camera's default rate control mode remains CBR.

Ref: 1391, 1392, 1415, 1416

Enable Pano2 at low resolution

Change to camera default setting to enable a ¼ MP panoramic stream as well the default 4.5 MP panoramic stream.

Ref: 1401, 1417

Fixes

Frame rates not set correctly via ONVIF

Fixed an issue where frame rate settings applied via ONVIF were not programmed correctly in the camera and could result in slightly lower rates than requested.

Ref: 1361

ONVIF Set Video Source Mode

Fixed an issue where changing the Video Source Mode using ONVIF command could result in a HTTP 400 Bad Request.

Ref: 1347, 1399

Known Issues

SD Card recording of Fisheye 1 not supported

Recording Fisheye 1 images overwrites the previous recording, when there is still space on the SD Card for more recordings. Only the Panoramic stream, Pano 1, may be recorded in this version.

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Ref: 1442

1.6.92-296 Release (March-2018)

Enhancements

Panoramic image recording to SD Card
If the primary Panoramic stream (Pano 1) is enabled, it will be the one recorded to SD Card when recording is triggered. In previous versions, only Fisheye 1 images were recorded to SD Card.
Ref: 1275

Day/Night control mode set to Day by default
The default day/night control mode is now set to Day mode. Thanks to the camera's low-light performance in normal conditions, image quality is better in Day mode unless IR light is present. For optimum image quality, the installer should only select modes that switch to Night mode (including Automatic) if IR light is known to be available.
Ref: 1311

Fixes

SSH security
Improved security for SSH by upgrading Dropbear to version 2016.74. This enhancement removes multiple vulnerabilities discovered in the previous Dropbear version.
Ref: 1337

Fixed minor Day/Night switching bugs
Fixed some minor issues found in the Web page controlling the Day/Night mode.
Ref: 1312, 1313

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Features

VCams - Panorama
The camera can provide up to two independent Panorama streams.
- the Panorama streams offer a range of resolutions up to 5.9 MP, @14 fps

Video Streams
The camera can provide up to two independent H.264 video streams (Fisheye1 and Fisheye2) plus a third MJPEG stream.
- the primary fisheye stream offers a resolution of up to 10.1MP @12 fps
- the secondary fisheye stream offers a resolution of 0.4 MP @14 fps
- the third fisheye stream mirrors the resolution of the secondary stream

VCams - PTZ
The camera can provide 4x independent VCams streams; all with on-board dewarping.
- the VCams video streams offer a resolution of up to 1 MP @14 fps

High-Speed Sensor Mode
The camera can be configured to deliver up to 30 fps @2 MP for the primary fisheye stream. This is to provide the user with much more flexibility on the camera stream output depending on his needs.

Multicasting
This feature is available for the primary video stream and is available through CGI commands and from the camera's configuration web page.

Known Issues

SD Card Recording
The camera will record Fisheye 1 if enabled, but cannot currently record the Panorama stream.

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