

# EdgeVision

Multi-channel, Quality of Experience monitoring

## Release Notes

M928-9903-117

Version 1.43

18 December 2015



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# Release Notes

The EdgeVision Release Notes include descriptions of new and enhanced features, notable bug fixes, as well as a list of known issues and limitations associated with the latest version of EdgeVision.

## Overview

In line with our commitment to environmental preservation, only the *Quick Start Guide* and some ancillary documents (e.g. welcome letters, warranty cards) are distributed in printed form.

All EdgeVision manuals are available in PDF format from the Documentation page in the *EdgeVision Admin* Web interface (see the *EdgeVision Installation Guide*).

**IMPORTANT: If you are using a firewall, ensure necessary ports remain open**

Before you attempt to operate *EdgeVision Player*, make sure all necessary ports remain open, otherwise streaming may be blocked (see the “Opening Required Ports on the Client PC” section in the “Configuring your EdgeVision Device” chapter of the *EdgeVision Installation Guide*).

## What’s Changed?

The following is a list of features, enhancements, bugs, and known issues — listed by their reference numbers — that are new or changed in this release, as well as newly supported peripheral hardware and new peripheral hardware firmware versions:

New and changed in EdgeVision version 1.43 (listed by reference #)

| New and enhanced                      | Fixed bugs   | Known issues | Supported hardware |
|---------------------------------------|--|--------------|--------------------|
| <a href="#">EPSW-1412</a> , on page 1 | <a href="#">EPSW-1416</a> , on page 10<br><a href="#">EPSW-1417</a> , on page 10 |              |                    |

## New Features and Enhancements in EdgeVision

### Enhanced in Version 1.43

- ★ [Ref. #EPSW-1412] EdgeVision version 1.43 has upgraded to Dropbear SSH 2015.68 to resolve security vulnerability issues present in older versions (prior to 2012).

## Enhanced in Version 1.41

### Deployment

- [Ref. #EPSW-1357] *EdgeVision Configurator/Player installation*: To circumvent problems resulting from the increased security requirements imposed with recent Java updates, the *EdgeVision Configurator* and *EdgeVision Player* applications are not deployed as Java Web Start applications anymore. A native installer is available, instead. The applications, along with the appropriate JRE, are installed in a private directory, under your user profile.

#### See also

For more information, see:

- the “**Launching EdgeVision Player**” section in the “**Managing the Device Feeds**” chapter of the *EdgeVision User Guide*.
- the “**Opening EdgeVision Configurator**” section in the “**Configuring Feeds and Alarms**” chapter of the *EdgeVision Installation Guide*.

## New in Version 1.40

- [Ref. #EPSW-1385] In EdgeVision version 1.40—in setups in which you are feeding PCM audio to an EdgeVision device via HDMI—you now can select which audio pair to stream. Prior to this enhancement, EdgeVision allowed users to discriminately select an audio pair to stream *only* if the received and decoded audio was AC-3 audio.

## New and Enhanced in Version 1.30

### Access Control

- [Ref. #EPSW-1125] EdgeVision version 1.30 introduces support for access control to the EdgeVision Web page, *EdgeVision Configurator*, and *EdgeVision Player*. When the *Access Control* feature is enabled, users are prompted to log on using a valid user name and password.

#### See also

For more information, see the “Configuring EdgeVision Access Control” section of the “Configuring your EdgeVision Device” chapter of the *EdgeVision Installation Guide*.

### Dynamic IP Address Allocation (DHCP)

- [Ref. #EPSW-1211] As of version 1.30 of EdgeVision, you can configure your EdgeVision device to obtain its *MGMT port*'s IP address automatically from a DHCP server on the same network.

#### See also

For more information, see the “Defining Network Parameters” section of the “Configuring your EdgeVision Device” chapter of the *EdgeVision Installation Guide*.

## Fingerprint Generation

- [Ref. #EPSW-4] EdgeVision version 1.30 introduces the ability to generate fingerprinting data for probed video and audio streams to be sent to a downstream analyzer such as the *iControl Audio Video Fingerprint Analyzer*.

### See also

For more information, see:

- the “EdgeVision-Generated Fingerprints” section of the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- the “Enabling and Disabling Fingerprinting in EdgeVision” section of the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- the “Fingerprint Comparison and Analysis” chapter of the *iControl User Guide*.

## Streaming Configuration

- [Ref. #EPSW-1212 / EPSW-1214 / EPSW-1190] EdgeVision version 1.30 introduces improvements to streaming configuration with the separation of *streaming type* from *bit rate*. Now, for example, you can set the high resolution streaming type to **High** but independently set the bit rate to **1 Mbps**. Additionally, you may configure bit rates to be lower than previously possible. The new bit-rate settings are:
  - **High resolution stream:** 4 Mbps, 3 Mbps, 2 Mbps, 1 Mbps, 750 kbps, 500 kbps
  - **Low resolution stream:** 1 Mbps, 750 kbps, 500 kbps, 250 kbps, 125 kbps

### IMPORTANT: Some targeted bit rates may not be achievable

In most cases, the configured bit rate will be respected. However, there are some extreme cases where it is impossible to achieve the target.

For example, you may have a high resolution 1080p stream at 1920×1080 with a configured bit rate of 500kbps. In this case, the encoder may not be able to compress the stream to fit so low a bit rate. The bit rate is a target, not an absolute.

### See also

For more information about:

- Configuring streaming video settings, see the “Configuring Streaming Video Settings” section of the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- Default conversions of streaming settings upon upgrading your EdgeVision from a pre-1.30 version to version 1.30 or later, see the “Updating the Software” section in the “Configuring your EdgeVision Device” chapter of the *EdgeVision Installation Guide*.

## Streaming Support

- [Ref. #EPSW-1243] EdgeVision version 1.30 enhances its streaming capabilities by now being able to generate RTP over UDP as well as RTP over TCP streams. RTP/TCP streams

have been found useful to increase resiliency over unmanaged network (ex. with high packet loss rate).

## New in Version 1.20

### Support for IR Learning

- [Ref. #30553] EdgeVision version 1.20 introduces its *IR learning* feature. With the use of an IR learner device (available as an option from Grass Valley), you can now capture the IR codes from a remote control, assign them to selected buttons of a virtual remote control in *EdgeVision Configurator*, and finally transmit the codes to an EdgeVision device and ultimately to an STB. This feature provides a practical workflow for introducing new remote controls to existing STBs as well as introducing new STB models without having to consult with Grass Valley Technical Support.

#### See also

For more information, see the “Creating a Remote Control for an STB” section in the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.

### Subtitling (Closed Captioning)

- [Ref. #26591] EdgeVision now supports EIA-608 (also commonly known as *line 21 captioning*), which is the closed captioning standard for NTSC broadcasting, and allows you to configure debouncing, logging, and operational status for several related alarms.

#### See also

For more information, see the “Configuring EIA-608 Closed Captioning Alarms” section in the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.

### AC-3 Audio Forwarding Support

- [Ref. #26675] EdgeVision continues to enhance its compatibility with the AC-3 audio format by supporting AC-3 forwarding to a streaming output. When forwarding to a streaming output, the player (e.g. *EdgeVision Player*) decodes the AC-3 stream.

#### See also

For more information, see the “Forwarding an AC-3 Audio Stream” section in the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.

### SDI Output Channel Line-up Customization

- [Ref. #34749] EdgeVision enhances its configuration flexibility by allowing you to customize the channel line-up of the SDI-OUT.



**See also**

For more information about customizing an SDI-OUT channel line-up, see the “Configuring the SDI Output” section of the “Configuring Feeds and Alarms” chapter in the *EdgeVision Installation Guide*.

## Streaming Output

- [Ref. #31359] EdgeVision version 1.20 introduces the ability to configure streaming as a constant bit rate (CBR) instead of a variable bit rate. By so doing, EdgeVision’s streaming becomes decodable by IRD Densité cards downstream.

**IMPORTANT: 720p streaming output remains limited with downstream IRD**

If your EdgeVision is outputting a 720p stream, a downstream IRD Densité card will be unable to decode the stream properly, even if streamed as a CBR.

## Support for 1080p Format

- [Ref. #30138] EdgeVision now supports an input format of 1080p over HDMI.

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**Notes**

- This input format (1080p over HDMI) is only supported from a Kaleido-X HDMI output.
  - 1080p inputs are transformed to 1080i signals before being sent to a streaming output or an HD/SDI-OUT.
- 

## New and Enhanced in Version 1.10

### Loudness Measurement

- [Ref. #26580] EdgeVision version 1.10 introduces the *Loudness Measurement* feature. Incoming audio feeds can vary in loudness within a segment (i.e. from start to finish) and from program to program. With the *Loudness Measurement* functionality, you can configure EdgeVision to measure loudness instead of audio peak levels which has been the traditional industry approach up until recently. In EdgeVision version 1.10, you can measure loudness across programs using the de facto industry standard ITU-R BS.1770 algorithm, and then present loudness metrics through alarms using your choice of competing methods (namely EBU R128 and ATSC A/85). Alternatively, you can also customize your parameters based on either an EBU R128 template or an A/85 template.

**See also**

For more information about:

- Loudness measurement, see the “Loudness Measurement” section in the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- Configuring loudness measurement, see the “Configuring Audio Settings” section of the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.

**See also** (Continued)

For more information about:

- Viewing loudness measurement alarms in *EdgeVision Player*, see the “Reading Loudness Measurement Alarms” section in the “Device, Feed, and Stream Alarms” chapter of the *EdgeVision Version 1.10 User Guide*.

## AC-3 Audio Support

- [Ref. #31743/29882/26581] EdgeVision version 1.10 enhances its ongoing support for the Dolby AC-3 audio format (also known as *Dolby Digital*). Starting in version 1.10, you can decode an AC-3 bit stream from an HDMI or S/PDIF input, as well as monitor in real-time AC-3 metadata statistics.

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**Note:** When decoding AC-3 audio, EdgeVision must send the audio in PCM format to the streaming output.

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**See also**

For more information about:

- the AC-3 audio format, see the “Dolby AC-3” section of the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- forwarding an AC-3 bit stream to an SDI-OUT, see the “Forwarding an AC-3 Audio Stream to the SDI-Out” section in the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- decoding an AC-3 bit stream, see the “Decoding AC-3 Audio” section of the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- monitoring AC-3 metadata alarms, see the “Reading AC-3 Metadata Alarms (Audio)” section of the “Device, Feed, and Stream Alarms” chapter of the *EdgeVision Version 1.10 User Guide*.

## Alarm URI Modification

- [Ref. #31228] The structure of the virtual alarms URI reported by EdgeVision has changed as of EdgeVision version 1.10. As a result of this change in the URI/path structure, it is now necessary to update client applications that are using EdgeVision virtual alarms (such as iC Web).

## iControl Edge Official Compatibility

- [Ref. #26638] EdgeVision version 1.10 has been officially designed, tested, and certified to be compatible and optimized to work with iControl Edge version 1.50.

## Enhanced in Version 1.05

- [Ref. #33238] **Support for Unicast TS-RTP/UDP Streaming:** EdgeVision continues to expand its solution base for streaming with the support of Unicast streaming of Transport Stream (TS) content using RTP over UDP, (*Unicast TS-RTP/UDP*).

The *Streaming mode* parameter now differentiates Elementary stream (ES) from Transport stream (TS), rather than Unicast from Multicast. By distinguishing streaming content in terms of ES and TS, EdgeVision simplifies the configuration process.

A stream configured as Transport stream allows you to do the following:

- Identify a destination by IP address *and* port number. With user-determined ports, you could, for example, configure several EdgeVision units to stream to the same player (using different port numbers)<sup>1</sup>.

Port configuration makes installation easier in environments where port allocation is tightly controlled (for example, in firewalled environments).

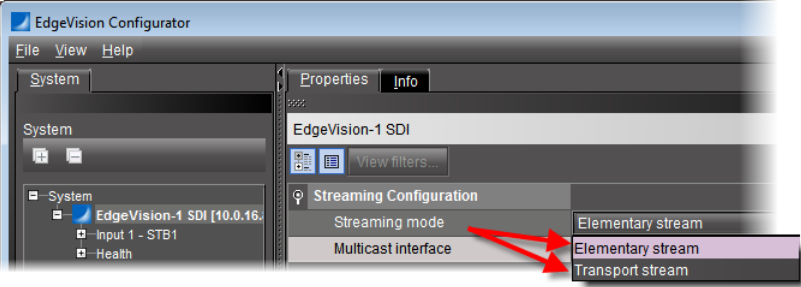
- Configure multiple destinations for a single stream.

This allows you to send multiple Unicast streams from a single EdgeVision to targeted destinations as an alternative to simply multicasting. That is, EdgeVision is able to generate multiple unicast streams with different IP address/port combinations simultaneously.

One possible application of this feature is for EdgeVision to multicast its streams on its local network while simultaneously sending a unicast stream to a remote location that may not allow multicasts through. This remote destination can be an *EdgeVision Player*, a Kaleido-IP, an Application Server, etc.

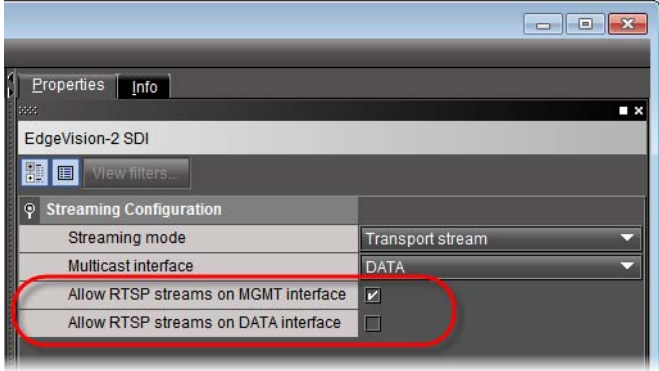
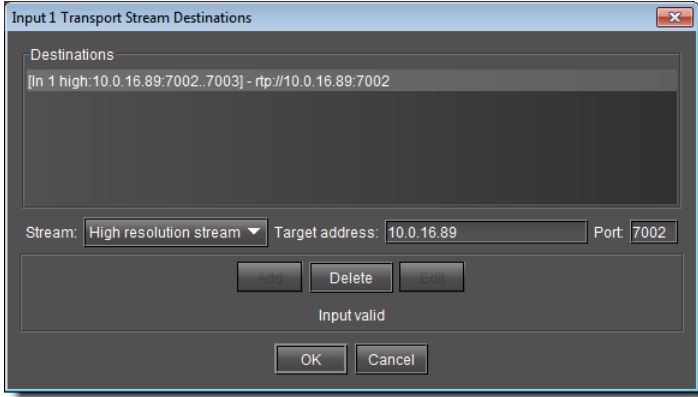
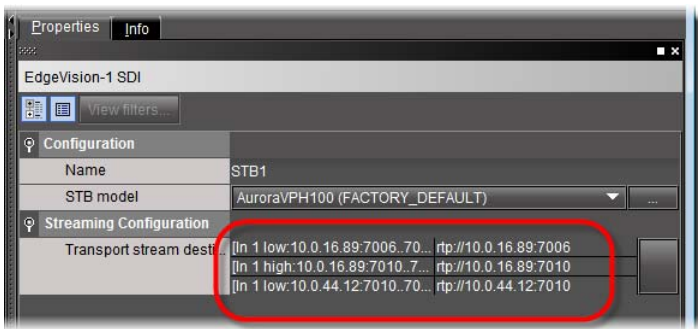
- Specify either a high or low resolution stream.

Changes in *EdgeVision Configurator* and *EdgeVision Player* are as follows:

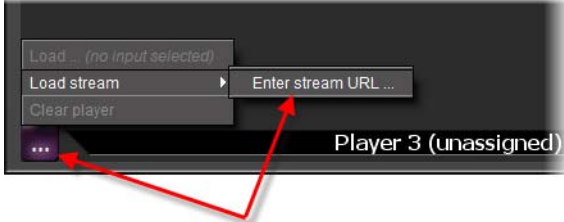
| User Interface          | Description of Change  |
|-------------------------|--|
| EdgeVision Configurator | <p>You can configure either Elementary Stream or Transport Stream mode.</p>  |

1. In prior releases of EdgeVision, only the IP addresses of destinations were configurable, with port allocation remaining hard-coded and identical from one EdgeVision unit to the next. Consequently, configurations, in which multiple streaming EdgeVision units feed into a single player, were not supported.

(Continued)

| User Interface          | Description of Change  |
|-------------------------|--|
| EdgeVision Configurator | <p>You can specify which (if any) of the ETH1-MGMT and ETH2-DATA ports on the EdgeVision device you would like to allow to send RTSP streams.</p>  |
| EdgeVision Configurator | <p>You can configure both a default target address and port when in Transport Stream mode.</p>    |
| EdgeVision Configurator | <p>You can configure multiple target addresses and ports for each stream in Transport Stream mode.</p>   |

(Continued)

| User Interface    | Description of Change   |
|-------------------|---|
| EdgeVision Player | <p>You can play streams from custom URLs.</p>  <p>Player 3 (unassigned)</p>   |
| EdgeVision Player | <p>You can select from listed streams.</p>  <p>The dot beside one of the listed streams indicates that this is the stream currently playing.</p> |

**See also**

For more information, see:

- “Configuring Feed Inputs” in the “Configuring Feeds and Alarms” chapter of the *EdgeVision Installation Guide*.
- “Assigning Feeds to the Monitors” in the “Managing the Device Feeds” chapter of the *EdgeVision Version 1.05 User Guide*.

- [Ref. #34383] In *EdgeVision Configurator*, administrators may now block one, both, or none of the ETH1-MGMT and ETH2-DATA ports on the EdgeVision device from sending RTSP streams.
- [Ref. #34179] EdgeVision now supports a new intermediate encoder stream set of resolutions/bit rates, called **Medium-high** in *EdgeVision Configurator*. The resolutions and bit rates of the encoded stream at this setting are as follows:

Medium-high resolutions and bit rates

| Input resolution | Stream resolution | Stream bit rate |
|------------------|-------------------|-----------------|
| 1080i            | 1920 × 1080       | 3 Mbps          |
| 720p             | 1280 × 720        | 3 Mbps          |
| 480i             | 720 × 480         | 2 Mbps          |
| 576i             | 720 × 576         | 2 Mbps          |

## Bugs Fixed in EdgeVision

### Fixed in Version 1.43

- ★ [Ref. #EPSW-1416] When using VBR streaming in RTP/TS output mode, the transport stream PCR shift error no longer appears every 12 hours.
- ★ [Ref. #EPSW-1417] Transport stream PSI information is now sent more frequently for low quality streams, preventing error logs in Kaleido-IP or other devices listening to these streams.

### Fixed in Version 1.42

- [Ref. #EPSW-1261] In *EdgeVision Configurator*, when attempting to connect to a different EdgeVision configuration through the **File | Connect** menu option, the new configuration successfully is loaded but may wrongly display the IP address of the last-loaded configuration.

### Fixed in Version 1.40

- [Ref. #EPSW-1398] If you change the format of one of your EdgeVision's inputs, one or more of your remaining inputs may spontaneously restart.
- [Ref. #EPSW-1350] In the **Resolution** pane of EdgeVision, when an input's video streaming configuration is selected, the *Medium* calibration for *720p* is wrongly listed as 960×540 instead of the correct calibration of 864×720.

### Fixed in Version 1.32

#### Fingerprint Generation

- [Ref. #EPSW-1376] For inputs that have an AC3 audio format, fingerprinting is not generated.

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**Note:** The fix for this bug requires that your system has the Dolby mezzanine card installed.

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- [Ref. #EPSW-1186] In *EdgeVision Configurator*, if you enable AC3 forward, but do not set **Decoded AC3 channel selection** to **Downmix**, the AC3 audio will not be forwarded.

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#### Notes

- The fix for this bug requires that:
    - Your system has the Dolby mezzanine card installed.
    - The audio format is set to AC3.
  - The decoded audio pair selection is only used when the audio format is AC3, the Dolby mezzanine card is present, and the user requests AC3 decoding. If these conditions are not all met, the first audio pair of the audio input (HDMI, SPDIF, analog) is selected for the streamer.
- 

### Service Infrastructure

- [Ref. #EPSW-1354 | Def. 001-00-016031] Occasionally, the GSM, as seen in iControl Navigator, disappears and triggers a lease renewal error.

### Virtual Alarms

- [Ref. #EPSW-1371] In the case where you have modified at least one overall alarm and your version of EdgeVision is 1.30 or later, after rebooting EdgeVision, overall alarms that were not modified by the user are deleted and not recreated.

### Security Infrastructure

- [Ref. #EPSW-1374] EdgeVision version 1.32 upgrades the EdgeVision Bash shell.

## Fixed in Version 1.31

### Streaming Server

- [Ref. #EPSW-1361] When attempting to stream RTP unicast to a remote Application Server, if there is a delay of more than 30ms before a connection is established, the stream forwarding attempt fails.

## Fixed in Version 1.21

- [Ref. #EPSW-1241] If the EdgeVision HDMI input feed is a 1080p 50Hz or 60Hz signal, the EdgeVision device may report periodic video loss.
- [Ref. #EPSW-1240] If your input feed is a 1080p over HDMI, you may find the resulting image has some intermittent flickering.
- [Ref. #EPSW-1231] If video becomes frozen, EdgeVision may not always raise the *Freeze Detect* alarm.

## Fixed in Version 1.20

- [Ref. #36224] In EdgeVision version 1.10, when **Allow RTSP streams on DATA interface** is enabled on *EdgeVision Configurator*, the EdgeVision unit signals to a downstream iC Edge

system to use the **ETH-DATA** interface to retrieve EdgeVision streams, even if **Allow RTSP streams on MGMT interface** is also enabled on *Configurator*. This behavior is different from the EdgeVision version 1.0x, which signaled to iC Edge to use the **ETH-MGMT** interface.

In EdgeVision version 1.10, the workaround was to clear the **Allow RTSP streams on DATA interface** checkbox in *EdgeVision Configurator*. With EdgeVision version 1.20, the behavior reverts to what it was in version 1.0x, with no need for a workaround.

- [Ref. #35309] If you stream video from your EdgeVision device to *EdgeVision Player* using *Transport Stream* mode, the audio may be out of synch with the video.
- [Ref. #37811] Restarting an iControl Application Server (or restarting a GSM on an Application Server) may cause client applications such as iC Web and *EdgeVision Player* to lose communication with the EdgeVision GSM.

## Fixed in Version 1.12

- [Ref. #36995] On rare occasions, the EdgeVision unit may not start and may additionally cause the following secondary effects:
  - The Input LEDs stay black.
  - It is not possible to connect via IP to the EdgeVision unit.

## Fixed in Version 1.11

- [Ref. #34806] On rare occasions, video streams from random inputs may be lost.
- [Ref. #35809] On rare occasions, an EdgeVision device may generate audio streams with invalid timestamps. This may render the streams undecodable by a Kaleido-IP.

## Fixed in Version 1.10

- [Ref. #31647] When two instances of *EdgeVision Player* (each launched from separate EdgeVision devices) are running on the same client PC, clicking **Load all streams** may not load the streams from the desired EdgeVision unit.
- [Ref. #31723] In *EdgeVision Player*, the *GSM Status detail view* is not visible.
- [Ref. #31855] In *EdgeVision Admin*, on the *System configuration* page, if you select **Use name resolution** and your host name contains a space in it, the EdgeVision device may not start.
- [Ref. #33974] When an input name in *EdgeVision Configurator* includes the + (*plus*) character, the GSM tree may not work properly.
- [Ref. #32610] In *EdgeVision Configurator*, when the following conditions are **all** met, there may not be an audio tone:
  - video and audio test patterns are enabled
  - video input signal comes from a component video
  - audio input is S/PDIF



- [Ref. #32320] When *EdgeVision Configurator* attempts to retrieve the database backup file from *EdgeVision Admin's System Snapshot* functionality (DatabaseSnapshot.zip), an error message appears.
- [Ref. #31709] After performing a firmware upgrade of your EdgeVision device, you may not be able to properly stream audio from a PCM-over-HDMI input.
- [Ref. #31713] In *EdgeVision Configurator*, when **Streaming mode** is set to **Multicast**, and the frame rate is reduced to 5 fps, the frame rate, as displayed in *EdgeVision Player*, does not reflect the same value until you refresh *EdgeVision Player*.
- [Ref. #31681] If you select **Use name resolution** on the System configuration page of *EdgeVision Admin*, and then open *EdgeVision Player*, CPU usage on the EdgeVision device may be higher than desired.

**IMPORTANT: This bug fix requires user action**

If **Use name resolution** is enabled in *EdgeVision Admin*, the solution to this bug requires that you do both of the following two actions:

- Edit the Hosts files for all client applications connecting to the EdgeVision unit – including *EdgeVision Player* – on the client PC to include the IP address and host name of the EdgeVision device.
- If the IP address and host name of the EdgeVision unit were added to the list of available GSMs in iControl, you must edit the Application Server's Hosts file to include the IP address and host name of the EdgeVision device.

- [Ref. #31902] When disconnecting, then reconnecting an HDMI input repeatedly, the color conversion may not function properly on SDI outputs or streaming outputs.
- [Ref. #33376] When in the **Single Player** view, setting the monitor to display a stream in 1:1 native resolution in fact displays the stream at the encoded resolution rather than the display resolution. This may cause horizontal compression.
- [Ref. # 29615] **EdgeVision Player settings are not all persistent:** Not all *EdgeVision Player* settings are preserved between sessions. Some settings, such as selected View Modes, always revert back to a default value when you start *EdgeVision Player* or if you refresh the *EdgeVision Player* window (by pressing **F5**).

## Fixed in Version 1.05

- [Ref. #32805] Input signals with a resolution higher than 960 × 540, from an EdgeVision system, are not yet supported.

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**Note:** For related known issues, see "[EdgeVision Compatibility with Kaleido-IP](#)" on page 20.

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- [Ref. #33667] After opening *EdgeVision Configurator* over a slower network connection, *EdgeVision Configurator* repeatedly times out.

- [Ref. #34586] Signals with a resolution of  $360 \times 480$ , or  $360 \times 576$  from an EdgeVision system (that is, the low-resolution options, for a 480i, or 576i high-resolution stream), are not supported on a Kaleido-IP.

**IMPORTANT: Bug fix changes EdgeVision streaming output resolution**

The solution to this bug entails a slight adjustment in the resolutions of the low-resolution stream at 480i input resolution from  $360 \times 480$  to  $352 \times 480$  and from  $360 \times 576$  to  $352 \times 576$ .

### Fixed in Version 1.04

- [Ref. #32828] After attempting a software upgrade, EdgeVision may not successfully reboot.

**IMPORTANT:**

- Before installing software version 1.04, **you must first upgrade your hardware.**
- This bug fix requires **both** a software upgrade **and** a hardware upgrade.
- Once you have upgraded your hardware, you will not be able to downgrade your software to a version lower than version 1.04. Familiarize yourself with the following upgrade path matrix for more information.

Supported upgrade path matrix

| Software upgrade path                              | EdgeVision hardware before hardware upgrade | EdgeVision hardware after hardware upgrade |
|--|---|--|
| Pre-version 1.04 to pre-version 1.04               | Supported                                   | <b>NOT</b> supported                       |
| Pre-version 1.04 to version 1.04 (or later)        | <b>NOT</b> supported                        | <b>NOT</b> supported                       |
| Version 1.04 (or later) to version 1.04 (or later) | <b>NOT</b> supported                        | Supported                                  |

- [Ref. #33150] When EdgeVision is connected to one of the following, the EdgeVision output may have a bluish tinge:
  - a Kaleido-Alto via a DVI-HDMI adaptor
  - OR,**
  - an AJA Hi5 Video and Audio Converter outputting an SD-resolution feed

### Fixed in Version 1.03

- [Ref. #32916] EdgeVision is not able to properly sync with video coming from the HDMI output of a BlackMagic SDI-to-HDMI converter.

**IMPORTANT:** In order for the resolution of this bug to be effective, you must disconnect all HDMI cables attached to the EdgeVision device before you upgrade to software version 1.03. You may reconnect your HDMI cables after the upgrade is complete.

- [Ref. #32840] *EdgeVision Player* may display video streams incorrectly if the video streams pass through virtual private networks (VPNs).

## Fixed in Version 1.01

- [Ref. #31716] On rare occasions, and without user intervention or loss of signal, EdgeVision may display a test pattern that will persist until the unit is rebooted or a video format change is detected.

## Known Issues and Limitations

### EdgeVision Device

- [Ref. #37239] If you try to upgrade the operating system of one EdgeVision device from two or more computers simultaneously, the upgrade operation may fail.

**Workaround:** Do not try to upgrade your EdgeVision device from more than one source at a time.

- [Ref. #34798] If the *Auxiliary Video Information (AVI) InfoFrame* is unavailable or in error, the SDI-OUT color may be different from the HDMI-IN color.
- [Ref. #34714] If you attempt to downgrade from EdgeVision version 1.11 to EdgeVision version 1.05, the version 1.05 overall virtual alarm is not restored and the version 1.11 overall alarms remain.

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**Note:** The scope and structure of overall alarms changed between EdgeVision version 1.05 and version 1.10. In version 1.05, a single overall alarm represented the aggregate of all EdgeVision alarms. In version 1.10, there is now an overall health alarm and a separate overall alarm representing the respective aggregates of each input.

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**Workaround:** Call Grass Valley Technical Support (see "[Contact Us](#)", on page 23).

- [Ref. #34617] If you try to upgrade the operating system of an EdgeVision device using an invalid upgrade file, the upgrade operation does not proceed but the system reports back:  
Upgrade completed successfully: EdgeVision unit will reboot
- [Ref. #33911] If using an analog input and the audio signal is lower than -40dBFS, the corresponding ALM on *EdgeVision Player* may report the audio peak with varying precision.
- [Ref. #33161] EdgeVision may not properly decode input coming from a Kaleido-K2.

- [Ref. #32659] If you attempt to upgrade your EdgeVision device from two client PCs simultaneously, your EdgeVision device may fail to restart following the upgrade.  
*Workaround:* Redo the upgrade procedure from only one PC.
- [Ref. #31855] **If a device name has a space in it, it will not load in the Host Browser.** Use the System configuration page in *EdgeVision Admin* to rename the device so that it does not use a space (device names can only contain letters or numbers).
- [Ref. #31442] EdgeVision's Macroblock probe may not function properly for SD inputs. The issue does not impact macroblock detection of HD signals.
- [Ref. #31006] **iControl Navigator does not automatically detect EdgeVision devices:** To ensure that iControl Navigator detects and displays EdgeVision devices, you must manually add the IP address of each EdgeVision in the list of lookup addresses in the **Edit service locations** portion of iControl Application Server.

## EdgeVision Configurator

- [Ref. #EPSW-1338] If you are generating video fingerprinting data on an EdgeVision using either a Component or Composite video source and the accompanying audio has an HDMI source, the video fingerprinting function may stop producing signatures.  
*Workaround:* When producing video fingerprint data, if your audio source must be set to HDMI, make sure the video source is also set to HDMI.
- [Ref. #EPSW-1320] *EdgeVision Configurator* does not support Java version 7.  
*Workaround:* If your client PC has Java version 7 installed you must uninstall this version and then install **Java version 6, Update 20**. You can download the installer for this supported version of the Java Runtime Environment from the EdgeVision Home page on your device.
- [Ref. #EPSW-1295] There is a risk of overloading your EdgeVision device's stream-encoding capacity if the aggregate of the bit streams you configure the device to stream at any given moment exceeds hardware capacity. In the event that this occurs, you may experience a loss of one or more streams as well as an unresponsiveness in communication to the device.
- [Ref. #EPSW-1267] *EdgeVision Player* does not support Java version .  
*Workaround:* If your client PC has Java version 7 installed you must uninstall this version and then install **Java version 6, Update 20**. You can download the installer for this supported version of the Java Runtime Environment from the EdgeVision Home page on your device.
- [Ref. #EPSW-1221] In *EdgeVision Configurator*, if **ALL** the following conditions are met, you may hear AC3 noise from the audio player:
  - the **Mute AC3 forward** option is enabled (On the left navigation pane, select **Configuration** under a given Input's Streaming | Audio folder)
  - that same Input's **AC3 forward** option is also enabled (On the left navigation pane, select Input selection under Audio)
  - the audio input signal is lost (even momentarily)

*Workaround:* [TO BE PERFORMED IF THE ABOVE CONDITIONS ARE ALL MET]

1. In *EdgeVision Configurator*, select **Configuration** in the appropriate Input's Streaming | Audio folder in the left navigation pane.
2. In the right pane, clear and then re-select the **Mute AC3 forward** option.

- [Ref. #37708] In *EdgeVision Configurator*, if you enable **AC3 forward**, but do not set **Decoded AC3 channel selection** to **Downmix**, the AC3 audio will not be forwarded.
- [Ref. #37099] In *EdgeVision Configurator*, if you enable AC3 forward, the reported bitrate of AC3 metadata may be different from the reported bitrate of the streaming audio.
  - Location of reported bitrate for AC3 metadata: System | <EdgeVision device> | <Input> | Audio | AC3 metadata | Bitrate
  - Location of reported bitrate for streaming audio: System | <EdgeVision device> | <Input> | Streaming | Audio | Bitrate

*Workaround:* The reported bitrate in the AC3 metadata folder is the correct bitrate.

- [Ref. #36669] Neither *EdgeVision Configurator* nor a system snapshot will allow you to create a backup if the configuration data for user-defined remote controls raises the overall size of the backup file above 4MB.

*Workaround:* Delete the unassigned .stb files on the EdgeVision unit.

- [Ref. #34618] If you are simultaneously streaming a multicast stream and a unicast stream using the same port number to the same client PC, *EdgeVision Player* may display the wrong stream.

*Workaround:* Make sure there are no two target destinations using the same port number.

- [Ref. #34336] **EdgeVision does not prevent iControl GSM's unsupported characters:** EdgeVision does not prevent you from using the / (forward slash) and & (ampersand) characters in the names of EdgeVision units and inputs. However, if you use these characters, certain functions in *EdgeVision Player* may not function properly.

*Workaround:* Do not use the / (forward slash) and & (ampersand) characters when naming EdgeVision units and inputs.

- [Ref. #31680] **HDMI audio selection may not work properly:** The EdgeVision allows AC-3 audio to be embedded on the SDI output. To do this, the **SDI out audio selection** in *EdgeVision Configurator* must use the same source as the audio Input selection, and that source must carry AC-3 audio. However, the audio in *EdgeVision Player* will be muted, as it does not currently support AC-3 decoding.
- [Ref. #31661] **The video alarms Video black and Video luma too high can occur at the same time:** Although it should not be possible, if you set the Video Black threshold to 20 IRE and the Video luma too high threshold to 90 IRE, it can trigger both alarms.
- [Ref. #31536] **EdgeVision Configurator loses connection with the device:** The *EdgeVision Configurator* may not recover the connection to an EdgeVision device after the device has been reset. Close *EdgeVision Configurator* and restart it.

- [Ref. #31418] **The Video black and Video luma too high values are inaccurate:** For Video black and Video luma too high probing, you should use the IRE calibration for NTSC signals fed to the Composite input. Use mV calibration for all other video inputs and formats. Please contact Grass Valley Technical Support (see "[Contact Us](#)", on page 23) for information on how to set the Black/Luma threshold values based on signal Input.
- [Ref. #31417] **Alarm settings are not automatically applied when you retrieve a backup:** Alarm-related parameters (e.g. audio alarm thresholds, alarm enabled settings, logging enabled settings, clear duration and set duration intervals, etc.) will not be instantly applied when you retrieve a backup on the *EdgeVision Configurator*. Restart the EdgeVision device after loading a backup file to ensure that all alarm settings are applied.
- [Ref. #31339] **High Quality Stream probing:** In the case of an 1080i input signal, selecting the *High* calibration for the High Resolution Stream will suspend the activity of the Low Resolution Stream. This limitation does not apply to other input signal resolutions, or when *Medium* and *Low* settings are selected for the High Resolution Stream.
- [Ref. #31189] **Video and audio probing on a Test Pattern:** When a user activates the Test Pattern Generator (TPG) on an Input, the audio probing continues, but the audio alarms will not be triggered. However, if video probing is enabled, the video alarms may be triggered falsely.
- [Ref. #31173] Opening *EdgeVision Configurator* on the DATA port of the EdgeVision device results in only partial functionality of the application. For example, alarms reported on *EdgeVision Configurator* may not be correctly updated.  
*Workaround:* Make sure you open *EdgeVision Configurator* only from the MGMT port of the EdgeVision device.
- [Ref. #30578] **Selecting HDMI video and audio input options:** If you would like to select an audio format from an HDMI input, you must first select video from the same HDMI input.

## EdgeVision Player

- [Ref. #EPSW-1302] If the streaming mode is TCP in your EdgeVision device, then in iControl Web, your player may freeze and your EdgeVision unit may crash and require a reboot.  
*Workaround:* In iControl Web Creator, make sure the URL of the player's video stream is the same as the URL for your audio stream.
- [Ref. #35691] EdgeVision does not support the PAL-M format.
- [Ref. #34110] If *EdgeVision Player* is open and the connected EdgeVision unit is restarted, it may take as long as five minutes to reconnect to EdgeVision.

*Workaround:* After restarting the EdgeVision unit, restart *EdgeVision Player*.

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**Note:** You must wait for the EdgeVision unit to finish its Restart sequence before restarting *EdgeVision Player*. If you are able to load the *EdgeVision Admin Web* page, the EdgeVision unit has finished its Restart sequence.

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- [Ref. #33943] *EdgeVision Player's* tree alarms are not always automatically refreshed when *EdgeVision Player* must connect to your EdgeVision device through a firewall.

*Workaround:* Make sure that all required ports are open on the client PC.

**See also**

For more information about opening required ports, see the "Opening Required Ports on the Client PC" section in the "Configuring your EdgeVision Device" chapter of the *EdgeVision Installation Guide*.

- [Ref. #33464] **EdgeVision Player must be refreshed:** When modifying streaming from Unicast to Multicast or vice versa, the player stops.  
*Workaround:* Refresh *EdgeVision Player* after modifying the streaming.
- [Ref. #31902] **HDMI color conversion:** When displaying HDMI video in *EdgeVision Player* or routing an HDMI video source on the EdgeVision device's SDI output, the color conversion may not always be accurate, especially if you disconnect and reconnect the HDMI cable.
- [Ref. #31772] **SDI synchronization:** The EdgeVision device cannot synchronize with a DVI signal via the HDMI input if the signal has an SD clock (e.g. 480i or 576i signals).
- [Ref. #31537] If, when you try to stream to *EdgeVision Player*, you specify a non-existent IP address, *EdgeVision Player* may take up to 60 seconds before yielding control of the interface back to you.
- [Ref. #31373] If you feed a PAL signal into a Composite, Component or HDMI input, the black detection error, set using an IRE scale, will be triggered with an offset of 7.5 IRE.  
*Workaround:*
  - In EdgeVision, if connecting an NTSC input, select the **IRE** unit
  - In EdgeVision, if connecting a PAL, Component, or HDMI input, select the **mV** unit
- [Ref. #31291] **Audio silence and a disconnected audio cable:** The EdgeVision device cannot distinguish between an analog audio silence and a disconnected analog audio cable. Therefore, if "Analog" is selected as the audio input format, and the associated analog audio cable is not connected, *EdgeVision Configurator* and *EdgeVision Player* will continue to report audio presence and PCM audio, triggering the Silence alarm on that Input.

## EdgeVision as Alarm Provider

- [Ref. #EPSW-1229] In iControl Navigator, an EdgeVision may erroneously appear with a white alarm status color for the overall alarm.

*Workaround:*

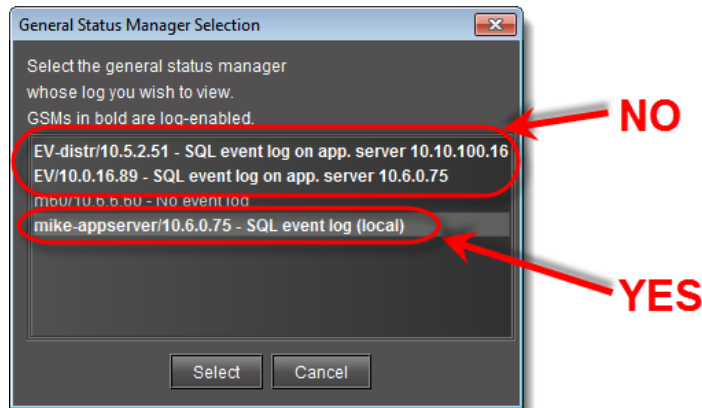
1. In iControl Navigator, right-click the EdgeVision's overall alarm.
2. Click **Configure overall alarm**.
3. In the URI box, change the link to the following:

```
virtualAlarm://xxx.xxx.xxx.xxx/Health+overall
```

where xxx.xxx.xxx.xxx is the IP address of your EdgeVision unit.

- [Ref. #37865] In iC Navigator, when viewing the logs of an EdgeVision device, the log retrieval may be slow and may not retrieve all expected results.

*Workaround:* In iC Navigator's **General Status Manager Selection** window, select the Application Server where the EdgeVision is logging its alarms to be the GSM rather than selecting the EdgeVision directly.



Select the Application Server, not the EdgeVision device.

## EdgeVision Compatibility with Kaleido-IP

- [Ref. #37182] In XEdit, if you register an EdgeVision RTP stream as UDP instead of RTP, the decoded video may stream in a noticeably jerky and/or fast-forward-like manner.

*Workaround:* Register the stream as *RTP* in XEdit.

- [Ref. 32805] In the case of a Kaleido-IP multi-viewer system with sources from an EdgeVision device, the Kaleido-IP must have version 6.40 (or later) of the Kaleido-X Software, and the EdgeVision must have version 1.05 (or later) of the EdgeVision software.

## EdgeVision Compatibility with iControl Navigator

- [Ref. #EPSW-1315] If your EdgeVision device has DHCP enabled and is restarted, the DHCP server may assign a different IP address to the unit. In this case, iControl Navigator may also need restarting before it can re-discover the Edgevision unit and reliably display it.

## Documentation

The following documentation is included with EdgeVision version 1.43.

| Part Number   | Title                                     |
|---------------|---|
| M928-9900-105 | <i>EdgeVision Version 1.41 User Guide</i> |
| M928-9902-106 | <i>EdgeVision Installation Guide</i>      |



*(Continued)*

| Part Number   | Title  |
|---------------|--|
| M928-9903-116 | <i>EdgeVision Version 1.43 Release Notes</i>     |
| M928-9905-106 | <i>EdgeVision Version 1.41 Quick Start Guide</i> |

In line with our commitment to environmental preservation, only the *Quick Start Guide* and some ancillary documents (e.g. welcome letters, warranty cards) are distributed in printed form. All manuals are available in PDF format from the *EdgeVision Admin* Web interface (see the *EdgeVision Installation Guide*).

## Currently Supported Set-Top Box Models

The set-top boxes (STBs) currently supported by EdgeVision are as follows:

Currently supported STBs

| STB name                 | Remote UI type |
|--------------------------|----------------|
| AccessDTA1030D           | Generic        |
| AmberyHDMIVideoConverter | Generic        |
| AmberyLCDT7              | Generic        |
| AuroraVPH100             |                |
| CanalDigitalCDC900SHD    | Generic        |
| CiscoCIS330              | Generic        |
| CiscoIPN330HD            | Generic        |
| ContemporaryResearch     |                |
| DirecTV                  |                |
| DirectTV-H25-D12         |                |
| DishNetwork1             |                |
| DvicoTvixHd3             | Generic        |
| EcholinkEL7202CR2CiUSB   | Generic        |
| EchoStar4100             | Generic        |
| EchoStar6131             | Generic        |
| ElectronicMaster5000HD   | Generic        |
| ElectronicMasterDTV500H  | Generic        |
| ElectronicMasterDTV500H  | Generic        |
| ElectronicMasterDTV500H  | Generic        |
| GDCT860                  | Generic        |
| GrandtecGXCP             | Generic        |

## Release Notes

### Currently Supported Set-Top Box Models

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#### Currently supported STBs (*Continued*)

| <b>STB name</b>                  | <b>Remote UI type</b> |
|----------------------------------|-----------------------|
| IcecryptS4000                    | Generic               |
| KcpiDT504                        | Generic               |
| MotorolaDCH3200                  | Generic               |
| MotorolaDCT3412                  | Generic               |
| MotorolaDCT6412                  | Generic               |
| MotorolaDCT700                   | Generic               |
| MotorolaDCX3501M                 | Generic               |
| MotorolaDSR205                   | Generic               |
| MotorolaDSR505_StarChoice        |                       |
| MotorolaVIP1216                  | Generic               |
| Pace102802                       | Generic               |
| PaceDS420NF                      | Generic               |
| PaceRNG110                       | Generic               |
| PhilipsDTR220                    |                       |
| PixelmagicHDMediabox             | Generic               |
| ScientificAtlanta12155874        | Generic               |
| ScientificAtlanta4027516         | Generic               |
| ScientificAtlantaExplorer3250HD  | Generic               |
| ScientificAtlantaExplorer8240HDC | Generic               |
| ScientificAtlantaExplorer8300HD  | Generic               |
| ScientificAtlantaExplorer8550HDC | Generic               |
| ShawA102802                      | Generic               |
| ShawPC758D                       | Generic               |
| SwisscomTVBox                    | Generic               |
| TVCaboZonBox                     | Generic               |
| TelstraTBox                      | Generic               |
| VantageHD7100S                   | Generic               |
| VideotronRT-U63P-15              | Generic               |



## Grass Valley Technical Support

For technical assistance, contact our international support center, at 1-800-547-8949 (US and Canada) or +1 530 478 4148.

To obtain a local phone number for the support center nearest you, please consult the *Contact Us* section of Grass Valley's website ([www.grassvalley.com](http://www.grassvalley.com)).

An online form for e-mail contact is also available from the website.

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