Changelog V2.7.514 release

March 14th 2025

Disclaimer

This release is not state-compatible with previous software versions; configuration scripts need to be adapted and will need to be reapplied.

Fixes

Ember+ Fix service file bug that would prevent the Ember+ driver from coming up automatically after reboot

IOModule Limit maximum audio groups in SDI output based on video standard to avoid audio corruption

RTPTransmitter [JPEG-XS/AT1130] Fix a bug wherein high enough numbers of 2110-20 transmitters (but well below nominal capacity) could emit corrupted data

RTPReceiver Fix a bug where instances of the same multiplexed receiver block might see their neighbors' `max_age` setting and thus produce spurious RX errors if buffer capacities were different

RTPReceiver Fix a race condition wherein receivers might incorrectly try to read out a packet that had only been committed to other memory channels (this bug can only occur when using clean switching together with stream sharing)

UI Correctly record references to non-KWL entities (as used by the AudioShuffler)

Genlock Fix driver bug that could indefinitely hold off calibration when trying to lock to an analog reference input with sufficiently high drift

AudioMixer fix rounding issues which could result in the fader not moving to the lowest point

AudioMixer fix peak hold continuously updating the UI

AudioMixer changing the compressor threshold value while in AutoGain mode was wrongly moving the graph handle

REST API resolved some parameters wrongly returning 404 Not Found

AudioMixer mute, faders and input gains were not updated when creating a mixer with existing state

NMOS resolved an issue that would lead to receivers trying to patch to the

wrong track.

Changes

vscriptd Don't refuse settings.json->script conversion when failing to look up some deprecated keyword's metadata. Instead, vscriptd will now generate lots of diagnostics at script execution time, which isn't ideal either, but at least allows the user to thoroughly check for potential translation errors.

Genlock [AT1130] Add toplevel state keyword per instance that aggregates single-lane states to simplify monitoring

NetworkManager remove address-via-Morse-code feature entirely: with the best Morse reader smartphone app we could find, this still required proper reader configuration and a steady hand, so this feature turned out to not be very helpful in practice; whereas it was very effective at confusing people because QSFP LEDs would blink in a strange pattern after every link state change. Instead, we now recommend to attach a USB-to-serial cable, and use a laptop or smartphone with serial app to read out ip addresses

NetworkManager remove stale entries on address deletion

NetworkManager don't list ipv6 addresses

While blade//runner supports both ipv4 and ipv6 in principle, the TX/RX driver software currently assumes ipv4, and will continue to do so while there is zero customer demand for ipv6. Until we change this, listing ipv6 addresses will typically only produce a link-local `fe80::...` entry that often has to be disregarded explicitly during scripting

RTPReceiver the 2110-20 engine is now less likely to crash ("backend liveness timeout") on invalid payloads

should you still encounter backend liveness issues, please provide us with a pcap of the troublesome packet stream

RTPReceiver the 2110-40 embedder now correctly handles the reserved line number 0x7FE

PTPFlows fixed a bug that could cause the hw delay response generator to lock up the irq bus on link_up changes

System improved i2c robustness (used for PSU communication, and `system.slots`)

NetworkManager changed weight to metric in route configuration

AudioEngine removed the peak meters from mono and stereo mix

New Features

UI The EasyIP router control matrix interface is now part of the landing page (requires a suitable blade//master configuration file)

AudioMixer AUX and sums can now be included in the main channel section

AudioMixer added Step mode to gate

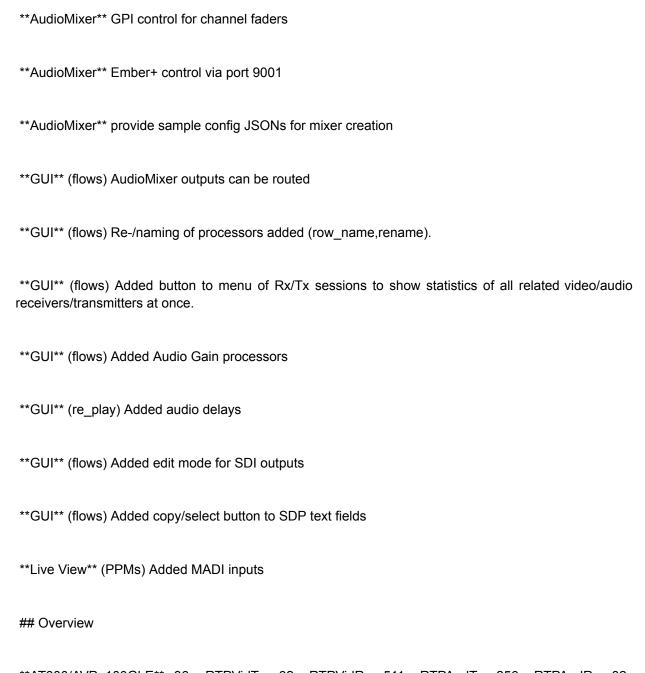**AudioMixer** show an error page with more information when the service isn't running

AudioMixer show AUX enable and tap select in pan / balance row for AUX delegation

AudioMixer add option to color channel background to easier differentiate channels

AudioMixer add option to allow mute to also apply to AUX sums

AudioMixer different PPM scales are now selectable (UI)

AudioMixer Loudness target level can now be selected (UI)

AudioEngine added Faders module with adjustable transition type / shapes

AudioEngine InputTrim now perform a clean cross fade when switching between A/B

AudioEngine MidSide got a new behavior mode for rotation: MID_PAN_ONLY

AudioEngine added a `only_internal_inputs` flag to capabilities

IPAudio increased the number AudioEngine delays and faders

AudioMixer new compressors modes: auto gain, ducking (using side chain)

AudioMixer AUX faders can be delegated to faders in virtual panel

AudioMixer input assignment

AudioMixer more and easier to use panel delegation

AudioMixer Loudness monitoring UI (via panel delegation)

AudioMixer GPI control for channel faders

AudioMixer Ember+ control via port 9001

AudioMixer provide sample config JSONs for mixer creation

GUI (flows) AudioMixer outputs can be routed

GUI (flows) Re-/naming of processors added (row_name,rename).

GUI (flows) Added button to menu of Rx/Tx sessions to show statistics of all related video/audio receivers/transmitters at once.

GUI (flows) Added Audio Gain processors

GUI (re_play) Added audio delays

GUI (flows) Added edit mode for SDI outputs

GUI (flows) Added copy/select button to SDP text fields

Live View (PPMs) Added MADI inputs

Overview

AT300/AVP_100GbE 36x RTPVidTx, 32x RTPVidRx, 511x RTPAudTx, 256x RTPAudRx, 32x RTPAnc/BurstRx, 24x ColCorr (12x 3D-LUT based), 24x VidMix/Key, 16x VidRePlay, 128x AudRePlay, AudioGain, 3x 384 AudioSRCs, 563x AudioShuffler, 20x VC2Enc, 32x VC2Dec, 2x LTCGen, 3x VidGenlock, 3x AudGenlock, 2x VidSignalGen, AudioSignalGen silence/400Hz/440Hz/1kHz, 3x MasterClock LTC-Gen, 16x Audio N-Minus-1, 64x AudioMixer, 256x LoudnessMetering

AT300/JPEGXS_RX_100GbE 32x RTPVidRX, 8x JPEGXSDec, 16x VC2Dec, 30x RTPVidTx ...

AT300/JPEGXS_TX_100GbE 30x RTPVidTx. 8x JPEGXSEnc, 32x RTPVidRx, 32x VC2Dec ...

Release 2.7 supports **C100 AVP / AVP_40GbE / CC3D_40GbE / JPEGXS_40GbE / PCAP_40GbE / UDX_40GbE

For a detailed list of hardware capabilities, please load the application you wish to use and refer to http://<ip-address-of-your-AT300>/runtime_constants.json