



HPA

2026 | TECH RETREAT

**SMPTE at Warp Speed?
Actually, Yes!**

Moderator: Chris Lennon, Ross Video

The Panel



Chris Lennon
Office of the CTO
Ross Video



Brian Cipponeri
Global M&E Architect
Dell Technologies



Jim Helman
CTO
MovieLabs



Stan Moote
CTO
IABM



Thomas Bause Mason
Director of Standards Development
SMPTE

IABM

IABM Hosts Industry Initiative Dynamic Software Licensing

The CFO's within our industry got all excited about the switch from CapEx to OpEx with the expectation in our everchanging industry of minimizing the risk related to over or under funding CapEx investments, hence providing flexibility. The theory being moving toward software-defined workflows, budgeting for projects on a pay-as-you-go basis would provide improved business flexibility, and implementation of best-of-breed multi-vendor solutions.



Stan Moote
CTO, IABM

Noor Hassan
Worldwide M&E
Partner Solutions
Architect, AWS

The broadcast industry's adoption of cloud-based and hybrid workflows has highlighted fundamental challenges between traditional licensing models and modern operational requirements. With the transition to software-based and cloud-based technologies, traditional approaches that correlate licenses with hardware create operational friction for system integrators, vendors, and customers.

Customers, system integrators (SIs), and Independent Software Vendors (ISVs) are voicing these challenges and the impact when migrating broadcast and live production workflows to software-based, cloud or hybrid ones.

"Today's broadcast industry requires flexible, transparent licensing models that empower media companies to experiment, scale, and innovate without friction. This collaborative initiative addresses a critical industry challenge by providing best practices for how broadcast applications are licensed and managed, enabling broadcasters to respond faster to opportunities while focusing on what matters most – creating compelling content for their audiences." – **Steph Lone**, Global Leader Solution Architecture for Media, Entertainment, Games & Sports, AWS

"As our industry evolves toward software-defined production, decentralized infrastructure, and commodify compute, we must modernize how we manage application licensing. Embracing a dynamic licensing model will reduce operational burdens and accelerate our mission to innovate and democratize media production."

Thomas Carlisle, Sr. Director, Engineering, Diversified

Current Industry Pain Points

Broadcasters and media companies face numerous challenges with traditional licensing approaches. The operational complexity of managing hundreds of proprietary licensing systems across multiple vendors creates significant administrative overhead and potential points of failure.

Cost uncertainty presents another major challenge, as organizations face significant difficulties in forecasting and optimizing licensing costs across their operations. Technical barriers further complicate matters, with many licenses being tied to hardware identifiers like MAC addresses or hostnames, manual license setups; all create bottlenecks in accelerating software-based deployments. Security is a top concern that must also be considered especially with distributed, hybrid systems.

Back in the day, we all designed around having redundant systems, or at least some type of planned disaster recovery. With software licenses, a continuous audit is required to ensure the license doesn't expire at an inopportune time – not really practical! Not unlike in the total hardware days, the SI's and the hardware suppliers ultimately come under fire when operations cease to work. It is issues like this that the industry is still in build and license for peak mode, rather than taking advantage of shared resources.



<https://theiabm.org/iabm-hosts-industry-initiative-dynamic-software-licensing/>

QC

Items

Templates

Test material

Dictionary

Parameters

Help

0082Wv2.0 published



AV DURATION MATCH

- Duration Audio == Video
- Wrapper Duration, Tolerance
- Matches Requirements
- Match, Mismatch Value

0083Fv1.0 published



COLOUR PRIMARIES

- Declared Primaries
- H.264, H.265, ...
- Matches Requirements
- Primary Values, Mismatch

0083Wv1.0 published



COLOUR PRIMARIES

- Declared Primaries
- H.264, H.265, ...
- Matches Requirements
- Primary Values, Mismatch

0083Xv1.0 published



COLOUR PRIMARIES

- EBU Test Items 0083F & 0083W
- Crosscheck Values
- Matches
- Crosscheck Mismatch

0084Bv1.0 published



PEAKS (TP)

- True Peak (TP)
- EBU R 128, ITU-R BS. 1770-3
- User Defined Peak Threshold
- Peak Level(s)

0085Bv1.0 published



PEAKS (PPM)

- Legacy (Q)PPM
- Tech 3305
- User Defined Peak Threshold
- Peak Level(s)

0086Bv1.0 published



AUDIO NOISE

- Background Noise
- Relative Levels Back/Foregro
- No Noise (hiss) Detected
- Noise, Hiss

0087Bv1.3 published



GENERAL IMAGE QUALITY

- Broadcaster Guidelines
- Golden Eyes, ITU-R BT.500
- Overall Video Quality Good
- Written Report Only

0088Bv1.0 published



AUDIO HUM & BUZZ

- Analogue Audio Disturbance
- Archive Ingest
- Audio Clear of Hum & Buzz
- Hum, Buzz Detected

0089Fv1.0 published



BWF METADATA

- Metadata in BWF Chunks
- EBU Tech 3285 & Supplement
- Metadata Match
- Values, Mismatch

0090Bv2.0 published



Extraneous Content

- Unexpected Content
- Bars, Slates, etc.
- No Extraneous Content
- Location, Position, Type

0091Bv1.0 published



Conversion Lag

- Conversion Lag
- Frame Rate Conversion Issue
- No Conversion Lag
- Location

0092Fv1.0 published



DOLBY® METADATA

- Dolby® Metadata Values
- Broadcaster Guidelines
- Matched Guidelines
- Values, Mismatch

0093Fv1.0 published



DATA CONTENT REPORT

- Ancillary Data Report
- SMPTE ST 3436
- Data Present
- Reports Data

0094Wv1.0 published



AUDIO LANGUAGE ID

- Audio Language ID
- ISO 639
- Meets User Requirements
- Language, ID, Mismatch

0095Bv1.0 published



LFE/CENTRE ASSIGNMENT

- LFE & Centre Channel
- EBU R 123
- LFE & Centre Channel Correct
- LFE/ Centre Error

0096Bv1.0 published



VIDEO CADENCE

- Video Cadence Artefacts
- Motion and Judder
- Pulldown Not Detected
- Cadence Artefacts

0097Wv2.0 published



Descriptive Metadata

- Descriptive Metadata
- SMPTE ST 377-1
- Meets Requirements
- Presences, Values, Mismatch

0098Bv3.0 published



LIPSYNC

- Broadcaster Sync Tolerance
- Golden Eyes/Ears, ITU-R BT.500
- AV Synchronous
- Written report only

0099Bv1.0 published



Unsteadiness

- Video Unsteadiness
- Unnatural Camera Movement
- No Unsteadiness
- Location

0100Bv1.0 published



Low Level Detail Loss

- Crushed Blacks
- Lack of Detail in Black
- Full Low Level Details
- Location

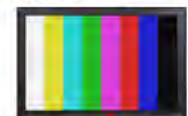
0101Bv2.0 published



VIDEO CLIPPING

- Clipping Visible
- Golden Eyes
- Video Levels are Not Clipped
- Written Report Only

0102Bv2.0 published



AV LINEUP

- Broadcaster Requirements
- Golden Eyes & Ears
- Lineup Meets Requirements
- Written Report Only

0103Bv1.0 published



Luminance Flicker

- Luminance Flicker
- May Be Creative Intent
- No Luminance Flicker
- Location

0104Fv1.0 published



0104Wv1.0 published



0104Xv1.0 published



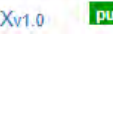
0105Fv2.0 published



0105Wv2.0 published



0105Xv1.0 published

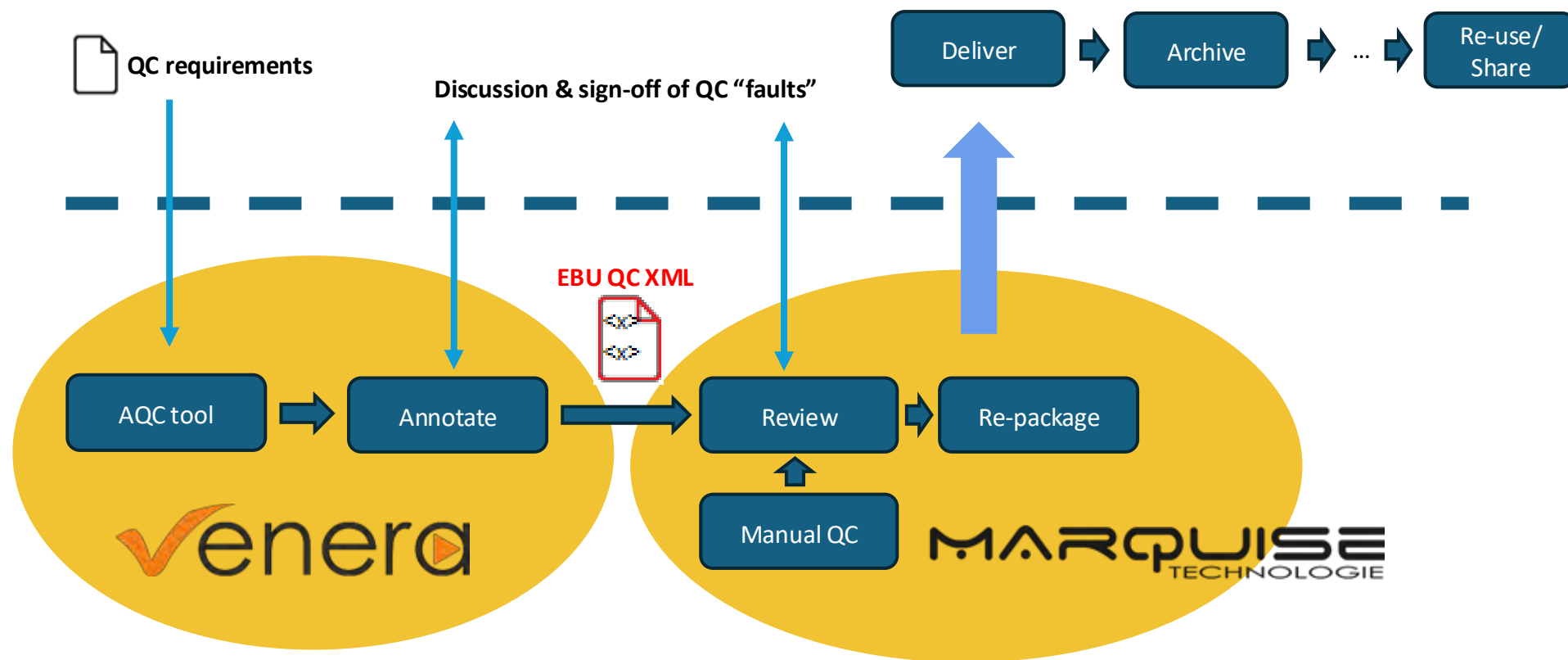


0106Wv2.0 published



0107Fv3.0 published





A Public Committee Draft (PCD) of a new standard has become available:

SMPTE PCD ST 2138-10 Catena — Model.



- On GitHub at: [SMPTE PCD ST 2138-10 Catena — Model \[nam10.safelinks.protection.outlook.com\]](https://nam10.safelinks.protection.outlook.com)
- From the SMPTE website: [https://www.smpte.org/public-committee-drafts \[smppte.org\]](https://www.smpte.org/public-committee-drafts)



Overview

SMPTE ST 2138-10 Catena — Model specifies a standardization of communication methods between (micro)services and full products designed for hybrid cloud and on-premises solutions, with the goal of making it easy to secure, connect and control a multi-vendor ecosystem of media processing services and microservices, no matter where they are in a true plug-and-play model.

The Hybrid Environment Reality

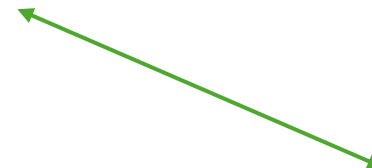
Today's environments typically encompass a combination of on-premises and cloud environments. Solutions span a variety of platforms, and must interoperate, regardless of where they are hosted.

The Need for More Seamless Multi-Vendor Integration

The number of devices, products, and services from a wide array of vendors can be daunting, particularly with the move to microservices. Media companies need technologies to simply work together.

Security as a Priority

The need to secure environments and the connections between products and services in a standardized manner is a must. ST 2138-10 defines a self-describing device model that incorporates an access control mechanism designed to scale across multiple devices from multiple vendors.



Principle 8

Individual media elements are referenced, accessed, tracked and interrelated using a universal linking system